

PATRICK GEDDES

by

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contemporary situation.

The essential problem in a study of Geddes is that it is difficult to cite any one particular doctrine providing his final definition of planning. He did not develop his theories in any one single systematic work. He left articles, lectures, pamphlets and innumerable reports on the subject out of which only a handful have been published. They constitute in effect illustrations of an unwritten theory accompanied by brilliant comments. Neither did Geddes leave a legacy of towns built according to his ideas which could testify to his ability and soundness of doctrine. Indeed for almost a lifetime he worked out a process of elucidation and realisation of his ideal of planning. It is in his life's work that one must search for answers - to comprehend Geddes as a planner one must investigate Geddes activities as a man of action.

This study falls naturally into clearly defined categories. Part I will be concerned with the diversity of Geddes activities. This will be followed by an examination of his early planning ventures in Cyprus, and Dunfermline together with the formulation of his system of correlative thinking. Part III will illustrate his ten years of planning in the Middle East and the Indian subcontinent. The Geddesian philosophy of planning will then be reviewed in part IV followed by an examination of the relevance of Geddes to planning in his day and ours.

The source material for this work is the collection of Geddes manuscripts housed in the University of Strathclyde. Gaps in the original Geddes manuscripts have been made good by transcript material relating to Geddes's work in India, Cyprus and Palestine.

The analysis of the Geddes manuscripts which was begun in 1967 has been sponsored and supported financially by the Corporation of Glasgow and the University of Strathclyde and without their support this study could not have been concluded.

The writer is also indebted to the many correspondents who have provided additional information and especially to the late Arthur Geddes (Department of Geography, Edinburgh University) and his wife Janine Geddes.

A final word of thanks is owed to Mrs. O. Prior and Miss E. Keddle who have typed the manuscript and to my colleagues in the Department of Urban and Regional Planning (especially Professor R. E. Nicoll) who have encouraged this research.

## INTRODUCTION

Patrick Geddes was born at Ballater, near Perth, on October 2nd, 1854. His lifetime spanned the periods which he defined as paleotechnic and neotechnic, some 78 years of accelerated change in the physical, economic and social environment in which Geddes worked. His own life reflected in part this period of change in that his early work was concerned with the development of specialism in science, whereas his later life became underpinned with a more humanitarian element concerned primarily with the sociology of living.

The key characteristic of the man was his essential diversity of thought and action - an apparent excessive vitality which drew him into a medley of affairs. His daughter-in-law (Janine Geddes) has recalled that her first impression of the man was of an old, yet highly vigourous individual, bubbling over with ideas.<sup>1</sup>

Patrick Geddes was often in a hurry. There was but little leisure in the ordinary meaning of the word in his long and active life. When he was not thinking he was working and generally, he was both thinking and working for with him thought and action were closely linked together - a simultaneous process.

Throughout his lifetime Geddes always appeared to have some vehicle laden with thought and action on the road. Often he had so many vehicles simultaneously in movement that they required the broadest of thoroughfares for their progress - sometimes the thoroughfares became congested, the result being that this or that urgent vehicle did not get through in time. This element in the/

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1. Discussion with Mrs. J. Geddes, Thursday, 29th February, 1968 and refers to first meeting with Patrick Geddes in 1920. Patrick Geddes was then 66 years old.

the temperament and the life of Patrick Geddes is essential to comprehend and to allow for if one is to understand him as a thinker, or as a man of action.

As with many active men, Geddes had the capacity for relaxation and recuperation. A lifetime friend, Edward McGeegan, illuminated this aspect of the man.

The constructive use of leisure became a habit to Patrick Geddes. His youngest son, Arthur Geddes, has explained his appointment at Dundee University College (which occupied only 10 weeks in the summer, from the middle of April to the end of June, and a fortnight in December) in terms of the opportunity it afforded to Patrick Geddes to pursue other activities -

"It/

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1. Unpublished memorandum, 14.2.1934 - Geddes, An Appreciation.

"It was not for leisure in itself, but for freedom and the time he wished to pursue in his many and varied intellectual and practical activities, that he stipulated that his professorial duties at Dundee University College should take place in the summer and for a fortnight in December." <sup>1</sup>

Patrick Geddes's creative use of leisure was directed not only to quantitative production of thought and practical activity, but to the qualitative production of these. The veracity of this supposition is well illustrated by his activities in connection with the Scottish Universities Commission in 1890. In October, 1890, he laid evidence before the Scottish Universities Commission and in the winter of 1890-91, he visited the universities of Ghent, Liege and Louvain, Bonn, Heidelberg, Freiburg, Strasburg, Lucerne and Geneva, Turin, Montpellier, Lyon and Paris - "to confirm and continue that evidence for the Commission in July, 1891". <sup>2</sup>

In close association with these characteristics, and directed towards the same end, appeared to be his life-long habit of early to bed and early to rise. This became a characteristic part of his daily life in India. Regularly Geddes would wake between five and six o'clock in the morning and spend two or three hours working on Thinking Machines or diagrams, elaborating upon and developing discussion or activities which he had undertaken the previous day, and also planning ahead for an activity of the current day. <sup>3</sup>

It is probable that this pattern of activity was based on Geddes's own comprehension of sound hygiene, both physical and mental, but this routine appears also to have contributed to the full use of his time. McGeegan independently testified to this striking characteristic of the man.

- "Pat/

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1. Discussion with Arthur Geddes, April, 1967. (Geddes held the Professorial appointment in Botany, 1889-1919).
  2. Patrick Geddes, University Reform - typescript of lecture undated.
  3. "He was always thinking out questions and the answers to these questions, about what had gone the day before and what was to come the next day".

The characteristic vitality of Patrick Geddes was also expressed through his power as a conversationalist. According to many of Geddes's contemporaries, he was a brilliant talker. His capacity to communicate was most well developed in a small informal group and, in his youth, it was sufficient to engross an audience in a lecture. However, colleagues who knew him in later life, pinpointed one essential weakness - an apparent incapacity to project his voice in a large lecture room. Lewis Mumford has described this succinctly - "He was not a good lecturer. He had not a strong voice and his beard muffled it, worse than that, he would turn his back to his audience and talk to the blackboard." <sup>2</sup>

Geddes's conversation appeared to his contemporaries to be different from that of anyone else. He had ease and fluency, depth and breadth of thought and an extraordinary wealth of image, metaphor and simile, drawn from all the arts and sciences, religions and philosophies and from his own personal observation. He appeared to enjoy talking. He used the opportunity of a long conversation as a medium for exercising his own thinking faculties and carrying his thought on the subject a stage further./

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1. E. McGeegan, *Ibid*, 1934.

2. Letter, Lewis Mumford to Peter Green, *Armenia*, 27th October, 1967.

further.

However, Arthur Geddes and Lewis Mumford have pinpointed a further weakness, that by 1921, a conversation with Patrick Geddes had become, not a dialogue, but a monologue. Through an unbroken barrage of ideas Geddes appeared to completely dominate his listeners and the repetitive element in his thought at this period would appear to indicate that Geddes was less receptive to new ideas than he had been in his youth. This capacity to dominate those close to him is a characteristic that merits comment. Through the versatility and originality of Geddes's ideas on a whole range of subjects he was able to inspire devotion amongst others. The most noticeable cases here are Mabel Barker and Amelia Defries and also his elder son, Alasdair Geddes. In his later life this capacity to inspire and dominate was apparently taken to extremes. Lewis Mumford has thrown light upon his own reasons for resisting from a long and close association with Geddes.<sup>1</sup>

This aspect of personal relationships has been developed at length by Arthur Geddes. In a series of discussions in April, 1967 and February, 1968, Patrick Geddes's younger son has thrown new light on Geddes's domineering and dominating personality. There seems to have been an attempt by Geddes - consciously or sub-consciously - to shape the work and minds of others into a mould which he himself devised and considered to be one which would confirm and extend his own life's activities. He became less likely to praise work which had been freely done for him or at his direction, but was only excessively critical and even more exacting.

A direct contrast was Geddes as a young man who was excessively receptive to new ideas which he would develop by stages/

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1. Lewis Mumford. *The Disciple's Rebellion. A Memoir of Patrick Geddes.* pp.11-21. Encounter, September, 1966.



stages into his own brand of philosophy. Unfortunately Patrick Geddes found spontaneous expression of his thought less easy in writing than he did in conversation. His writings were often laboured. One reason for the difference between the written and the spoken word - the reason which he himself acknowledged - was that he required the presence of a group of friends to stimulate him towards spontaneous expression.

His numerous manuscripts and typescript material, written or dictated between the 1880s and 1931, the year before his death, are written and rewritten over, that scarcely a word of the original remains. The attention to editorial work is outstanding and the physical effort of revision and further revision must have been enormous. Geddes's collaborator, A.J. Thomson, commented upon this laboriousness. - "His output of books was cramped by a strange fastidiousness which led him, like many an artist, to throw away one brilliant sketch after another till the opportunity passed all together, or else to overelaborate the canvas till intelligibility was obscured."<sup>1</sup>

There are other possible explanations. By the time Geddes had written drafts of articles or chapters, his thought on the subject had developed several stages further and the task of revision to incorporate these new and advanced ideas often proved too laborious and thus was left unfinished. Additionally, Geddes was frequently expressing and developing ideas which were in their essentials, new. He had to find a convenient label for these ideas and a vehicle of expression to explain them adequately in themselves and in their relation to the subject to which they belonged and this effort produces in Geddes's writings a series of nomenclatures, viz : synergy, biotechnics, ethopolity, geotechnics. Even when these were avoided single paragraphs or sections/

1. A.J. Thomson: Geddes, An Appreciation, pp.318-320 inc.  
The Interpreter Geddes - The man and his Gospel: A Defries,  
London, 1927.

sections of the lecture of article contained a condensation of ideas drawn from a whole range of sciences, arts, politics, and philosophy, which to an untutored reader is most indigestible.

Another cause of the laboriousness of his writing was the habit of using what Geddes called his 'Thinking Machines'. These were in reality a form of intellectual shorthand. They were a means of recording on paper the ideas which he developed with extraordinarily rapid thought. In essence, Thinking Machines were blank sheets of paper which Geddes folded horizontally and vertically into a number of divisions varying in number and size for the purpose for which they were to be used and in the divisions so made Geddes wrote not sentences but single words, or a group of words, or even just letters or signs. Arthur J. Thomson said of them '- "To those who find such notations useful, they appear as the most remarkable organa which the mind of man has devised for disclosing all the possible relations of any subject."<sup>1</sup>

The Thinking Machines devised by Geddes were a fore-runner of systems theory and enabled him to work out intellectual problems with the maximum rapidity and also, with the minimum of secondary mental exertion which is normally concerned with the translation of ideas into descriptive sentences. These diagrams became ends in themselves and Geddes postponed indefinitely the task of reproducing them in ordinary syntax. On the occasions when these were translated by Geddes, the process of translation was made the more complex by the fact that the intellectual impetus which had produced the Thinking Machines had passed and could, perhaps, not be recaptured.

This process of translation and difficulty involved in giving grammatical form to these notations may easily be comprehended when it is realised that the basic schemata which Geddes used most frequently, the place, work, folk combination, can in fact, be/

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1. Ibid, A.J. Thomson.

be combined into a series of 576 squares which in themselves include positive and negative correlations. <sup>1</sup>

The Geddes diagrams or Thinking Machines were originally developed by him in the 1880s during his period of temporary blindness in Mexico, and it appears that they came to have a certain fascination for him. Lewis Mumford in the article in Encounter appears to have missed the essence of these Thinking Machines. <sup>2</sup>

On the other hand, Mumford does indicate that when Geddes was over sixty, the Thinking Machines had come to exercise more than simple fascination for him. At an earlier period, however, as indicated by McGeegan, Geddes appeared to regard his interest in them with a kind of humorous indulgence.

One crucial result in this reluctance to translate Thinking Machines into the written word is that Geddes produced no systematic exposition of his philosophy as a whole. This is particularly the case in the field of Town and Regional Planning. Geddes/

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1. See chapter 1, Part iv.
  2. Lewis Mumford, *Ibid.* (Encounter)
  3. McGeegan, *Ibid.*, 1934.

Geddes left numerous notations, articles, lectures, pamphlets and reports, many of which were written for specific practical purposes and these constituted, in fact, illustrations of an unwritten theory accompanied by brilliant comments.

It was through his practical actions, seemingly aimed at a realisation and, at the same time, an elucidation of his own philosophy, that one comprehends more easily the substance of his thought. In the field of biology it was only the constant pressure of his former pupil, A.J. Thomson, which brought Geddes to a final completion of his lifelong work - that of the principles of biology, which appeared only months before his death.<sup>1</sup>

Nevertheless, in spite of this difficulty, Geddes alone, or in collaboration with others, published over 250 articles and papers which, in the wide range of subject matter covered, shows Geddes as being profoundly original. This originality in the main, appears to be in the form of an advance on previous learning. As a thinker Geddes was aiming for a universal synthesis and consequently, he borrowed freely from others. He borrowed from Lamarck, Darwin and his own teachers, Huxley and Lacaze Duthiers in biology; from Comte, Le Play and Spencer in sociology; from Stanley Hall and William James in psychology; from Bergson in philosophy and from many others in this or that subject. Even so, he borrowed little which he did not quickly develop or transform, neither did he borrow indiscriminately. He repaid his intellectual debt by not taking out any patents for his own ideas.

Geddes clearly had the intellectual capacity to isolate the essentials of a thesis or idea and this allowed him to quickly combine/

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1. A.J. Thomson and P. Geddes: Life - An Outline of General Biology. London, 1931.

combine an understanding of the essence of phenomena derived from numerous fields, into a total systematic study. This ability to isolate and assess the essential factors involved in a problem is a keynote of Geddes's approach to urban and regional planning and was an art which apparently he had developed very early. He was able quickly to group together the essential factors of a planning problem, synthesise them and sketch out an answer in terms of the master plan. He appeared to have little time nor, indeed, inclination for working out the complementary mass of detailed proposals and, in fact, published his general answer to the problem as quickly as possible with an encouragement to others to use it, with or without acknowledgement. The fact that Geddes had no sense of copyright partly accounts for the fact that his contribution, in many fields of learning, and particularly in the field of planning, is left largely undocumented. This characteristic of Geddes was aptly recorded in his own phrases, quoted by Amelia Defries.<sup>1</sup>

" I prefer to ring the bell and run away."

" I have no use for claims of priority. I am like the cuckoo who lays her eggs in the other birds' nests - the main thing is that the eggs should develop, not that the cuckoo's egg should be gratified. "

The vast body of practical and creative work which he attempted and achieved and the great if incalculable influence of that work on many minds and on many practical activities, both in this country and abroad, indicates that Geddes was one of the most gifted men of action of his time. A number of aspects of these activities will now be examined with a view to illustrating the diversity of Geddes's work and those features which contributed to the Geddesian planning synthesis.

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1. Quoted by A. Defries.

## PART 1

## GEDDES THE MAN OF ACTION

### Some Aspects of Education

#### 1. Summer Meetings

The Edinburgh Summer Meeting, which was founded by Geddes in 1886, was the first organisation of its kind in Europe. It was continued year after year, under his direction, until 1898. A meeting for 1899 was projected but was abandoned because Geddes was busy from the early Spring of that year with the organisation of his plans for the Paris International Assembly of 1900.

The Summer Meetings were revived in 1902, mainly through the work of Professor Kirkpatrick and the Modern Language Association, as a Summer School of Modern Languages. It appears from the evidence available that Geddes showed little interest in this revival, probably owing to its rather specialist character. Indeed, it seems that Geddes never lectured at all at these particular language meetings.

The objective of the Summer Meetings at Edinburgh can best be described in Geddes's own words.

- "In this Summer Meeting which is held at University Hall every August, it is attempted to harmonise the claims both of holiday and education in a philosophy which is again literally peripatetic. The educational aims of the meetings are best indicated by its actual development. The courses of seaside zoology and garden botany originally began in 1886, were complemented the year following by one on the theory of evolution.<sup>1</sup> The next step was the introduction of the social sciences - here a general course was arranged leading from the social phenomena observable in Edinburgh to their abstract aspects, historic, economic and ethical. The parallel teaching of the natural and social sciences thus begun has steadily developed in subsequent years and always on the same method of reaching general ideas as far as possible through personal observation, the former deepening as the latter widens. The association of science as/

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1. The early meetings, in fact, were held at Grantown Marine Biological Station.

as practised, of thought with action, has similarly been kept in view. Hence, from local, natural history excursions to systematical regional survey, artistic and topographical, geological and botanical, then also agricultural and economic, etc., has been a natural progress. Similarly from Old Edinburgh and its memories and associations to the larger life of Scotland, historic or incipient, from Scotland to England and Empire, or from Scotland again to France and Europe generally, to the history of civilisation and its associated special courses, anthropology, education and psychology, etc., are no less natural steps towards more intelligent interest in that contemporary social evolution in which each is at once actor and spectator. Thanks to the cordial co-operation of many lecturers belonging to different countries and to the most contrasted schools of thought, this attempt at harmony and unification in studies has made steady progress and the essential conception, that of experimentally working out in the freedom of vacation, plans and methods adaptable to wider application and to more regular educational use, has been justified by the experience alike of students and lecturers. The lectures are followed when possible, not only by discussion and demonstrations, but by excursions and practical work and though examinations are not held nor certificates given, students may test and prove their level of efficiency by sharing in the preparation of the maps, models, diagrams, summaries, abstracts, etc., at the respective collections of the Tower and are also invited to take part in the weekly meetings and the current events club."

The distinctive features of the Edinburgh Summer Meetings aroused considerable interest amongst educationalists and the meeting was visited, not only by prominent members of British and Colonial, American and Continental Universities, but by a special deputation from the French Ministry of Education. The meeting and its associated seminars were also selected as a model worthy of reproduction by the university then being founded in Chicago. This was in the year 1891. The range and diversity of the subjects studied and the width of specialised knowledge drawn upon by Geddes may be well illustrated from the programme for 1896.

### Programme

#### 1. Philosophy and Social Science

- a) Contemporary Social Evolution - 10 lectures by Patrick Geddes.
- b) The Relation between Science and Philosophy - 10 lectures by Professor R.M. Wenley, Michigan.
- c)/



- c) Borderlands of Ethics - 4 lectures by Miss Julia Wedgewood.
  - d) La Grandeur du Moment Present - 4 lectures by Monsieur Paul Desjardins.
2. History.
- a) Comparative Economics in Europe - 10 lectures by Victor Branford.
  - b) History in Architecture - 10 lectures by S. Henbest Capper.
3. Psychology, Education and Physiology.
- a) The Individual and His Revelation - 4 lectures.
  - b) Vorlesungen uber Joh Fr. Hobarts Leben und Lehre - 3 lectures by Dr. Withrein (Vienna)
  - c) The Physiology of the Nervous System and the Mechanism of Conduct - 10 lectures by Dr. Louis Irvine.
  - d) Present Educational Problems - 8 symposia or conferences.
4. Civics and Hygiene.
- a) The Development of the Care of Public Health in Edinburgh - 2 lectures by Baillie James Pollard.
  - b) The Evolution of Health - 3 lectures by Dr. W. Leslie Mackenzie.
5. Biology.
- a) Studies in the Biology of Colour - 5 lectures by Marion I. Newbiggin.
  - b) The Biology of the Seasons - 10 lectures by J.A. Thomson.
  - c) Ten Lessons and Demonstrations to Illustrate some of the Principles of Zoology, by J.A. Thomson.
  - d) Applied Botany - 10 lectures by Robert Turnbull.
  - e) Practical Botany - 10 meetings conducted by Robert Turnbull.
6. Geography and Geology.
- a) L'Histoire des Fleurs et des Civilisations - 4 lectures by Elysée Reclus.
  - b) The Rivers, Mountains and Sea Coasts of Scotland - 5 lectures by J.G. Goodchild.
  - c) Scotland, Historical and Actual - A Study in Social Evolution - 5 lectures by Patrick Geddes.
  - d) Geographical Excursion - walks through the town of Edinburgh to the Neighbourhood. Afternoon excursion to Rosslin Castle and Chapel, Linlithgow, Boness, Dunfermline, Musselburgh and Inveresk. Day excursion to Fife, Gairloch, Loch Long, Arrochar, Loch Lomond, Melrose, the Tweed Valley, Stirling and the Forth Valley.
- e)/

- e) Man and His Environment in Africa - 5 lectures  
by A.J. Herbertson.
  - f) African Sceneries Influenced by Climate - 5 lectures  
by G.F. Scott Elliot.
  - g) The Geological History of the Basin of the Forth -  
10 lectures with field excursions by J.G. Goodchild.
7. Fine Art.
- a) Celtic Ornament and Colour Design - 4 demonstrations  
by Miss Helen Hay.
  - b) Practical Study of Decoration under the direction of  
Miss Helen Hay in the Studio of Old Edinburgh School  
of Art.
8. Popular Evening Lectures - 8 popular lectures.
9. Musical Recitals - 3 recitals illustrating three  
centuries of British music under the management  
of Mrs. Kennedy Fraser.<sup>1</sup>

Geddes organised at least three other summer meetings in addition to Edinburgh. He was the organiser and director of the Summer School of Civics which was held in Dublin from the 27th July to the 15th August, 1914, in connection with the Cities Exhibition held in that city from the middle of July until the end of August and more particularly, with the associated visit of Geddes's Cities and Town Planning Exhibition. The School was conducted with the approval and co-operation of the Department of Agriculture and Technical Institute for Ireland. As far as possible, each week of the School was made complete in itself but the work of the whole three weeks formed a connected programme - mornings were devoted to lectures, demonstrations and discussions and afternoons to excursions in the country and town. The main subjects dealt with here were regional and civic surveys, the historical/

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1. It is interesting, as an example of what might be called Geddes's secondary practical activities to indicate the inspiration he gave to others to follow out activities of their own. Mrs. Kennedy Fraser acknowledged that it was Geddes who inspired her to undertake her work on Hebridean Folksongs, for which she has become well known. Ref. Annand correspondence.

historical development of Dublin, town planning of Dublin, geography and nature study, school gardening and the problem of education.

A later meeting was held by Geddes at Kings College, London, from 12th to 31st July, 1915 and the topic here was, the War - Its Social Tasks and Problems. The lectures were grouped under the headings, War and Peace, Geography of War (with explanatory History), Economics in War, Civic Surveys, Reconstruction after the War. Conferences were held on the requirements of education and reconstruction in Belgium and Northern France and Britain and excursions were arranged to places in or near London, selected for their bearing on the problems discussed in the Meetings. There were, in addition, two exhibitions - the Graphical and Historical Exhibition of War and Peace, at Kings College and an Exhibition of Ideas at Crosby Hall, Chelsea - both organised in connection with the Summer Meeting.

The success of this approach partly influenced Geddes's taking up the idea of War and Peace and Reconstruction in a series of pamphlets produced at a later period.<sup>1</sup> Geddes carried the Summer Meeting idea to India and involved in it two of his most famous Indian collaborators, Sir J. C. Bose and Sir Rabindra Nath Tagore. This was the Meeting held at Darjeeling from the 21st May to the 16th June, 1917. The aim is indicated in the prospectus.

- "To bring together in the comparative leisure and freedom of Darjeeling, different members of the community, Indian and European, official and non-official, women as well as men, for lectures and informal discussions on matters of social and biological science and this with reference to the problems and needs/

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1. Making of the Future series, Editors V. Branford and P. Geddes.

needs of India, industrial and artistic, agricultural, sanitary and economic, civic and educational."

## 2. Nature Study and School Gardens.

In his letter of application for the Chair of Botany at Edinburgh University, 1888, Geddes wrote -

"As University local examiner in Botany, my attention has been constantly directed to the teaching of Botany in schools and to its value as an instrument of general as well as elementary scientific education. I have hence endeavoured to advance the teaching of the subject and to give it reality and concreteness, especially by the organisation of small, typical botanical gardens whose rapid adoption by public and private schools and other institutions gives encouraging evidence of their utility to the actual work of education."

Some years later, in 1899, Geddes and Thomson were largely instrumental in persuading the then Head of the Scottish Education Department to introduce Nature Study into the Scottish Code. However welcome to Geddes this official recognition of Nature Study might be in itself, it appeared to fall far short of his own aims and ideals. As late as 1931, he wrote -

"These new regulations will undoubtedly be helpful to nature loving teachers and to their like in training colleges as well since giving them and their pupils an encouragement to outdoor interests and pursuits, accompanied by indoor observation. Also, and even with incentive to school gardens, school museums, etc., so far well; yet, as the main character of school institutions was and is more bookish than can either satisfy naturalists or form them, the annual and total results of this new measure still fall short of satisfying the hopes of its outset and, unless the present rate of progress be accelerated, it may well need another generation before these are all adequately realised, for obviously, neither regulations, nor books, can give initiation into nature till children, students and teachers alike are seeking and finding her for themselves."

The basis for Geddes's doubts on the advance in nature study may be highlighted from the course Geddes organised at the University College, Dundee - an Introductory Course of Nature Study for Teachers. This course consisted of eight lectures with demonstrations - eight afternoon meetings with practical work in the laboratory and garden and Saturday excursions with the College Botany/

Botany class. The outline of the introductory public lecture posed a series of questions :-

There then follows a detailed syllabus divided into twenty sections, each section dealing with a specific outlook. These especialisms were art, geography, mathematics, mechanics, astronomy, physics, chemistry, meteorology, geology, botany, zoology, biology, anthropology, economics, history, philosophy, and poetry. There was to be a discussion of the detailed contribution to be made by each specialist and yet a synthesis was to take place of these differing factual backgrounds into a sense of unity of nature and environment. McGegan discusses this aspect of Geddes in his appreciation by recalling that -

An additional explanation is offered by Geddes himself.<sup>3</sup>

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1. Problems of the Course - An Elementary Introduction to the Study of Environment, Physical, Organic and Social.
  2. McGegan, Ibid, 1934.
  3. Geddes writing of his life as a boy in his home in Perth from Montpellier. 1930-1931.

leaf, or flower, or fruit and even with touch and scent. Here was Montessorian training at its rural best, through senses to interests and sympathies and towards the week's practicalities as well - from outdoor care, indoor vegetables and stews, berry tarts, apple puddings and pies. Life and its growth, beauty and youth were thus all realised together. The survey always came to its climax with Mother's flowers. Then too, my own small but advancing efforts were encouraged. First my rockeries of rock crystals from quarry and agates from screes below precipice and garnished round with the expansive ferns I most admired and within, the dainty ones I well nigh worshipped in my later and first botanic garden, the area of a small room but well filled from excursions and my very own. So here the start for later college botanic garden and now the smaller, yet more ambitious, evolution garden I am trying to make, some seventy years after this first one, at Montpellier, and thus leave to science this summary of my Opus Botanicum which will give visual impression to my theories of plant-life-and-evolution. No wonder then that from child's experience of my aquarium and ditch I developed to marine zoologist and to botanist, first at home, as adolescent and then as student from Huxley to Lacaze and so to Roscoff at Naples, zoological stations again and again, so next to university teaching at Aberdeen and next at Edinburgh, between which, a bit later, exploring in Mexico as observer and theorist of variation and evolution, yet within one of the best of recent years' vacations, returning to be among sea searchers Woods Hall.<sup>1</sup> Hence too, that comradeship with my first and best student, Arthur Thomson, so together in collaboration now grown old, hence half-a-dozen books so far, of which the big one as yet set us free for one or two more.<sup>2</sup>

Thus the child has been father of the man."

For Geddes, the study of nature and gardens was a segment of a wider process of action and his educational objective through his course for teachers was to train them in a type of formal operation which he himself followed - that of observing nature and relating nature. This life orientated aspect of nature study is clearly visible in his own practical activities in Dunfermline  
(Report/

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1. Cape Cod.

2. Outlines of General Biology - A, J. Thomson and P. Geddes, London, 1931.

(Report on City Development) the creation of open spaces in Edinburgh and in the planning of the Edinburgh Zoological Gardens.<sup>1</sup>

### 3. University and Adult Education

As an extension of his own biological researches, Geddes had been profoundly influenced by Lacaze Duthiers under whom he studied in 1878 and 1879, at the Sorbonne and at the Marine Biological Station at Roscoff in Brittany. He also studied and lectured at the Naples Zoological Institution in the Spring of 1879. This interest became translated into his work in Britain. He early took a part in the founding of the Marine Biological Stations in Scotland and was appointed assistant to Professor Cossar-Ewart, Professor of Natural History in the University of Aberdeen. This was in April, 1879 and he immediately assisted his chief in organising a zoological laboratory and zoological station for the University. In 1886 he had previously 'cut his teeth' organising a marine biological unit at Grantown-on-Spey and about the same time he also helped to organise a similar station at Millport. These items were in connection with students' training through universities, but Geddes was one of the leading spirits in the development of the university extension movement in Scotland and in the 1880s he carried a considerable burden of secretarial work, both for Edinburgh and for St. Andrews, in this connection. It is also the case that he conducted the first tutorial class (at Battersea) which was formed by the Workers' Educational Association, under the guidance of Dr. Albert Mansbridge.

However, Geddes's primary activity and interest in the field of education, in a formal sense, was his attempt to reshape the/

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1. The Sociological Review of October, 1932, contains a tribute from Miss May Ritchie, who refers to Geddes's connection with the Nature Study Movement in Chicago and New York.

the nature of university education and also in the planning of university structures. Geddes has left voluminous manuscripts relating to university reform which show that for a considerable period he made a very close and detailed study of universities from both the theoretical and practical point of view. His own Outlook Tower at Edinburgh was an attempt to harmonise both his work in adult education with a university type institution within which there could be a correlation of numbers of specialisms towards a higher synthesis in practical action.

He was also active in more general fields in that in September, 1904, he offered himself as a candidate for the Principalship of the Durham College of Science at Newcastle-on-Tyne. Additionally, the Dingwall North Star, on the 20th April, 1932, stated that Geddes was consulted in connection with a proposed Gaelic College. Again, in the field of education Geddes showed a considerable diversity of interest and activity and a number of illustrations record this fact.

In a closing address on Scottish University needs and aims, delivered at the University College, Dundee, in 1890, Geddes said,

"The Scots College did good service until broken up the by Revblution and the wars of the present century and whether we recover the mere buildings or not, being mainly a matter of sentiment, it soon may again. A more recent enquiry as to how its possible reorganisation would be received in Paris has brought a reply cordial and generous beyond anticipation. From the highest circle of thought and statesmanship, the great schools of learning and of fine art, from the most distinguished private citizens, a committee, which includes many of the greatest names in the present intellectual renaissance of France, has offered us its services. The list begins with the very Head of the Education Department himself and his colleague, the Directeur des Beaux Arts. It includes not only the Rector and Deans of every Faculty of the University, with some of the most illustrious and also most genial of their colleagues, but representatives of all the other great institutions, such as Monsieur Milne Edwards, for the Museum, Monseur Pasteur, for the Ecole Normale, or Monsieur Berthelot (who, to avoid alarming Scottish susceptibilities, has taken the place of Monsieur Renan) for the Collège de France. Such a Committee will, I doubt not, soon find its Scottish counterpart/



counterpart and this historic adjunct of our university culture will thus be reorganised, perhaps even in time for next winter's session."<sup>1</sup>

Geddes went on in a footnote -

" To avoid any misconception, it should perhaps be explained that the revived Scots College would not, of course, be a teaching institution nor even, like the University Hall, a complete boarding house, since this would have the disadvantage of too much isolating the residents from the students' life around them. It would be, first of all, an agency which aided the newcomer in the arrangement of his studies and in finding friends amongst his teachers and fellow students; and in the second place, a suitable lodging with all due economies. Further information on this or other kindred matters may be obtained from the Resident Secretary, for the Scots College next winter, Mr. A.J. Herbertson, University Hall, Mound Place, Edinburgh, or from the writer."

This institution never developed, but during the last eight years of Geddes's life he was instrumental in bringing to fruition some part of his ideal through the Collège des Ecosais at Montpellier. Geddes had studied at Montpellier in his early manhood and made several life-long friends there. He regarded Montpellier University as one of the great universities of the world, historically and actually, and the importance of its geographical position deeply impressed him. It appeared that living and working there recaptured for him his own past and in his own past was a great deal of actual present and much of the potential future.<sup>2</sup>

At Montpellier Geddes appeared to be renewing past dreams and old activities but on a different plane and under different conditions. He fused into this institution regional survey, town planning, an Outlook Tower, gardening, current events club, university halls, international club, oration - all these and other activities which he/

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1 . The Scots College was originally founded by David Bishop of Murray, in the 14th Century in the rue des Amandiers. It was rebuilt in 1665 by Robert Barclay opposite the rue Clovis, behind the Pantheon. It was suppressed at the Revolution of 1789.

2. Conversation with Arthur Geddes, April, 1967.

he had become involved in during his early life. Here too he was continuing his work for a revival of the Old Alliance between France and Scotland, which had already, partly through his own actions in 1896, led to the foundation of the Franco-Scottish Society. The founding of the Association Patrick Geddes in Montpellier, in October, 1967, by a group of his former students, and collaborators at the Scots College, bears testimony to the impact that Geddes's work in the educational field made upon his contemporaries.<sup>1</sup>

In an unpublished manuscript, written at Montpellier, Geddes gives his own view on the importance of the ideal of Scots College.

"This whole University has longest been leading in medicine as it rose from herbalism and so has started all other medical schools of the world to their pharmacy, their botany and their botanic gardens, up to vivid stimulus, to Linnaeus and again, beyond him with the first garden of natural system of Decandolle. Here too, has grown the soundest medicine as well, faithfully following Hippocrates in his study of environment as with his air, water and places. Yet, on the other hand, in his studies of constitution, temperament and diathesis, and so that for Sydenham, the reformer of our medical practice, his English biographers are candid and clear in recognizing his faithfully following of his Montpellier teachers. Recall once more the leadership of Montpellier in botany, so actively floristic, systematic and geographic. This first attracted me well over forty years ago and it was to Montpellier that I sent my best students, including all save one of my eight or nine assistants. Instead of our residents and we elders keeping to ourselves, concentrating on our own difficulties and our survival when not quietly enjoying college and chateau, our gardens, fields, and forests, our culture, city's varied wealth as well, let us keep on striving and growing with each year and its seasons, as here throughout these initiative years, so all with increasing growth, energy, at the compound interest of a tree, not with abating momentum as the material order and its pseudo economic procedure presses on us to have it so. We need to keep up plain living and high thinking so beyond our colleges and chateaux we need the simplest possible shelters and camps for our occupational pioneerings and these from forest or/

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1. The aims of the Association are to promote international educational exchange and Regional Studies. The inaugural lecture 'The Relevance of Geddes to Modern Planning Problems' was delivered by the author of this study.

or sea, and in these to work with the work folk and weigh up to their best standards what we should seek in time to be directive beyond them in our organising skill and our wider ranges of activity and thought and towards deed. We are seeking, sharing, even advancing the best of the many-sided cultures our environment offers and bringing in also the best of these beyond, each from his own land - yet we are all open to learn and so to utilise the best of France. Yet let us also give as well as take and see that we give and do more as for servants and for neighbours as friends and thus for village and even city, for other villages and cities as well, for the university and other universities, our own as well; yet, whenever possible, giving more than we take from them. In our co-operative synergy and in all its widening ranges, domestic and neighbourly in villages, to co-operation in university and city, in region and in France, we are thus also best developing our little educational centre here towards vital influence and for larger output towards vitally social careers, whether in our own homelands or even beyond. Each of our little colleges at Montpellier has thus to be the beginning of a little Geneva of peace making, a little Athens of thought and art, a little Rome of social wisdom and worthy citizenship and even a little Jerusalem of spiritual idealism even to wisdom and to love and to sacrifice, so preparing women and men worthy of sharing in their turn, indirectly at least, and doubtless sometimes directly too, in all this high and complex range of future activities and so towards approaching their best upon their own lives' brief asymptote and so contributing to the world's life so far also. Here let there be no rigid and inflexible rule for the monastic or temporal but growing concensus, sympathetic and reasonable, in and towards progress and this rightly understood as of life, life social and life individual, life in nature and life in its guidance also - in short, as life of all kinds and in all ways in evolution does better it further and towards that ideal best which never to be quite attained."<sup>1</sup>

#### 4. Museums and International Assemblies

The notion of a new educational process carried Geddes from a study of university learning into a much wider field and it appears that one of his attempts was in 1900 to make an exhibition - the great Paris International Exhibition of that year - serve the purpose of/

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1. Memorandum to My Successors at the Collège Ecossois:  
P. Geddes, 1931.

of a vast university. Geddes spent a great deal of time in the field of exhibitions and museums. These, together with cultural exchanges and assemblies, formed a medium for the impact of Geddes's new thinking on the world in general.

Perhaps one of the main causes for Geddes's life-long continuous interest in exhibitions and museums, both theoretical and practical, was the fact that Frederick Le Play, one of his greatest inspirers, was Director of the Great Paris International Exhibitions of 1855 and 1867. Twenty years after, in 1887, Geddes published a booklet entitled, *Industrial Exhibitions and Modern Progress*. This contains a succinct but complete survey of all the greatest and some of the minor international exhibitions held up to that date, together with searching criticisms and constructive suggestions. One passage in it contains the following educational precept -

"Let the members of the societies of arts, the architects and engineers, the learned societies, the universities, be invited to furnish from amongst their numbers an occasional guide for teachers to the various departments and let these again take their pupils; lecturers, scientific and technical are, of course, also wanted; and as for the sciences, these may be easily illustrated, not only in detail, but what is now becoming more important, in synthesis.

Like every good teacher Geddes had always utilised exhibitions and museums for the benefit of his students, but in 1899 came an opportunity to carry out on a grand scale, what he had suggested in his booklet in 1887. This was the Paris Exhibition of 1900.

Geddes saw this projected exhibition as potentially the world's greatest and most democratic university; - a university equipped with educational riches as no other university was, but as one with no organised body of teachers and serious students. Accordingly, he set himself to attract the students and to supply the teachers and for this purpose he founded the International Association for the Advancement of Science, Arts and Education and its functioning educational body, the Paris International Assembly. Geddes's scheme was made possible by a gift of £3,000 as a guarantee fund by Sir. Robert Pollard to whom Geddes had submitted plans. He described the object of/

of the International Assembly as,

"the immediate object of the Assembly is to profit by the vast material display of the Exhibition of 1900, with its collections illustrating alike the natural products, the industries, the arts, the commerce and the institutions of every country and its numerous retrospective exhibitions in fine arts and industries, made up of loaned collections which are not likely ever to be brought together again. The Assembly has a popular as well as an academic side offering privileges not only to specialists but also the intellectual public. To the former it offers the means of meeting with fellow workers in France, or from other countries. To the intelligent public the Assembly offers a method of seeing and appreciating the important features of the exhibition, with economy of time, effort and money, by means of daily lectures and systematic visits with skilled guidance."

Of the origins of the Association and the Assembly, Geddes wrote -

"The Association dates from the meetings in September, 1899, at Dover and Boulogne, of the British and French Associations for the Advancement of Science. Here a small preliminary committee was formed, amongst whom may be mentioned Lord Lister, Sir John Burdon-Sanderson, Sir John Merry, Professors Hadden, Lodge, Thomson, Shaeffer, Howes, Mavor, etc. A circular issued by this committee led to the formation of a general committee, including upwards of 500 members of the British Association alone. The general committee held its first meeting in London in October, 1899, and elected as President, Monsieur Leon Bourgeois, the late French Minister of Education and delegate to the recent Peace Congress at the Hague; as Vice-Presidents, the Rt. Hon. James Bryce and Sir Archibald Geikie. A corresponding meeting was held in Paris at the Ministry of Education and the French committee was constituted, its President being Monsieur Gerard, member of the French Academy and Rector of the University of Paris. Monsieur Leon Bourgeois was elected General President of the whole Association, with Monsieur Liard, Permanent Secretary of State for Higher Education, as its General Secretary. As a result of these meetings it was resolved to hold the first International Assembly of the Association at Paris, during the Exhibition of 1900. The approval of the authorities of the Exhibition having been assured, a substantial initial fund was provided alike within the British and French committees. Steps have been taken to organise similar committees elsewhere, notably <sup>in</sup> Belgium, Germany and Russia. In the United States a strong committee has been organised with centres at New York, Boston, Chicago and elsewhere. For the purposes of this year's Assembly it is working in conjunction with the British group. The/

The first step of the Association in its assembly is to co-operate with the various international congresses being held during the Exhibition and wherever necessary or desirable, to aid the existing agencies in recruiting suitable members for these. The International Assembly is included in the official list of congresses as the permanent Ecole Internationale de l'Exposition." <sup>1</sup>

Geddes went on, "that in this way the congresses and the widely represented gathering of specialists of all kinds which they have been together, may be viewed as a vast resource of educational power to be, as far as possible, utilised by the Association for the benefit of the intelligent visitor. The Assembly will thus serve as a useful intermediary between congresses and the public. One of its main tasks is thus to summarise, interpret and diffuse the results of science legitimately, popularising these without vulgarising them; on the one side, interesting a wider public and so recruiting for every science and for the congresses of the future years, on the other, aiding the specialist himself to see and to present his subject, both from the widest speculative aspect and the most practical side, here developing its applications, there justifying its place in culture. The scheme is not simply that of organising the greatest for summer schools hitherto, but as already indicated for the congresses, it has a synthetic purpose also. It seeks to view and to set forth the exposition in its highest aspect, the museum of the present interpreted by the university of the present."

The excursions, according to Geddes, were,"designed to include not only visits, under skilled guidance, to the various departments/

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1. About 140 congresses were held during the Exhibition. The subjects were - art (6 congresses) mining, engineering and applied science (14) maritime affairs (5) mathematical, physical and chemical sciences (6) natural science (5) agriculture, forestry (11) medicine, hygiene, etc. (12) anthropology, archaeology, history (8) education (14) technical, social and commercial education (4) geographical and colonial questions (3) industry and commerce (8) property and finance (10) literature and press (5) labour and co-operation (9) women (2) philanthropy (11) peace (1). The lectures arranged by the Assembly were broadly grouped under the main headings of art, industry, commerce, agriculture, natural science, hygiene, education, geography, history, archaeology and anthropology, economics and social science. They included popular courses, 2 or more lectures each week, descriptive of the Exhibition as a whole; special courses, lectures on subjects included in the general classification. These were designed mainly to interpret the progress of each art and its underlying science for the intelligent public; and finally, general courses. These were to interpret the Exhibition and its main features in a more general and philosophic way and thus, in relation to the general progress at the close of the century and to the major problems which were to be posed by the 20th cent.

departments of the Exhibition and to the museums, galleries and monuments of Paris, but such other excursions as would give the visitor an idea of the historic developments of Paris throughout the ages." Other excursions were to include visits to historic towns and cities within a convenient distance, e.g., Chartres, Senlis and also special excursions of geological and botanical interest. The aim, at all stages, Geddes stressed, was to be deeply educational.

The long term object of Geddes's scheme was never realised, but though disappointed by the failure of his Paris Assembly, Geddes boldly repeated the experiment, at the Glasgow International Exhibition of 1901, a scheme on a much more modest basis than on the previous year in Paris. He then began to plan an Assembly in connection with the St. Louis Exhibition of 1902, but the plans were abandoned.

An important part of Geddes's idea in connection with the 1900 Exhibition, was the preservation of the rue des Nations as one of the important and interesting sections of the Exhibition. He hoped to retain it as an international museum, the object of which was to promote international understanding of peace. A committee was formed known as the Comité d'Initiative s'occupant de l'affectation des bâtiments ou terrains ayant dépendu de l'Exposition Universale et des œuvres et institutions d'utilité internationale. This committee's proposal was generally approved, not only by the public and the press, but by the authorities of the Exposition and also the different national commissions. The buildings asked for were offered on the most generous terms, though some legal, political and administrative difficulties were inevitable, where the site of the building was a matter of triple ownership. Here too, Geddes had, in fact, failed though the Committee continued its efforts as the Comité d'Organisation des Instituts et Musées Internationaux.

Geddes's papers relating to this scheme have never been traced/

traced and only one document covers this period- the Report issued by the Committee, February, 1901, entitled "Memoirs et Notes Concernant l'Organisation à Paris des Musées ayant un caractère internationale en exécution des propositions et des projets procoquées par l'Exposition Universelle de 1900." This document clearly indicates that the project for the preservation of the rue des Nations having failed, the committee had requested the Municipal Council of Paris to house in the Petit Palais, or other buildings equally suitable, museums of an international character. These were suggested as,

1. Retrospective museums of Universal Exhibitions.
2. Museum of Peace Institutions.
3. Museum of Human Life (Medicine, Hygiene, Bacteriology)
4. Museum of Cities.
5. Historic Museum of Paris.
6. Museum of General Comparative History or Museum of Civilisation.
7. General Museum of Geography.
8. Museum of Comparative Education.
9. Museum of the Sea.
10. Museum of the Air.
11. Museum of Mines or Subterranean Museum.
12. Museum of the Book (Printing, etc.)
13. Museum or Institute of Psychology.
14. Museum of Physical Education.
15. Museum of Art, Archaeology, etc.
16. International Institute of Bibliography.

An elaboration of this theme was developed by Geddes in the Scottish Geographical Magazine for March, 1902. Here appeared an article entitled, "The Plea for a National Institute of Geography", by J.G. Bartholemew and to this article was appended a plan and note by Geddes. Bartholemew pleaded for the establishment of a National Institute of Geography which would/



would include a geographical reference library, reference museum, in fact, a temple of geography devoted to the universe in general and the earth in particular. Bartholemew states that, "In working towards a complete scheme the most notable effort is that of Professor Patrick Geddes who has given much of his life to the elaboration of such an idea. In its conception the scheme is great, comprehensive and eminently practical - the inspiration of a geographer and philosopher and worthy of the coming renaissance of geography."

In his note Geddes states that in his draft plan the accumulation and arrangement of maps, reliefs, illustrations, the presentation of descriptive and general geography, is primarily centred around the great relief globe of Monsieur Elisée Reclus. With this is associated as its complement the celestial globe, already partly realised by Monsieur Galeron. Around this should be placed astronomical collections, together with photographs, star maps, models and so on; rooms are provided for the concrete and, as far as may be, the experimental illustration of the physical phenomena of the universe. There were to be included in the scheme an Outlook Tower, more or less on the principle of the Outlook Tower in Edinburgh, rooms for anthropological, historical and economic geography, an information bureau, galleries of industry and commerce, education, engineering as primarily related to geography; geotechnics as a whole (afforestation, irrigation, agriculture, hygiene, etc.) a peace museum and a lecture theatre and congress hall. These collections were to find their practical application in a gallery of Comparative Civics in which the development, character and progress of representative cities would be indicated.

A letter from the President of the Royal Geographical Society, Sir Clements Markham, commented upon this scheme -

"Your/

"Your own ideas and your efforts to give them practical shape have always interested me very much and I have long had my own castles in the air on the subject of a central geographical society in closest relation with many branches. How the plans of yourself and Mr. Bartholemew are to be realised, taking into consideration the vast sum that would be required and the amount of organising ability that must be brought together, is a question for practical consideration. The subject will begin to receive the generous attention of the Council at the Royal Geographical Society in a year or two when Mr. Bartholemew, yourself and other leading geographers will no doubt be invited to meet and thus form a more representative deliberative council. The principal question to solve will be at first, financial, but I believe that there will be no insuperable difficulty in realising the great national scheme which has been sketched out by Mr. Bartholemew and yourself."

This scheme was never realised, but elements of it became incorporated in Geddes's planning of the University of Jerusalem and also in his Cities and Town Planning Exhibitions. The significance of the Planning Exhibitions will be considered in a later chapter. It is sufficient at this point to note that the original exhibition, which was developed from the material amassed in the Outlook Tower, was shown in February, 1910, at the Royal Society of Arts Gallery in Edinburgh; October, 1910, Town Planning Conference at the Royal Academy Galleries in London; February, 1911, Crosby Hall, Chelsea; 13th March to 1st April, 1911, Royal Society of Arts Gallery, Edinburgh; 24th May to 7th June, 1911 at Dublin; 24th July to 2nd October, 1911, Belfast; 1913, International Exhibition at Ghent (where it was awarded the Grand Prix); Summer, 1914, Civic Exhibition at Dublin.

Early in 1914, Geddes received invitations from Madras, Bombay and Calcutta, to go there with a view to advising as to the development of these cities and on social and housing conditions generally and he was asked to take the Exhibition which was to be used as the basis for demonstration in connection with lectures to be given by him in each of these centres. On the 18th September, /

September, Geddes sailed for Bombay and about the same time the Exhibition was shipped in the Steamship "Clan Grant" for Madras. However, the "Clan Grant" was sunk by the German cruiser "Emden" in the Indian Ocean and the whole Exhibition was lost. An emergency committee was formed in Britain with Mr. H.V. Lanchester as Chairman. This Committee appealed for loans and gifts of material with a view to sending out a small, representative collection to Geddes as early as possible. An appeal for funds to provide more material so that the whole Exhibition might be adequately replaced was issued by the Cities and Town Planning Exhibition Committee. A new Exhibition was speedily equipped and sent to India and this was shown in 1914-15 at Madras and Bombay, 1915-16 at Calcutta, Central Provinces and in United Provinces, summer, 1916 at l'Exposition de la Cité Reconstituée (Paris) as general planning feature.

In a letter dated 4th January, 1921, addressed to an old friend (un-named) Geddes said, speaking of the occasion, "I am pleased to tell you that this has borne good fruit of various kinds alike in helping the start of fresh town planning and civil monuments in Paris and also towards better reconstruction in the cities of France."

During the period of the planning exhibitions, Geddes let his energies be drawn into Universities and College Exhibition. In 1912, he issued from the Outlook Tower, a four page prospectus marked, draft and corrected, private, of a Universities and College Exhibition. In this prospectus he stated -

"This University and College Exhibition is being prepared to illustrate the development of British and other universities and institutions of higher education and of their residential college and halls. The uses of such an Exhibition are obvious and manifold alike on the side of university development and of collegiate residence. Every university has its unique historic interest, its often monumental buildings and besides these, its variously developed modern institutes of special studies, some highly equipped and organised, others as yet, less complete. The present exhibition as it develops and circulates will thus afford a means of ascertaining what is being done/

done in the leading universities of our own and other countries, for each department of higher studies offer their application and similarly as regards the furtherance of their collegiate life. The immediate occasion which has suggested this Exhibition is in connection with the approaching semi-jubilee of University Hall, Edinburgh, to be held in March, 1912 and the Exhibition will accordingly be in the first place, arranged and shown in the Outlook Tower which, for many years past, has been a centre of higher studies in connection with University Hall and with other educational and civic endeavours. The interest and importance of such an Exhibition will be evident to all interested in these higher aspects of town planning which pass into city design and city development. Hence the active co-operation of the Committee of the Cities and Town Planning Exhibition has been obtained with contributions from their collection and the Exhibition will be from the first, under the charge of its Director, Professor Geddes. The plan of the Exhibition is a comprehensive one. Its aims are to illustrate as widely as possible,

1. the leading developments, ancient and modern, of the universities of England, Scotland, Ireland, Wales and those of
2. the Empire and
3. the United States and as far as possible also,
4. those of the Continent of Europe and finally,
5. of those countries which, like Japan, or new China, are fully entering the fields of occidental learning."

Geddes appealed for gifts and loans of illustrated material. He also stated that after the close of the celebration of the semi-jubilee of the Edinburgh University Hall, the Exhibition would probably be held at the University Hall of Residence in connection with the University of London, at More's Garden, Chelsea and further, that if arrangements permitted, it would be continued until the Congress of the Universities of the British Empire in the summer of 1912 and that thereafter, it might be available for other university cities. This is one further illustration of Geddes's restless energy and many of these points occur repetitively in his plans for museums, contained in City Development, 1904 and his Indore Report, 1918.

Another sideline was a prospectus announcing an Exhibition of Gardens in Mythology, History and in Modern Developments, issued/

issued from the Outlook Tower in 1912. The Exhibition was to be arranged by the Art and Open Spaces Committee of the Tower and was to include paintings, sketches, engravings, books and models covering the wide field of gardens, mythical, oriental, classical, mediaeval, renaissance, 18th century and modern and the last section was to include Garden Cities, window gardening and the Outlook Tower Open Space Movement, such as children's play gardens in Old Edinburgh courts and closes; lectures on the various sections were also to be given. The prospectus states that Geddes was the Director of the Exhibition and the promoters were Miss Norah Geddes (his daughter), a Mr. F.C. Mears (later to be his son-in-law), and the Honorary Secretaries, Miss Mabel C. Forbes and Mr. F.C. Mears. No further evidence occurs in Geddes's collection relating to this project.

The ever widening range and diversity of Geddes's interests is shown also in May 1903, when he offered himself as a candidate for the Directorship of the Edinburgh Museum of Science and Art. A note written by Anna Geddes at this time contains a point that his mind had been for so long occupied with the problems of museums and exhibitions that he felt almost compelled to offer himself as a candidate.<sup>1</sup>

He based his candidature on three general points -

1. "A long and critical acquaintance with museums and exhibitions in general and a concrete familiarity with the main Departments and even many of the details of such a museum as that of Edinburgh.
2. Upon a special and experimental intimacy with the problems of classification and the application of these to the departments of an index museum<sup>2</sup> and,
3. Upon the experience of an educationalist whose essential problem has always been the awakening or freshening of interest in student and teacher, but is not enough to amass collections/

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1. Diary of Anna Geddes, 1903.

2. This is a reference to the Outlook Tower.

collections nor even intelligently to display them. The most pressing problem of all is that of the museum visitor, teacher, pupil and public alike; it is to renew the healthy spring of wonder in our day, too much depressed and to guide it onwards as admiration towards art and as curiosity towards science. In a word, I should hope not only to administer and develop the museum as a centre of educational supply but to increase and improve the educational demand."

Much of Geddes's expertise, in fact, arose from his work in developing the idea and the practice of the Outlook Tower, named by one American, the world's first sociological laboratory,<sup>1</sup> which, in fact, became a centre for current affairs and a museum of geography, history, sociology and applied civics. The impact of Geddes's sociological ideas is well instanced by a letter from Victor Branford,<sup>2</sup> recalling his founding of the Sociological Society - "My deliberate object was to provide, through the Society and its projected review, a platform for Patrick Geddes". Branford, in fact, bore the bulk of the responsibility, financial and otherwise, for this Society and its review. But Geddes inspired Branford and he also took a very active part in conducting other business of the Society, frequently lectured under its auspices and contributed numerous articles or reviews.

In an unpublished manuscript, written at Montpellier in 1930, Geddes wrote -

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1. C. Zueblin op.cit. The American Journal of Sociology vol IV No.5, 1899.

2. Quoted by McGegan.

an introduction of me to the public library, where from ten to sixteen, I devoured nine or more volumes a week, since school lessons, after his early training, were easy and left leisure. Hence initiation to fiction and poetry as well as prose and even to historians he had delighted in. From earliest to latest schooldays, I brought home my father's newspaper every afternoon and so learned the habit of reading it all the way home- whence later, Current Events Club and even historic charts and more in the Outlook Tower."

The Current Events Club mentioned by Geddes, was founded in 1895 or 1896. The Club met at the Outlook Tower once a week and the events of the previous week were taken in the order of the classification of the Tower and, as far as possible, each event or group of events was reported upon before discussion by someone who had made a special study of it. Newspaper cuttings reporting the events discussed were always brought to meetings of the Club and were afterwards pasted into their appropriate cuttings book.

The Tower was acquired in 1892 and became an integral part of Geddes's life. It is suggested that an understanding of Geddes - his personality, his thought or his action <sup>↳</sup> cannot be properly assessed without a clear and sympathetic conception of what he himself meant the Tower to be: and conversely, the Tower cannot be understood without a clear knowledge of Patrick Geddes. The Tower, in fact, was a thinking machine, an aid to thought and the result of thought, which is illustrated by a note on the Outlook Tower written by him.

"While current education is mainly addressed to the ear, whether directly in saying and hearing, or indirectly in reading and writing, the appeal of this literal Outlook Tower or interpreter's house is primarily to the eye and the attempt to link the various departments of study and the summer meetings, etc., is thus become more and more a matter for actual observation in picture and map, diagram and in thinking machine. Neutralisation of the Tower thus best begins in its camera turret with the actual landscape/

landscape and the art of seeing with the help of open eyes and camera obscura, one proceeds naturally to the seeing of art by help of representative pictures, so that in some measure everyone may become his own art critic, appreciating contemporary evolution in art with freshened eyes. Parallel to this comes the art of seeing in science observation and reasoning upon the phenomena themselves independently of book or other hearsay accounts of them. Further comes the analytic study of this mass of impressions by the help of different special sciences - these all return to unity and the study of contemporary evolution."

Geddes suggested and built towers elsewhere. He believed that an Outlook Tower should grace every city. This comes through particularly strongly in the Reports of Dunfermline, Indore, Jerusalem and Bombay. He created such towers at Montpellier, Bombay and Domme in the Dordogne.<sup>1</sup>

### 5. Art and Culture

Patrick Geddes was a man of many parts and one important segment of his activities related to a wide field of art, culture and regionalism. These played an important role in Geddes's planning relating to the realisation of human personality. It is relevant to mention briefly a number of the contributory inputs into Geddes's thought and actions arising from his interest in the general field of human culture.

Art In a personal memorandum Geddes writes of his ambition, when a boy, to become an artist -

"In boyhood, drawing as children do, I met and was fascinated by the work of J.H. Cranston, a Perth artist and family friend who had discovered and started Orchardson when a boy and so was interested in trying others. Thus, naturally, I went to the art class but, alas, was there taught to copy so faithfully, to design so symmetrically, to stipple so perfectly, that I was encouraged by my South Kensington master to follow  
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1. The Outlook Tower is more fully considered in Part II.



in his steps, or to become a professional designer. The best drawings of the class, which happened to be mine and another boy's, were sent up to South Kensington and were duly returned with prizes, but when it came to sorting out our drawings and taking them home, that boy and I, happening to have each done drawings from the same bundle, could not for the life of us tell his from mine till we had looked for our names on the back. Here then was the clash, we realised that we had been mere copying machines. Recalling my artistic friend's different method, a sketch of familiar and favourite landscape was attempted but this I soon saw was but mechanical copy too. Hence, utter discouragement, whence returned to science and to this day with no more drawing save that necessary for blackboard teaching or working diagram. Convalescence from mechanical copying might doubtless have come, as amongst artists proper who often make rapid decisions and abide by them."

However, in spite of this decision, Geddes seemed always to remain something of an artist and occasionally a patron of the arts. His manuscripts show a deep interest in the study of art, though his only publication dealing exclusively with the subject were the two booklets which he published in 1887 and 1888, entitled - Every Man His Own Art Critic and An Introduction to the Study of Pictures. It should be borne in mind that it was in 1887 that Geddes pleaded in his industrial exhibitions of modern progress for skilled educational guidance to exhibitions. Taken into consideration with the two books on art, it is clear that his propaganda in these works is directed at fulfilling a purpose, analogous to that of the Paris International Assembly of 1900, for in fact, the Introduction to the Study of Pictures dealt exclusively with pictures exhibited at the Manchester and Glasgow International Exhibitions respectively. Whilst Geddes was always quickly responsive to the appeal of art, he was more deeply interested in the social aspiration, application and influence of art than in any purely aesthetic consideration.

In 1889 he wrote a paper on National and Municipal Encouragement of Art upon the Continent. This was delivered to the Art Congress held in Edinburgh in that year and one particular/

particular passage is appropriate.

"Our initial position is that art is not an exotic supplement to life but as inseparable from it as hygiene and just as we expect the state and the city in all its necessary functions to respect the laws of hygiene, nay, even set an example of these in all its buildings and belongings, so should we do with art. While the decoration of colleges and schools is certainly one of the most important and expedient of all beginnings, it need not by any means be the only one. There are opportunities for mural decorations everywhere but nowhere more so than in Edinburgh. We need a scale of public decorative work from the simplest copying and enlargement of good examples in monochrome, to the execution of monumental designs in colour and from brightening of the humblest sickroom up to the permanent historic adornment of the greatest public buildings. The national and municipal encouragement of art must be reached through our voluntary individual and associated beginnings, at first scattered and local, thereafter more abundant and general; and so ultimately municipal and national."

In 1892, Geddes founded a University Hall School of Art. The first report, dated 24th February, 1893, includes the following passage.

"This school is not in competition with any existing school in Edinburgh or elsewhere but has distinct objects of public and educational usefulness. The class to whom it hopes to appeal are students who have already acquired some preliminary training, workmen who have already mastered the essentials of their handicraft, painters and architects who have studied their professions; and it endeavours to organise their efforts upon the city, much as in every city during the Middle Ages, the cathedral and the civic and corporate buildings were the recognised centre of artistic life. The first problem has been to make a thorough study of the old town of Edinburgh and to obtain a full collection of photographs. This has been in active progress and a valuable collection has thus been accumulated. It is hoped in the course of a year or two to have material for publishing a monumental volume. Two photographers have hitherto been employed but it is hoped gradually more widely to interest both amateur and professional photographers. In future years this promises to extend from the city to the district and even to other towns. Even in its present imperfect state the/

collection has a great historical and antiquarian interest and has been of actual service in the preparation of architectural designs for new buildings. A number of architects have already been provided with suggestive material of this kind which is at the disposal of all members of the profession."

Geddes went on to stipulate that -

"A more important practical object than the preservation of memorials of old buildings comes forward, that of the development of the existing elements of a living school of Scottish domestic architecture. This divides itself into two heads - the restoration of old buildings and the construction of new. In this respect the school may claim to be already active. The Director has acquired personally several large important sites in Old Edinburgh (Ramsay Gardens, Riddel's Court, etc.) and has also been fortunate in securing the co-operation of other persons interested in Old Edinburgh. The principle adopted has been to avoid either competition amongst many architects or monopoly by one or two, the plan being to employ as many architects as possible, consistent with the endeavour to preserve artistic unity by giving each an adequate opportunity of designing a really satisfactory work. Besides the large buildings of University Hall, themselves divided between two architects and restoration connected with this, about 20 buildings, or masses of buildings, have been designed or remodelled this winter, the work being divided amongst at least eight distinct hands and the architectural problems have thus, necessarily, this year, taken precedence. Preparation for the higher work of the painter has not been forgotten. For several of the old buildings being restored and also for one or more of the new houses being built, designs for decorative panels are being designed. The artist is in each case entrusted with the working out of a unified series of designs, appropriate to the position and usually bearing upon the history or domestic tradition of the house or its neighbourhood. The work of teaching has also begun, each artist being invited to utilise the services of one or more students in the preparation of these. In this way again the living nucleus of an art school is being formed on a method which has been successful at all past periods of importance in the history of art and which already is providing an efficient substitute for examination or rewards. Certificates will, however, be given when desired in the form of attested photographs of the pupil's work. The claims of public decoration have not been forgotten. A well-known artist and designer has been appointed teacher of figure design. He devoted the greater part of his time to the preparation of an important historical design which it is intended to submit to the Water Trust for direction upon the frieze of the Water Reservoir (Castlehill) by the process of permanent plaster-work known as scraffito. This subject is in the form of a procession, that of the royal and otherwise prominent personages of Scottish history, beginning with Duncan and Macbeth, Malcolm Canmore and St. Margaret, coming down to the entry of Prince Charlie in 1745. The design is already partly enlarged by his pupil and/

and will be 130 feet long. As the design has been prepared with historic care and accuracy it is hoped later to publish this in a form suitable for school decoration and in a smaller form as a historic picture book which it may fairly be hoped will be useful in spreading a knowledge of Scottish history." <sup>1</sup>

Geddes carried on to include others in this scheme -

"But while the architects and painter and decorator have thus been provided for, the workman is not forgotten. An arrangement has been formed with the Committee of the Industrial Art Association to afford them a workroom with tools, etc., with a competent superintendent and it is hoped that some of the ability often spent on objects of doubtful design or limited ability, too common in recent artisan exhibitions, may thus gradually be utilised for work of public interest - for example, carving in stone, monumental tablets or fountains, etc., for the further development of the old town. It is here encouraging that this Department is being organised by the workmen themselves and that a craftsman of eminent skill has generously volunteered his unpaid services till the organisation of the School is complete."

Though Edinburgh Corporation made a grant of £200 in fact, from its residue grant for the general purposes of the School, the remaining deficit was met by Geddes himself. University Hall School of Art later became the Old Edinburgh School of Art, under the directorship of Mr. John Duncan. The theme was inherited. In the Chicago lecture, Duncan mentioned that -

"The essential idea of the School was to do practical work, the students learning their business on the old apprenticeship system,/"

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1. Practical work in Edinburgh, which Geddes mentions, is related to the activities of the Decoration Department of the Edinburgh Social Union which was carried out under Geddes's inspiration. In a copy of a lecture, given in Chicago in 1901, by a Mr. J. Duncan, the following comment was made - "The Art School had for its programme the work of reconstruction and the revival of historic associations. Its centres were the offices of architects, idealists, architects planning improvements upon the largest scale, not counting the half-pence. Whilst practical architects were carrying out specific plans for immediate realisation, Geddes invited suggestions from everyone, - schemes, however visionary, and aimed at the complete renovation of the ancient city. He has in his possession, drawings of ideal Edinburgh, with the ugly features suppressed and with large architectural effects not unworthy of its superb position. And later, that the intention at first, was to execute a frieze in scraffito, but Murdoch preferred cutting it in stone relief and on it (the frieze) would be a monument of the greatest importance, a history that would appeal to professor, workman and street arab alike, the places so conspicuous that every inhabitant would soon have been familiar with it. There would have been no child in Edinburgh who had not read at least that history of his country."

system, while lending a hand wherever they could help. At first this might take on a more mechanical side, enlarging drawings and helping to find material in the libraries, but by and by, doing a little of the first painting and designing details, borders and ornamental setting and so by degrees the over pronounced individuality and isolation of the modern artist gave way to more social and co-operative ideas and methods. The School worked towards the association of self active and creative artists, believing that it is only so that any great art is possible."

Amongst the activities of the school were classes in Celtic design and ornament and it should be noted that Mr. Duncan and his assistants (Miss Anne Baxter and Miss H. Hay) designed initial letters and head and tail pieces for the Evergreen and other books published by Patrick Geddes and colleagues.

In addition to the mural decorations carried out under Geddes's inspiration by the Edinburgh Social Union, mural decorations were also made through direct commission from Geddes or on his initiative through the Town and Gown Association. These included -

1. Geddes's flat at 14 Ramsay Gardens (J. Duncan and associates).
2. Mound Place (J. Duncan and Biron-Murdoch).
3. Ramsay Lodge (J. Duncan).
4. Giles House (J. Duncan and associate).
5. Edinburgh Room, Outlook Tower (designed by Mr. James Cadenhead, executed by Miss H. Hay).

Another interesting element was that in 1895 the Old Edinburgh Art Shop was established by Geddes in the Lawnmarket, one of his objectives being to encourage the skilled workers of many kinds, wood carvers, metal workers, etc., whom Geddes had gathered about him.

An extension of Geddes's interest in art was his interest in masques and pageants. He appeared to be alive to their pictorial, decorative and dramatic quality and to the vivid presentation of history which these could afford, but as his own books of masques of learning clearly show, he was eager to achieve more than this, to dramatise them into actual creative life.

In 1894, he organised a presentation of three incidents in costume, in Edinburgh, though little appeared to have been done between/

between that period and 1912 when the semi-jubilee of University Hall was celebrated and for that celebration Geddes devised and produced his Masque of Ancient Learning, the performance being given in the Synod Hall, Edinburgh, from the 14th to 16th March and repeated later for pupils of the schools of Edinburgh. The participants, some 650, later formed themselves into an Association, unlimited in constitution and in ambition, as the Edinburgh Masquers, Outlook Tower. The masques were developed, the Masque of Mediaeval and Modern, each complete within itself yet, making up with the Masque of Ancient Learning, a trilogy of the main phases and events in the changing history of civilisation. They incorporated suggestions towards the world pageant of education, of learning, of culture, of human advance.

Geddes's own objectives were -

"The Masque of Learning consists of an historic pageant and characteristic scenes illustrative of the development of higher education and of the origins and history of the university, each in its widest sense. It thus starts from the earliest stages of evolving man, for what is the one essential of the university in all times and lands but the communication of experience from age to youth? The main presentiment begins with the great oriental civilisations and proceeds through Greek and Roman times, through Celtic and mediaeval periods to the Renaissance and the encyclopaedic age and thence to the present day. For each of these great periods of thought and action one or more of its memorable moments, its characteristic movements, will be represented. In each of these phases of culture, its simple origins, its highest culmination and achievement are expressed, its ideals at their best, its decadence with loss of these. All this varied history has made up the complex heritage and burden of the intellectual world from schoolbag to university library. The final scene attempts to shadow forth the opening future of higher education and to suggest how Edinburgh and its students, university and city together, may take an increasing part in this."

Regarded as a whole, the masque is in itself a search, and the interpretation of its episodes, which Geddes wrote and published, must be regarded amongst one of the positive achievements Geddes made to popularise his view on education and co-operation of Town and Gown.

Geddes was eager to achieve more than simply the presentation of history and this he achieved, for instance, in the pageant which he/

he devised and superintended in Indore in 1917.

<sup>1</sup>"The procession is authorised by His Highness the Maharaja and is in order to encourage the cleaning and brightening of the city which is appropriate to the season and also, to stimulate the public to hopeful and energetic action in dealing with the causes of plague, especially the rat pest and the deterioration, overcrowding and neglect of homes. It will further help to make known the schemes which are in preparation for the general improvement and extension of the city, the better housing of its inhabitants, whether these remain within the limits of the present city or take up new homes in garden suburbs and villages, or the new industrial town which is at present being planned and prepared". In the first of his talks, From My Outlook Tower, Geddes describes this pageant - "Indore, a city particularly decimated by plague and depressed by malaria, in fact to the worst degree I have found or heard of in India, and thus with the shortest expectation of life. This was calculated as low as 18.6 years while the average of India rises to about 30 and that of Britain to about 50. Evidently then, Indore was a place needing a careful survey and corresponding thorough improvement and for a good part of 1917-18 I was busily employed there. The townspeople, however, were not merely apathetic, they were vaguely alarmed. To see a European prowling into every land and corner and marking his plan always provokes fear of demolition amongst Indian householders who vaguely gossip of what new roads or railroads this uncanny engineer might be scheming, but here matters are worse. People pointed and talked with more than usual dread. That afternoon was fixed for a consultation with the Home Minister and the Mayor, each as progressive as could be desired, but also sensing the public opposition. Despite our powers from the Maharaja, we felt depressed, not seeing how to diffuse a cordial understanding amongst the people towards the large clean up and clearing up we were out for. Then, however, came a happy inspiration - 'Make me Maharaja for a day', I cried. 'What do you mean?' asked the Minister. I explained, 'One main business of a prince is to be magnificent and thus to head and express the ideals of his people. The Maharaja of Indore has two great processions yearly, one for his Hindu subjects, another for the Moslems and each with its appropriate sacred time, route and pagentry. Now, to arouse all alike to cleanliness and good works complimentary to such renewal and godliness, a civic pageant/

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1. A Schoolboy's Bag and City's Pageant, Survey Graphic, 1st February, 1925.

pageant, a town planning procession might be the very thing.' 'Not a bad idea', said the Minister, 'I'll go and ask His Highness,' which he did, soon returning with good humoured assent. So now to planning and preparations (nature, methods and description). Then on the great day came forth our pageant with streets athrong with villagers from far and near, the usual state procession and the usual gay position of harvest with the Sun God and the car of Rain, these two main conditions of growth and the Harvest car and so on. But now, after all this gaily of Harvest came a dismal change of scene and to melancholy wailing and discordant instruments, weird figures as tigers and demons, as diseases, the latter breaking jointed twigs like bacilli and casting them at the crowd; types too of poverty and misery as well as wretched disease sufferers; and amongst and after these sinister swordsmen, barbarious riders threatening with dagger or lance - in short, the ugly aspects of war. Next followed models of slum dwellings, well caricatured, with their crumbled walls and staggered roofs, broken windows and general air of misery and dirt; then the giant of Ramas - legend was here presented as a giant of dirt, a formidable figure some twelve feet high, splendidly attired in blue, yellow and scarlet satin and with enormous, long, resplendent boots, yet also daubed and torn and dishevelled as to be the very type of fallen magnificence. Then following him, the rack of plague, again made by clever and skillful craftsmen, full of the fun of it, a good six feet long this rodent, quivering all over with rat fleas which carried plague, which were here similarly magnified by the use of locusts dipped in ink and mounted on quivering wires. Nor did we forget the huge model mosquitos for malaria. Again a brief break, after all these instructive horrors; then cheerful music heading the long line of 400 sweepers of the town, two abreast, all in spotless white raiment, with new brooms flower garlanded. Their carts were all fresh painted red and blue and their big, beautiful white oxen were not only well groomed and bright harnessed for the occasion, but with black polished hooves, blue bead necklaces and golden flowered garlands, their great horns gilded in vermillion by turns; every sweeper too was wearing a new turban and of the town's colour, as were all the employees and the higher officers of the town, as well as the Mayor and myself and this arranged with his warm approval as a symbol of the democracy of civic service. . . . After the sweepers came the casts, labourers, the firemen, the police and the officials and Mayors, and behind them, enthroned on a stately car and in worthy splendour of apparel, a new goddess, evoked for the occasion, Indore City, with her mural crown like Rama Indore. She bore her appropriate symbol, a banner on one side illuminating with the city's name and on the other, with the city's plan, simplified around its blue twisting rivers and its future changes outlined in red, amid the existing black. Then followed/



followed big models of the public library, museum, theatre and other projected public buildings and best of all of better homes. Thereafter the cars of the crafts, on one the masons hewing, on another the bricklayers, the joiners, the carvers, the iron-workers and so on, not forgetting the potters, all of them busily acting their parts. Finally, the future gardens, great drays laden with fruit, laden with banana plants, papayas and more and with flowers as well, and sacks of fruit tossed to the children. We even sacrificed the Maharaja's biggest and best orange tree which went swaying through the streets and dropping its golden burden; and to wind up all, a tray giving away innumerable tiny pots with seedlings of the tulsi plant, the sacred basil of European poets, which is the central symbol of the well-kept Hindu home. Thus we perambulated pretty well the whole city through the long afternoon and then wound up at dark in the public park where the Giant of Dirt and the Rat of Plague were burnt in a great bonfire, their disappearance announced by fireworks. Soon there was no more fear of me. The people again talked and pointed. 'Do you know what they are saying now?' my assistant said to me. 'They are crying after you - There's the old sahib that's charmed away the Plague'".

### Publishing

The medium for expression in the arts, and also as a vehicle for Scottish renaissance, was Geddes's work as a publisher. Geddes had involved himself in publishing from a fairly early period, as evidenced from some of his earliest published writings - 1881 The Classification of Statistics; 1885 The Principles of Economics; 1887 and 1888 Industrial Exhibitions of Modern Progress and Every Man as Art Critic - which were all published at his own expense. In December, 1894, The New Evergreen was published. This magazine contained poems, stories, essays, drawings, the contributions coming from the residents of Ramsay Gardens and also from other friends and colleagues of Geddes. In 1895 his real activities as a publisher began. In that year he published, under the name of Patrick Geddes and colleagues, The Northern Seasonal, The Evergreen. Geddes himself wrote of the Evergreen in September, 1895, entitled "The Evergreen Good Reading" -

"You asked me to give some account of our Evergreen - well, last December, 1894, two or three of the young writers and artists of our little germ of a college, which had just before absorbed Allan Ramsay's old goose pie into its new buildings, drafted a Christmas/

Christmas book and called it the New Evergreen. This was, of course, in memory of Allan's Evergreen of 1726, a collection of simple verse, perhaps without great merit of their own but which served as modest books may do to suggest better things to others, in this case to no less than Percy, Burns and Scott. The whole edition of the new Evergreen was taken up privately in University Hall and the editorial committee - there was no editor, indeed, nor hardly as yet but what I may perhaps best describe as a struggle for existence - decided on a public and larger venture, The Evergreen and Northern Seasonal. Of this you have already the book of Spring and the book of Autumn is also now ready, while those of Summer and Winter, making up the first series, will come next year. What are its ideas? It is not simply one more illustrated magazine of the usual type, still less than a mere counterblast to any existing quarterly, as some reviewers (quite misunderstanding its name) have supposed, but a product of its medium - an expression of the ideas of a little group amongst which it has arisen and of the widening circle already beginning to co-operate with it. The artists and writers with their pictures and poems, their stories and essays, are all in evidence; so also, are the designers, the binder, the printers and it is for the reader to say how far they have collectively or separately succeeded but, as the amusingly wide selection of press cuttings upon our autumn circular will show, our critics have, as yet, greatly disagreed. Some find our new serial, as, of course, we had hoped, both fresh in thought and beautifully informed, while others as confidently describe it as bad from cover to cover. Others, more cautious, reserve their judgement or even are not sure whether we are in earnest or in jest. Of so free and varied a journal each contributor might give a somewhat different account, but I may best put mine from my own side, though I trust one of the less apparent ones, I mean that of science. Those of us who are naturalists have departed far from the Darwinian orthodoxy of our upbringing and hold that view set forth in the Evolution of Sex and so well and widely popularised in Professor Drummond's The Ascent of Man, that is of evolution, as not primarily through a struggle at the margin of subsistence through cumulative patenting and underselling, but of evolution primarily through sex with its consequence of family and wider co-operation. We insist also largely upon a new or little considered aspect, that of evolution through the seasons. Here, we biologists join hands with the geographers, the historians and the students of social science who are well to the front amongst us. Hence, we have upon the stocks, multitudes of scientific papers which may, one day, doubtless develop into an Evergreen and weld into a chain of which our individual essays are the links and which I may call the House the Sun Built. In other words, the special sciences are, we hold, uniting/

uniting rapidly into one common doctrine; not one single account of the development of nature, man and of society, curiously recalling the old astronomical religions, - we are, in fact, renewing some of the teachings of the ancient mythologies and mysteries upon a new spiral, that of modern science. Hence, the four headings into which each of our numbers is divided - for example, Spring - in nature, Spring in life, Spring in the world and Spring in the North; the seasons in nature, the seasons in human life, regarded as a part of nature are, of course, themes in oldest poetry and science and will also last as long. So, under these headings we wish to include and to suggest some of those fresh readings in which science is nowadays so rich and mortal life so prodigal in suggestion. Our next heading, the season in the world, appeals to the old continental sympathies of Scotland, the newer but increasing similar sympathies of England. Here we are fortunately able to utilise these wide and varied personal relations which many of us made abroad or with the many colleagues and guests at our annual Summer Meeting, where the most varied schools of thought are represented. The Scottish student is again beginning to wonder if, as of old, the readers of Hill Burton, Racey, Scot Abroad, for whom the ancient league with France may yet seem an old and half-forgotten story, will soon hear of the Société Franco-Ecossaise, which is now being organised between Paris and Edinburgh. Under our fourth head see how we Scotsmen are trained to sermonise - of the season in the North comes the distinctly local and Scottish note with its literature of locality. Here we hope to illustrate not only the present little known school of writers, but the dawning Scoto-Scandinavian one and probably most likely, those who in Scotland are following the admirable recent lead of the Irish Literary Society and bringing their part to that Celtic renaissance which is setting in upon so many sides. Hence, then, we do not fear to speak more generally of the Scots renaissance, yet this in no merely local sense, still more in any narrow rivalry with the two kingdoms, with the predominant partner of the minor ones. From the standpoint of history, as of geography, Scotland is but the north-west corner of Europe, of which our history must be read as a part. Of course, we all know Scots history seems nowadays unimportant to most people, Scots and English alike, but ten years of historical seminar, i. e., of comparative history, has satisfied some of us that it is still particularly well worth reading and this by Englishmen and foreigners quite as much by Scots, for its wealth and contrast of strange survival and strong initiatives, for its deep mark upon <sup>the</sup> modern Empire as upon the ancient/

ancient and mediaeval world. In other words, this Scottish patriotism of ours has two main elements which distinguish it sufficiently from the merely boyish and popular sentiment for which it will, no doubt, at first, be often mistaken. On the one side, our exposition of Scotland is simply that of the geologist who is prepared to show his foreign or English colleague some things interesting and perhaps unique, but it has undeniably a practical ambition also, but this is an impartial, not a local-and-political-one. Thus then, our season in the North, while it seeks indeed to renew the local colour and feeling of Allan Ramsay's Evergreen, has a larger aim, no less than that of expressing our conception of Edinburgh as not only a national, but an imperial culture capital; may also our conception of Scotland gain, as in ancient, mediaeval and in recent times, one of the European powers of culture. This seems a large order but Evergreen aside, there is far more new life in Edinburgh and Scotland than ever Scots people yet realise. As I said at the outset, the main object of this new Evergreen will be served if, like the old one, it stimulates new men to do something better. I feel, of course, that this account is not one which does justice to the artists or the writers, or even gives the reader an adequate, much less attractive idea of our Seasonal. It is really not so ponderous and wintry a treatise as all this may indicate. I have not expressed one aspect, or put it in my own botanical way - Here is but a part of the tough, woody twice-forked and perhaps thick stem of our Evergreen. It is my colleagues who are more concerned with its verdure, flower and fruit and to them I can commend the reader."<sup>1</sup>

Through the work of the Evergreen, a friendship developed between Geddes and William Sharp, who wrote under the pseudonym Fiona McLeod. By 1895, Sharp was acting as literary advisor to Geddes and Colleagues and the firm published several of Fiona McLeod's works, for example - "The Sin-Eater and Other Tales" in 1895, "The Washer of the Ford and Other Legendary Moralities" in 1896, "Tragic Tales" in 1897 and so on.

Records exist to indicate that the firm intended a much more widely based audience than that concerned primarily with culture and Celtic renaissance. It had been intended to publish a biology series, /

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1. Letter - copy - to T. Fisher Unwin, September, 1895, University Hall, Edinburgh.

series, current science and evolution series, education series, current events series, though these apparently never came to fruition.

In discussion with Arthur Geddes,<sup>1</sup> it was made abundantly clear that Geddes never, in fact, faced up to the financial aspect of publishing and this was another failure. Geddes, of course, was unable to devote to it the detailed and continuous attention which is necessary.

The copyright of Fiona McLeod's works, which he had published, was Patrick Geddes's own but, in fact, he generously presented it to Mrs. William Sharp about 1910 and in that year the firm of Heineman published the uniform edition of McLeod's works and these were re-issued four times. One interesting aspect here is that during the hayday of the publishing firm and indeed long after it ceased to exist, Geddes used the title of Geddes and Colleagues frequently in connection with matters that had not even the remotest relation to the business of publishing and the name perhaps became something of an obsession, a desire for a wider, more intimate and more continuously active co-operation with people than he ever, in fact, achieved.

#### 7. Scottish Renaissance.

Geddes's letter on the nature of the Evergreen indicates the desire which was current throughout much of his life, to facilitate the renewal and the development of Scottish affairs, both the life of Scotland in general and of Edinburgh in particular. His practical work in Edinburgh itself, through the Social Union, house renovation, civic surveys, the University Hall, his Edinburgh School of Art, the publishing venture and Outlook Tower, appeared to be expressions of the desire to see Edinburgh once more/

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1. April, 1967.

more a European capital, and some of these activities were also meant by him to serve as examples of what might be attempted and achieved in other urban communities in Scotland and, indeed, elsewhere.

Geddes fully realised, of course, that rural renewal and developments were at least as important as urban renewal and the botanical surveys of Scotland, which he initiated through Robert Smith, W.G. Smith and Marcel Hardy, are only one of the many practical proposals and activities which he promoted or supported for the regeneration of Scotland.

It is important to recall that Geddes's ideals and proposals in connection with this work in the field of the Scottish renaissance was essentially synthetic and intended to be simultaneous. A purely political, industrial and commercial basis of a Scottish renaissance appeared to repel rather than attract Geddes, though he acknowledges the importance of industry and commerce as constituent elements in such a movement and this is evidenced by his detailed plans for the Forth-Clyde ship canal. The papers dealing with this scheme no longer exist but amongst them were indications of a very carefully prepared relief survey of the area of the proposed Canal and included reference to Paul Reclus, who was involved in this work with Geddes.

In a similar vein, Geddes was reluctant to accept with enthusiasm a purely literary and artistic revival. This too was a component, but to Geddes the major problem was that of Scotland as a nation and Edinburgh as its capital and a problem which could not be solved satisfactorily unless the life, past, actual and possible of both the nation and its capital was seen as clearly and as comprehensively as possible and the renaissance planned accordingly.

Some elements of Geddes's thought are recorded in a letter he wrote to R.B. Cunningham-Graham, 31st August, 1909 -

"Your criticisms of Edinburgh and Scotland and of most of what they now value, or think they value, is mine too and is compounded in varying/

varying ways, no doubt, from your mingled quests to my vegetable stall, so quiet save for an occasional stool throwing, yet essentially of the same element. What are they? Many the jealousies of honour and of love, of pride and sorrow, sometimes ashamed too of things and times and dates departed, of disgust with the sordid, yet of disappointment with the romanticism which promises in our youth to overthrow this and despite our moods of cynicism and despair, our feelings as if we only are left, there is yet a certain blend of hope - better of faith - of scientific conviction indeed, which is based in the uniformity of things, that this winter of our discontent must have its ending despite all returns of the frost which nipped our young buds and this yet more depressing persistence of east wind and har. You see that this stormy little world's end of ours is yet no more mutton bone of England, but an individuality which once and again has given that massive body its head, heart and hand, voice and direction. Even now, indeed, in these days of mere politics, is not the gigot oftner gripped from the bony end? But better than this, we are north-west Europe with all the rich jetsam of its tides upon our shores and from this rock often rebounds anew flash wave impulses throughout the world. You will remember we were recalling this heritage from each generation since the old order ended with the Jacobites and their singers, the historians and the philosophers like Robertson and Hume, the technicians and economists like Watt and Adam Smith, the titanic Ossian and Byron and the dionysiac Burns, the romantics headed by Scott and contrasted by the critics and reviewers, each were all 'great Englishmen' no doubt, but still were Scotland's and the world's. So it has been with other groups, the geologists and the travellers, the naturalists and the farmers, the builders, architects and gardeners, the physicians and the surgeons, the physicists and electricians and now in our own day, the shipbuilders and the painters. Each have been of the very foremost of their day and generation. We are only discouraged because we do not see what next, perhaps also because we who have been trying to act or think for the opening generation lack the courage or the persistence of our predecessors and so hesitate to take action, to say what may be in us and, indeed, is in our hearts and shaping our minds. Well, that is what has been the problem of my own life of alternate studies and experiments here, for we dominies have this compensation for subordinating our own careers that we the more shape future ones, or at least shape armour and temper swords and fill armouries for the rare comers who can use them and who, in this great teaming schoolhouse of a university, do occasionally come. Do you know the story of how the Grande Encyclopaedie was brought north here and became adapted, like a play, into the Encyclopaedia Britannica, even before it was taken to Germany and fell into the pieces which make up the University of Berlin? But here the encyclopaedias are still made - Chambers or even Harmsworth, Mathers and so on, but after each encyclopaedic marshalling of thought/

thought there comes a corresponding battle front of action - everywhere in the world this has held good and what you think death here is a pause between them. I don't think my own little personal world here the whole one, far from it - still here in the Tower, as around us in the city is the Encyclopaedia Graphique which he that may read, the mass of the people and the artist as well as the mathematician and the thinker. What we are trying to make is the Encyclopaedia Synthetica instead of Alphabetica Empirica and so Civica too, instead of Mammonitica and so on and in some measure, Pratica, Synergetica not Paralytica, like too much of the academic tradition and heritage, its static part. Will you come back for a week or so to Edinburgh, stay here and look with me once more at this sad old city, as she sits despised and powerless, having once more, as too often, lost all her best sons, when she is demented by her dominies who have run away to seek their fortune? You see how she now sits as she fell in an unhealthy sleep, a long enduring coma; you see her pinioned by her judges and played on by their wig lice, that countless vermin of lawyer links, swollen and small; you see her kept in squalor by her shopkeepers, a bawbee worshipping bailie bodies and pushioned by her doctors; you hear her doled by the blethers of her politicians and deeved by the skreigh of the newsboy caddies who squabble at their heels and you know who she has been paralysed by, the piffle of her professors more than half doited or driven into alternate hidebound or hysteric nightmares by every chilly dogmatism, every flaring hell blast imagined by three centuries and more of diabologian divines. You look more closely and you may see signs of waking - some of us have - so we are trying here and there to wipe off the dirt and then the tears and rub out the stains amongst her old grey gown, to gather some of her better bairns about her and mend her own ways, even it may be changed in the ways of some of those I have been abusing. People tell me that it is not practical politics but neither you nor I have taken much stock in that. They say that she is as good as dead, that she can never rise again but I know better. The scientific certitude of our day and the prevision of the rhymers are essentially true. She has not always had degenerate sons and daughters - even these are proud to recall how many was at once the latest of Aphrodite and of Helen, Queen of Love and Swords, Queen on the Chessboard of Europe, as queen to this day in memory and song and since her passing of Cyprus and Troy in one, the memory, because the very spirit of Athens has come here and this once and again. In generation after generation Athen's spear has flashed. Yet it is by this grim sign that I am kept from despair, for nearest to where the Gorgon's head is doing its deadliest work, there, once we get behind the shield there is, as of the old, are the grey eyes of vision and interpretation. With such a life expectation as runs in your kin and mine we shall do something yet. I have been letting myself go - indeed, I have rarely /



rarely done to anyone, because, as I told you, I know you to be of the company of old and bold. \_I see that you bring back the heart of Scotland from old Spain, as I the Ancient League with France and that there sings in your mind, as in our friend Fibna's, the Highland memory and even the ancient fire."

#### 8. International Understanding - Social Finance and Industry

Geddes worked for the promotion of collaboration in economic affairs between nations. This action was part of, and at the same time an extension of his work for the Scottish renaissance. He lectured and wrote a great deal on the subject of social finance and industry. One early reference occurs in the penultimate passage of a lecture on the condition of progress of the capitalist and of the labourer, published in 1886.

"If you have any capital the first duty it owes to labour is that of wise investment - wise investment, I say, not weak philanthropy and few investments are yet wise. Investments in really useful and practical ways, progressive ways, evolutionary ways, are by no means the favourite ones. Don't, for instance, invest in more foreign loans, nor even more corn or cattle raising in America - we have plenty of all these - but invest in your own town amongst the people who made it for you and in permanent realities, not in more factories and more back streets, full of workers in them - we have plenty of these too - but in nobler dwellings, and giving the higher industries their long-delayed turn and so producing a larger individual return for labour than is to be got by our too exclusive tending of machines. That is the kind of investment which pays, the kind of risk for which there is ample compensation."

This theme, which may be defined as the mobilisation of credit, is one which pervades Geddes's approach to economics and also underpins his ideas on international co-operation. His notion was to promote an intensification of local life and opportunity within a national context and in a wider level, opportunity within an international context. The direction of this credit mobilisation was always to be towards co-operative, civilised or social ends. Geddes frequently put his concept of social finance into practice and not infrequently to his own financial loss. His housing work in Edinburgh, University Halls/

Halls and publishing venture, were all imbued with this conception and his published writings on the coal industry show clearly that he worked out applications of the conception in other fields.<sup>1</sup>

One such venture, which is rarely commented upon, is his work in the Eastern and Colonial Association Ltd., in 1896 and the winter and spring of 1897. Geddes spent three months of this period in Cyprus.<sup>2</sup> His main object was to study the Near Eastern problem, at the time a burning issue, following the displacement of Armenian refugees from Turkey. Geddes believed that the refugee problem in Cyprus was to be approached on the lines of the place, work, folk trilogy. Shortly after his return to Britain he founded the Eastern and Colonial Association Ltd., to carry on and develop the work of reclamation which he had initiated during his stay in Cyprus. This was Geddes's most notable experiment in the practical application of the theories of Le Play and of the application of social finance in a redevelopment project.

Social credit and co-operation form part of Geddes's intense and comprehensive approach to achievement of international understanding and co-operation. His Outlook Tower, Edinburgh Summer Meetings, Current Events Club, Exhibitions, International Assemblies, projects for museums, the revival of Scots College and other practical activities, were all more or less directly concerned with the promotion of international co-operation.

A first step towards this wider horizon was in an intelligent understanding between Britain and France and Geddes /

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1. Making of the Future Series - The Coal Crisis, P. Geddes, 1926.  
2. See Part II.

Geddes himself was an inspirer and founder of the Franco-Scottish Society.<sup>1</sup> At the end of 1889, certain French and Scottish professors, notably Professor Lavissee and Professor Geddes, originated a Comité Franco-Ecossais, of which Comité M. Louis Pasteur was President. In January, 1890, the General Comité des Patronages des Etudiants Etranges was formed in Paris with M. Pasteur as President and M. Paul Melon, who had been mainly instrumental in organising it, as Secretary.

In the Spring of the same year the Senatus of St. Andrews University appointed a Scots College and Foreign Residence Committee consisting of Principal Donaldson, Professors Pettigrew and Geddes to advise students intending to travel and to receive and aid foreign students coming to Scotland. In October, 1890, a number of young graduates and senior students, with Mr. A.J. Herbertson as Secretary, began residence in Paris under the auspices of these committees and were joined in the beginning of 1891 by several other students. In Paris, there was held, in April 1892, the first Scots College Dinner, various members of the Comité de Patronage were present, as well as nearly all the Scots students and teachers then in Paris, including Professor Geddes and others. This activity was clearly an early model for Geddes's later work at Montpellier.

Summary: The range and diversity of Geddes's activities highlights a number of essential elements. It has been shown that his work was characterised by a series of linked and recurring themes not least/

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1. A very early collaboration with A.A. Gordon, the first Hon. Secretary of the Scottish Branch of the Association. Publication issued by this Branch in 1896, containing an account of the Society and the inaugural meeting states that fetes which were held during the Paris Exhibition of 1889 attracted students and professors of almost all nationalities. The good feeling engendered by the meetings then held suggested to many the desirability of organising international university relations, so the students and teachers might more easily participate in the advantage of study at universities other than their own.

least of which is a continuous elaboration of a simple notion through to a complex schemata of action. Education towards place comprehension is a notable example. This becomes linked to education in time; exposure to a range of learned minds; varying viewpoints and a host of separate disciplines. The codifying factor underpinning the schemata was the Geddesian philosophy of the linkage of sciences with other studies. It transpires, thus, that place education rooted in field or street becomes central to and necessary for international collaboration. At each stage of this educational process there is an expression of Geddesian teaching in action achieved by numerous methods: field study, adult education, publishing, exhibitions, social work and the like. Geddes emerged as no mere theoretician or pedagogue. His ideas, which embraced many fields of intellectual speculation, led on to a situation in which his practical activities became almost unlimited. Geddes showed an excessive vitality which drew him into a medley of affairs and an originality in the pursuance and the presentation of his central themes. The basic thinking on which the complex web of activity was based clearly occurred before 1900. After this date there appears little evidence of any major advance in his methodology. This fact is not unduly surprising for Geddes was then over forty years of age. His early planning activities in Cyprus and Scotland and his experimental sociological laboratory in Edinburgh (now to be considered similarly) show this imprint of an already mature philosophy.

PART 11

CHAPTER I

THE OUTLOOK TOWER - FOCUS OF CITY AND REGION

Writing in 1903 of a needed research institute, geographical and social, Patrick Geddes said that the ideas behind a school of regional survey could be most easily explained by referring to two pieces of work which were interesting him at that time. The first was to help a neighbouring town (Dunfermline) to start a naturalist society. The demand for such a society, he said, arose not so much from the local field naturalists but largely from the schools which were showing signs of wishing to escape from examinations based almost exclusively upon book work. The Professor's particular problem was not only to help this movement but to direct it towards a larger and quite practicable idea - that of proceeding from excursion, collection and observations to a regional survey and regional museum. This was the trilogy of a combination of nature study methods, namely, first hand observation of nature, aspect by aspect, science by science and secondly, regional survey of the selected area and finally, a museum illustrating and illuminating the survey of this area.

For Geddes there seemed to be only one way to commence such work - it was to make use of the actual Outlook Tower if Edinburgh was to be studied and for any other city or region, then a real or substitute Outlook Tower situated within the area. In Edinburgh, with the Camera Obscura giving a prospect of the region, forcing the observer to look at the immediate environment with "the eye of an artist", this would produce, he felt, "First outlook upon the city and country, upon the old Kingdom of Fife and Lothian, glories of sun and earth, sea and air."

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The second problem which pre-occupied him was "to complete our survey of nature, a sociological survey if needed and to initiate this by actual regional effort and example is the next purpose of our Outlook Tower." This was to be achieved by -

"starting from the proceeding naturalist survey of the region and utilising its results - it especially devotes itself to the human world and proceeds outwards in widening circles - first to the immediate outlook of the whole city, thence to its province and country, Lothians and Scotland. Thence again it proceeds to Great Britain and the English speaking world, to Occidental and Oriental civilisation and finally, to man. Obviously all our cultures are but complex developments of the simple nature occupations. Upon imperial thrones, in camps and armies, in sports or games, in subtle developments also, artistic, literary, scientific, we have still the hunter, just as in our skillful metallurgy the miner, similarly under all developments of our banking or our law, is still the peasant in our enterprise and travels still the seaman and in our occasional spirituality, the shepherd of men."

The Geddesian approach is simple and direct, it begins with the immediate landscape and a study of nature and physical geography. It is necessary then to relate this to social life through the nature occupations from which, Geddes assumes, develops our institutions and ideals.

"We have in these widening circles throughout the vast field of geography the wide range of history and these alike in their simple and involved aspects, both objective and subjective. That is, on each level we enquire first how nature has conditioned occupations and institutions but next, how ideals have reconditioned spiritual and temporal life, have determined education and have expressed themselves in literature and art."

The Outlook Tower, in Edinburgh, a five storey building, was acquired by Geddes in 1892. It became the much needed research institute referred to above, its various storeys being devoted to maps, drawings, diagrams and photographs; each floor forming a regional and civic survey at a particular level of thought. With such social surveys on each storey went corresponding endeavours of educational and social service, expressed in past years in Edinburgh city improvements and in collegeate/

colleagiate beginnings (University Hall) and later, city and university development schemes in other regions, and cities of the United Kingdom, Europe, India and Palestine. The Outlook Tower became a subtle and effective teaching machine for it exemplified the epitome of Geddes's philosophy, both theoretical and practical. As such it affords an interesting illumination of the view Geddes held of the state of civilisation, his techniques of analysis and it also offers pointers towards the realisation of Geddesian Utopia and Eutopia.

A whole body of educational doctrine and practice which became embodied in the Outlook Tower arose from the Summer Meetings which were held yearly from 1886. Initially the Outlook Tower was a Summer School of Zoology and Botany. Sociology was next added and this, for some years, remained the only systematic teaching of sociology in Great Britain. Biological courses were gradually developed by Geddes and Thomson into an increasingly systematised teaching of nature study. Courses of practical geography and region survey, with geographical excursions were commenced in 1890. This sequence is reflective of Geddes's own life and the evolution of thought from the individual sciences into the social sciences and synthesisation of the two streams into an effective working philosophy.

A major and notable development was undertaken in Riddel's Court; originally seminars for advanced students were held and these developed, in the Tower, into a School of Geography which ante-dated those of the universities. A number of notable pioneers of geographical study participated, particularly Professor Elisée Reclus (for two summers) his brother, Professor Elie Reclus, Monsieur Paul Reclus Guyou (Professor of Geography in Brussels) A.J. Herbertson (who became Reader in Geography at the University of Oxford) Robert Smith and Marcel Hardy (the pioneers of land use survey, Scotland) and Geddes himself.

Paul Reclus was a continuing collaborator of Geddes and with his brother Elisée and Geddes, worked towards the preparation of/



geographical teaching apparatus, especially relief models and globes. These initiatives in nature study and geography, in fact, preceded the recognition of these subjects by the Scottish Education Department (1902-1906).

Much of the work of the Tower, however, was concerned with continuing teaching in sociology. Geddes, himself an advocate of a modified Le Play concept of analysis of society, encouraged the teaching of this school in Britain and indeed, Edmond Demoulin was an early participant in the teaching of sociology and the early prospectuses include lectures on La Science Sociale. An early and continuing emphasis on the significance of the analysis of primitive occupations was complemented in parallel studies of the urban milieu. It is interesting to note that associated with the analysis of simple occupations, considerable attention was paid to the study of anthropology and lectures on this subject were given by Professor Hadden.

From the outset, especially from 1892-93, a large number of foreign students, especially French, but also German, American, attended these courses and a large proportion of lectures were given in French and thus gradually, there arose a Summer School of Modern Languages. This international aspect of the Summer School had much more than a merely linguistic purpose. From the outset it appeared to be definitely active towards a renewal of the Franco-Scottish relation which expressed itself in the Franco-Scottish Society and in 1900 the Edinburgh Summer Meeting took a much more ambitious and comprehensive form of the Association International at the Paris Exhibition, which developed into French, British, American, Russian and German sections.

The Tower, as a mature organism, had thus activities which ranged from nature study, regional survey, town survey, to effecting local improvements of many kinds from school gardens to the clearing of slums and closes. The City Improvements which were connected with the Tower and with the closely associated University Hall Movement, were especially active from 1887-1897 in/

in the area of the Castle Hill and Lawn Market.

The clearly associated concept of social survey and social service was widely understood and became effective elsewhere and later it was generously acknowledged by the promoters of the American Institute of Social Service, by Ebenezer Howard and many other prominent workers in the cause of civic betterment.

Thus, from a different point of view the Tower was a seat of history, geography, a practical centre of education and may be best understood as a combination of sociological study and research and a research laboratory with a social clinic. Its situation in Old Edinburgh, adjacent to the Castle, was particularly fortuitous and in its own way reflected Geddes's selection of site. He recorded his view that in Old Edinburgh was probably the most complex and concentrated mass of social and civic problems that can be found within the same area: "The old High street..... this mass of mediaeval and renaissance survivals .... the most squalid conglomeration, the most overcrowded area in the old world".<sup>1</sup>

The Outlook Tower thus, in general, was a repository of research material but in principle this material was used to suggest and advocate and educational or social advance, but also as a start point for experiments to set this advance in motion. In order to fully comprehend this system of thought which Geddes had devised, at this period of his life, it is necessary to restate the format of the Outlook Tower.<sup>2</sup>

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1. Cities in Evolution, 1st Ed., London, 1914. Chp. 1, p. 13
  2. The discreet scientific nature of the Outlook Tower was early recognised by Professor Zueblin who publicised the work of the Tower under the title, "The World's First Sociological Laboratory", in the American Journal of Sociology, Vol.4, No.5, March, 1899.

### The Arrangement of the Outlook Tower

"The position of the Outlook Tower is well fitted for its purpose, for it stands on the Castle Hill, at the head of the High Street, that historic mile up and down which, from Castle to Holyrood, passed in all likelihood, more pageants and processions associated with the gloom and glory of a nation's life than have traversed any other street among the capitals of Europe. Tradition indicates the building itself as the Town Mansion of the Laird of Cockpen, but to our fathers and grand-fathers it was known as Short's Observatory from the Edinburgh optician of that name who first established the little museum of the astronomical instruments and scientific toys which this succeeds."

The Outlook Tower was a five storey building with a terrace roof, with a small turret which contained the Camera Obscura. Each storey was intended to be devoted to exhibits or a collection of material representing the world, Europe, language (English speaking world) Scotland, Edinburgh. The critical path to be taken was advocated by Geddes himself -

"On entering the Tower the visitor is advised to make his way at once upstairs to the flat terrace roof or prospect, without paying attention to the various objects on the way, not even excepting those in the Edinburgh Room. All these will be more conveniently viewed and understood on his return."

In the numerous lectures and articles relating to the Outlook Tower, Geddes never once departs from this advocated line of approach to the Tower. There is frequently a clear insistence that the material contained within the Tower could only be adequately understood if one was to initially gain a general viewpoint of the Edinburgh region before looking, in more detail, at the individual exhibition rooms. The teaching philosophy can best be summarised in Geddes's own words.

"Having reached the roof the visitor will find that the Outlook/

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1. The Outlook Tower - Patrick Geddes, 1905, Edinburgh.

Outlook Tower affords not simply an exceptionally fine view of Edinburgh and its environs, but the central and therefore, the most essential one. Standing as it does on the highest accessible pinnacle of the ancient city and now also at the very centre of the modern one, which has grown upon all sides of this, it peculiarly commands that range and variety of landscape and architecture for which Edinburgh is so famous. The outlook, hence, fully compares with the magnificent panoramas of the Calton, from Salisbury Crags and from the Castle itself and completes all these. The Castle, for instance, is displayed in its natural setting between city and gardens, between rock and sky, with a dignity and magnitude far exceeding its aspect from the street level of Princes Street, or even of the ordinary approaches by the Mound, Castle Hill and Esplanade. Looking northward over Princes Street and its gardens, over Inverleith and the Botanic Garden, we see Leith and the Trinity and Grantown fringing the isle-dotted and ship laden Firth of Forth. Beyond this the Fife coast appears with its fringe of towns, Aberdour, Burntisland, Kinghorn, Kirkcaldy and above them the steep nearer hills, while beyond these again lies the Fife Lomonds. Looking north-east the Forth Bridge appears above the wooded slopes of Dalmenny, beyond Corstorphine Hill, while beyond the Saline Hills and Ochills lead the eye onwards to the fine outlines of Dumyat, rising above the misty level of the alluvial plain of the Forth, the fertile Carse of Stirling. On a clear day the view reaches to the Highland hills, the peaks of Ben Ledi and Ben Lomond standing as the most conspicuous landmarks of a noble skyline, often white with snow. Here the Castle interrupts a distant view but amply compensates us by the scenic variety of its Esplanade as by its picture-~~ness~~ *equeness* in mass and outline, the towering detachment from the Grass Market on the south side being even more striking than its precipitous descent to the Gardens, the old Nor' Lock. The southward prospect of the deep-lying portion of the old town is of striking architectural variety and interest. Conspicuous are the many turrets of Herriot's Hospital and of the Infirmary and the red roofs of the School of Medicine, the vast low arch of the McEwan Hall and further east, the stately dome of the old University. The open spaces of the Greyfriars Churchyard and Herriot's Hospital grounds lead the eye onward to the meadows and Bruntisfield Links and thence to the Blackford Hills with its observatory, to the Braid Hills, and to the larger Pentlands. To the left of the Pentlands we have the spacious valley of the Esk and the whereabouts of Rosslyn and Hawthornden, Glasswade, Dalkeith and other attractive centres of excursion which can be easily seen. Towards the south-east the Salisbury Crags and Arthur's Seat stand out above the town, while looking eastward the eye follows along the High Street with its irregular masses of buildings/

buildings on either side and surmounted by the Tower and Crown of St. Giles, thus seen at its very best, dominating the ancient city and in its most effective contrast to the Castle. In the distance again, the prospect opens along the shore of the Forth with the volcanic mound of North Berwick Law and the Bass Rock against the horizon. Notably picturesque also are the masses and monuments of the Calton Hill and the irregular grouping of the intervening medley of buildings. The opposition of the Classic High School and the castellated prison is repeated in a different way by that of the imposing modern renaissance edifice of the Bank of Scotland, with the modern perpendicular of the Free Church College and most of all, by the contrast of the palatial new town with the courts and closes of the High Street below. On the stone coping of the parapet will be found cut orientation lines showing the due north and the position of various places, both near and far, for example, North Berwick, Dundee, Aberdeen, Cape Wrath, Glasgow, Inna, etc." <sup>1</sup>

The next process in the critical path is to climb a flight of stairs into the Camera Obscura. The Camera Obscura is a huge photographic camera with an image reflected downwards upon the level table. Geddes's object, at this stage, appeared to be to focus rigidly the attention of any observer on a particular feature rather than on the landscape as a whole. He noted that -

"As the skylight is closed our eyes rapidly become more sensitive in the darkness. They become reposed also and are made ready and hungry to enjoy the moving images, a pleasing colour, upon the table. These images are, of course, those of the outside landscape over again, yet each of us is interested and amused by them and each in his own way, according to his particular bent of mind or mood of the moment, watching the spectacle for its varied movements, or seeking to make out its fixed details. Hence, one is fascinated by the marching soldiers, the passing vehicles and pedestrians in the street below, the distant bustle of Princes Street, the steaming train in the valley, the changing clouds above; while another, all for geography, identifies building after building, hill after hill - How does the picture differ from what we saw outside? Without entering into technicalities it is easy to see that in the camera image the intensity of daylight is subdued because of its reflection from the mirror above and its transmission through the camera lens ,/

1. Ibid, p. 6

lens, its enlargement upon the table and finally, its reflection from this to our eyes, so that this diminished quantity of light corresponds to that reflected to our eyes from a picture. Still more important, each object is shown in its truth of colour and in its actual relations of tone - there are stopped off all the irrelevant cross rays from all parts of the sky and from surrounding objects for it is these which, to everyday vision, so much tend to veil and overpower the colour, the tone, the pictorial truth and the beauty of things. Thus it comes about that the camera which, to those who have not seen it, may seem unnecessary, perhaps even childishly simple, becomes for those who use it one of the very richest of aesthetic luxuries, nay more, it becomes understood as a means of recovering that appreciation of beauty which, under modern city conditions of atmosphere and surroundings, of education alas also, becomes dulled in too many of us, if not left dormant altogether. Here then is a first example of the use of the Tower as a signpost towards the various collections and museums of the city. The camera will be found the best of preparations for a visit to an exhibition of modern pictures - this experience of the camera is helpful to the visitor in two main ways - on the one hand it gives him a fresh outlook on Edinburgh and its region, a renewed sense of its wonder and beauty, on the other, it helps the ordinary observer to see the familiar scenes somewhat in the way that the artist has trained himself habitually to do and thus enables him better to understand the artist's vision. He has had a lesson in the art of seeing."

The sequence of events on the roof of the Tower is in itself of some interest. Instead of directing the visitor immediately into the Camera Obscura, Geddes deliberately withholds the colour vision until the second stage of the critical path. From the roof the total environment has been comprehended and then the heightened effect of a colour camera has followed. The visitor then returns to the terrace and, as Geddes clearly remarks,

"The first impression after coming out of the Camera is perhaps one of disappointment. Some of the beauty revealed by the camera seems lost, but if we half close our eyes to shut out details and for a moment focus our attention on the colour and/  
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1. This quotation is particularly apposite in respect of Geddesian notion of survey before planning which contains the essential requirement that the survey produces an understanding of the essence of quality.

and tone and composition of the scene before us, we shall find just as on coming out of a picture gallery, that we can at least see more colour and beauty than before our visit to the Camera."

There is a sense of the dramatic teacher in this element. Geddes appears to be deliberately focussing the attention of the visitor upon a sharp contrast between what the eye normally sees and what the camera can reveal. It becomes thus necessary to look more closely, more directly, at phenomena. Indeed, Geddes inbuilds into the Outlook Tower a mechanism for this to be achieved.

"We note a curtained doorway leading into a small, bare cell with obscured windows, its single chair shows that it is intended for a solitary occupant. The full room is meant to suggest that on our direct observation a gathering of many new impressions must be completed by quiet reflection and meditation before it can reach its full value either for ourselves or for others."<sup>1</sup>

But to Patrick Geddes the terrace roof and the Camera Obscura were not solely a means of illuminating the vivid quality and perhaps the beauty of phenomena, but were also designed to introduce the visitor unconsciously into the impressions of science. Through an early attempt at direct method in teaching and avoiding the possibility of the repellant aspect of formal methods of extraction, Geddes clearly hopes that a visitor, before leaving the terrace roof, has gained a sense of the interplay of phenomena as a whole and would become receptive to the more detailed examination of science or applied science on his descent through the Tower. He specifically comments, for example, on his hope for a realisation of the inter-action of meteorology, geology, botany and sociology.

"We cannot be long on the roof without interesting ourselves in the weather. We shall be particularly alive to the sun or shower, wind or calm, genial warmth or icy cold, so that whether we/

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1. Ibid, pages 9-12.

we will or no, we are obliged for the moment, to be meteorologists. In the same way, we can hardly look at the great Castle Rock and the valley below without at least being reminded of the mighty forces which have piled the one on top of the other. That is, for the moment, we are looking through the geologist's eyes. Perhaps we are chiefly interested in the changing aspects of the gardens below us, green and pale golden in spring or tawny in autumn and now we are at the point of view of the botanist. Or it may be the romantic beauty of the old town, the manifold associations of the Historic Mile from Castle to Holyrood that interests us, or the pressing questions of the condition of the men, women and children who throng it. These are the outlooks of the painter or poet, the historian or social reformer. Still, even here, we may begin to see that as the various aspects of the prospect strikes us, our outlook on the familiar region leads us to the threshold of each of the sciences and arts in turn, so that to fully and truly observe and understand our region, we must seek the help of all the specialists from astronomer to historian, from physicist to poet. But here is something more, for here where so many outlooks are possible and even inevitable, we are reminded of what the specialists are in danger of forgetting, that all these specialisms are part of a great whole that only to be rightly understood in their mutual relations. The outlook from the roof then, has helped us to realise that our immediate and familiar surroundings contain elements of interest which we are apt to overlook and that all around us there is much of beauty, interest and significance waiting for exploration, so that, from this general survey from the Tower we may proceed to that further detailed study of our own environment, that personal regional survey which furnishes the material for all vital education."

#### The Episcopes and Orientation Table

Throughout his life Geddes had been an advocate of the Montessorian method of teaching, from the known to the unknown. The format of the arrangement of the Outlook Tower was conceived with this object in view and in the second stage of the critical path the visitor was quickly presented with a world vista, though an unusual one. The apparatus marshalled for this purpose was an episcopes, a hollow globe, an orientation table, a hollow celestial sphere, a cosmos sphere, a number of maps, star charts and suspended globes.

"If this episcopes is the first example of a simple yet ingenious and carefully worked out device for arousing both the every day observer from his indifference and the geographer from his attachment to the map or even the ordinary globe, or compelling both to visualise the/



the world, as if it was suddenly to become transparent beneath one's feet - one sees deep down and far away, in the long perspective, nearly 8,000 miles, the antipodes, New Zealand, Australia, of trifling size - the vast Pacific Ocean itself - thus the forms of the continents and countries so familiar to us upon the map or globe, seem now distorted into the strangest forms, whilst these are rendered doubly hard to understand by the fact that we are *here* seeing them not as usually represented from their surface, but with their outlines completely reversed since seen through the world from below. We may thus understand the greatly transformed America, for instance, by looking through an ordinary map of the Western Hemisphere from its underside and then allowing for the further change upon the form of this which actual perspective will produce. It will now be seen that there is a sense in which this strangest looking of world maps is the most truthful of any and this the most real and immediate sense possible, that of the personal one, to the observer *here*. To see northern Europe or our hemisphere as it is represented upon the map or on the globe, we should have to be out in space, far away from it, or say, studying it with a telescope from the moon, but *here* for the first time, we see the world as it is. Its points are fixed in their permanent relation to us *here*. To make this large episcopes fully intelligible it may be usefully compared with its smaller and earlier and yet in some ways, simpler form, the hollow globe - the orientation table - the direction of various places with their distances in miles in Edinburgh will be found marked around its edges so that the episcopes is again understood as completion of the ordinary orientation table. Another set of orientation lines is cut in the stone coping of the parapet or the flat roof without. Finally, looking from the north side of the episcopes southwards two elongated red spots will be noticed on the south wall. These small spaces indicate not only the direction of London and Paris *respectively*, taken straight from the eye of an observer of average height, but the actual appearance of size they would represent if it were possible to see them - the observer may now continue this imagination and see all the world at will - until at length in widened consciousness he has not only completed the visible outlook for the deeper inlook and so in some measure visualise the world, but in the same way, united in thought, the seen and the unseen harness of the starry heavens into celestial sphere."<sup>1</sup>

An additional item was the hollow celestial sphere. This had its part to play in the general scheme devised by Geddes. He noted that -

"To/

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1. Ibid, page 13.

"To escape from the difficulty of our outsideness to the ordinary celestial sphere in its true relation to the heavens, we should obviously get inside it" and that the observer then transferred himself in imagination from the outside of an opaque sphere reflecting the stars, to the centre of a transparent one.<sup>1</sup>

The complement of the celestial sphere was a model of the earth's course and the seasons. To complete the mental image and "to form an idea of the earth's place in the planetary system, the visitor may refer before he leaves the building, to the great globe at the entrance and its descriptive label indicating the magnitude of the planets and their orbits upon this scale."

The sum total of the outlook which Geddes wished to achieve was that,

"Over the prospect from the Camera gallery conceived not only as that of the circle, of which we occupy the centre, but as the visible segment of the world, we henceforth retain a fuller realisation of our globe".... and.... "passing under the glass roof we find the beginnings of a small collection bearing our nature study, the child's introduction to the biological sciences, including living plants and birds and fishes and some small beginnings of the artistic presentment of the regions and seasons to which these are related. Opening the door in the east wall we look out on the High Street which, with the Castle at one end, the Palace at the other, its churches, law courts and slums, presents a concrete summary of the social fabric of which we form a part and the regulative machinery which has arisen out of it."

At this point in the critical path to be followed in the Outlook Tower, Geddes has clearly attempted to create a conception of the general relationships of phenomena and has attempted to present a visitor to the Tower with a re-orientation of outlook, a capacity to relate phenomena to each other- local place to regional and international setting and to have prepared his eye and mind to look directly for the essence of phenomena.

"Having/

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1. The celestial sphere was devised by Monsieur Galeron who produced the Globe Celeste of the Paris Exposition of 1900 - a reproduction of this model was provided for the training college of the Faculty of Education of the University of Chicago. Ref. Arthur Geddes.

"Having made this rapid and rather cursory survey of the prospect from some of its many points of view, we descend to the Edinburgh Room to learn therein more detail of what we can of the city."<sup>1</sup>

### Edinburgh Room

The arrangement of the various rooms within the Outlook Tower carries forward the process developed on the terrace roof and in the Camera Obscura. At this early stage Geddes had been concentrating on the combination of breadth of view with depth of view and throughout the following sequences, through the Edinburgh Room, Scotland Room, Empire and World, Geddes is forcibly attempting to inculcate the synoptic view, based upon precise and discreet observation of scientific data. The primary mechanism in the Edinburgh Room for this view is its central object - Paul Reclus's relief model of the site and environment of Edinburgh at a scale of 1-4,000 complemented by an artistic impression of the main aspects of the city, a painted frieze.<sup>2</sup> These, according to Geddes, allow for the "mutual complementing of science of art - as elsewhere in the Tower, clearly brought out."

Even here, a critical path has to be followed as Geddes remarks -

"To restore the actual scene from which the facts for the model are abstracted then down at the north side of the model, bringing the eye almost on a level with the surface when the relief will be more clearly distinguished. Look up then to the frieze facing you on the south wall of the room, actually sketched from the corresponding situation as seen, which represents the Salisbury Crags as seen from sea outside Leith harbour".

Geddes goes on,

"Returning to our relief map of Edinburgh, this is a topographical, geological facsimilie of the region. It is a summary of the history of the city during the geological ages. It is also, as I have indicated, the necessary starting point for a study of the city's history in the historic period. This story of the past Edinburgh is found in a series of books and documents located in the same room as the map."/

1. *ibid.* P.17.

2. By James Cadenhead and Helen Hay.

map. The documents on which I would lay most stress as being characteristic of the usual method of the Tower, are those so profusely scattered over the walls and the screens - I mean the pictures and photographs. A fairly complete photographic survey of Edinburgh as it is, has been made, but the collection showing Edinburgh as it was and has been is necessarily very incomplete. The magnitude of the present collection and the photographs show that the compilers have not forgotten that the history of the city is a process going on today and that as intensely as in the past, perhaps more so. In a word, in this department we have the beginnings of a statistical bureau of the city."<sup>1</sup>

The series of drawings and engravings, photographs and plans, had been arranged with an end in view as -

"a fitting symbol of citizenship, for here it is exhibited as a central object of further collection, already begun, of designs and plans, etc., bearing on the improvement of Edinburgh as regard public amenities, workmen's dwellings, students' residences, etc. Even a short time spent in the study of the contents of this room may enable the passing tourist to explore Edinburgh more intelligently and more profitably and may also help the Edinburgh citizen to realise he is a citizen of no mean city and to furnish him with a key to unlock many of its treasures, whether these are contained in museums or scattered abroad in its streets. It may further aid him through a clearer realisation of its needs and possibilities towards strenuous and effective citizenship."

At this point, therefore, in the critical path, Geddes had introduced all of the primary objectives of the Tower, the stimulus of thought towards a constructive and propulsive action. The same format is used by Geddes in other rooms in the Tower. The Scotland room, for instance, is - "a collection illustrative of the history and geography of Scotland, its present state and its possible advances." However, set behind these visible teaching machines is the importance of the stairway in the Outlook Tower. This forms an integral part of the process of education and illumination. At the foot of a short staircase, for instance, leading down from the Edinburgh Room, were one or two exhibits which consisted/

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1. Geddes records here, page 8, "Give to every parish an Outlook Tower and then the parish will find its own Charles Booth."

consisted of a small relief map of Scotland and part of the botanical survey. This<sup>i</sup><sub>A</sub> is valuable, according to Geddes, not only from the point of view of showing us things as they are, but of suggesting possible future activities, for instance, the reclamation of waste land or the improvement of soil and climate by re-afforestation. Perhaps one may even find some key to the problem of rural depopulation and suggestions towards its arrest. Here also was a plan showing the various possibilities as to the route of the proposed Forth and Clyde Ship Canal. The complement to this was the botanical globe which was prepared by Elysee Reclus and which was inserted to stretch the rural imagination into a comprehension of the world significance of changes in bio-geography. Geddes records in his documentation of this exhibit that -

"It is becoming increasingly recognised, for instance, by geographers and historians, that it is owing to the gradual desiccation of Asia and the consequently diminishing pastures that from the dawn of history there may have been ever recurring migrations from East to West, from Asia to Europe - the frequency and inevitability of the conflict between these nomad shepherds or shepherd warriors and the peasant cultivators whose land they ravaged, or took possession of, is abundantly proved by historical evidence. - We thus see that the botanical globe may help us to understand how geographical conditions affect history."

A little further down the stair we come to a stained-glass window which not only further illustrates this point but emphasises the action and re-action between man and his environment.

#### Windows on the Staircase.

The upper window in the staircase portrayed the Geddes Valley Section, representing a stretch of landscape from the hilltop, passing through a variety of landscape zones which are to be found. Geddes records that this could be viewed in numerous ways as -

"a landscape we have just looked at from the gallery of the Camera Obscura, stretching from the blue waters of the Forth to the bare Pentland hill tops, or we may record it as a diagram of/

of the Great Plain of Europe or of North America - so that we come to see that the little landscape is a typical section of the earth at many points and indeed, as the legend written under it tells us, a microcosm of nature. - It is a clue to many of the present-day problems with which we are confronted if we realise that it represents on the one hand, the aggression of nomadised shepherds, on the other, reprisals of exasperated peasants..... As we look a little closer we see that the history of mankind resolves itself into the history of the conflicts and compromises of these various types with their corresponding varied cultures, institutions and ideals. Our little landscape is thus not only the microcosm of nature and the seat of man, but *Theatrum Historiae* and sets the scene on which the drama of the human race plays itself out. In this way we come to some understanding of the relations between man and his environment, of how geographic features of his birth-place determine work and that this in turn determines his family group and this again his institutions and ideals; but man, worker and idealist reacts profoundly on his environment so that he is always pressing forward towards a new heaven and a new earth. - One panel on this window is the *Lapis Philosorum*, an obelisk whereon is outlined in graphic notation a classification of the arts and sciences. Here again we have an attempt to recall the student or the man of action to a view of the unity of mutual relations of the various departments of thought and life upon which, as physicist or chemist, geologist or naturalist, historian or economist, or again as artist or physician, lawyer or churchman, he may have been specialising."<sup>1</sup>

Geddes points out that this is indeed,

"a diagram summarising in graphic shorthand, so to speak, the ideas already put before us in the outlooks of the sciences and the terrace roof representative of the physical, biological and social aspects of thought and action."

The second window represents a tree with its branches spreading right and left, which to Geddes was to represent,

"the two-fold aspects of each historic era, temporal on the one side, spiritual on the other". The branches "symbolised the past and passing developments of society and the bud at the tree-top suggests the hope of the opening future."

In general the Tower's fundamental idea relates to the idea of interpretation and simply one of observation, the alternation of observation/

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1. Ibid, p.23-4.

observation in detail and in totality as the basis for true interpretation of phenomena. In this respect it is an epitome of Geddes himself and was truly the interpreter's house.

#### Outlook Towers in Other Cities

Writing in 1902, J.D. Bartholemew made a plea for the establishment of a National Institute of Geography.<sup>1</sup> He pointed out that much of the necessary material already existed but required to be brought together for classification and arrangement. He paid tribute to the work of Geddes who, he said, "was working towards a complete scheme."

The note on the plan for such an Institute, together with the detailed plan, appeared in the same issue of the Geographical Magazine. The main idea proposed by Geddes was to have an Outlook Tower between those parts of the building housing a terrestrial globe and a celestial globe.<sup>2</sup> Geddes wrote that the Tower envisaged for such a scheme would be practically orientated.

"We descend", he wrote, "storey by storey, through city and province, region or state, to nation and empire and thence again to the larger occidental civilisation, of which these form part and finally to the oriental and primitive sources, the facts of geography and history, the problem and possibilities of useful activity also being represented as far as may be upon each level."

Later in the same note Geddes discusses galleries of industry and commerce and refers to a series of type collections on a geographical basis - "so widely discussed at the close of the Paris Exposition and embodied in the attempt of the International Association to preserve the main buildings of the Rue des Nations."

The/

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1. Scottish Geographical Magazine, March, 1902.
  2. These were referred to by Bartholemew - a relief globe planned by Professor Reclus on a scale of 1:500,000 and the celestial globe of Galeron.

The draft plan and note, together with Bartholemew's suggestions, were submitted to various authorities for comment. The Rt. Hon. James Bryce wrote that, "an Outlook Tower, like that which you have at Edinburgh, would be of great interest;" but he did not like the exhibition or winter garden style of the proposed buildings. Sir Clements Markham, President of the Royal Geographical Society, considered that the Society, with the more or less affiliated Hakluyt Society, could be the main foundation of the scheme, while Sir Archibald Geikie expressed the opinion that, "the Imperial Institute, in its original scheme, was in large measure meant to do for the whole British Empire what you propose in the applied part of your design."

This institute never was realised but the concept of the Outlook Tower was carried, by Geddes, further afield. Before and during his occupancy of the Chair of Sociology and Physics at the University of Bombay, Geddes was involved in numerous planning ventures. In 1918, there appeared a report to the Durbar of Indore entitled, *Town Planning Towards City Development*, which includes a reference to a proposed Outlook Tower.

"Architecturally speaking, the essential and culminating feature of our group of buildings on this site has plainly to be a central tower. Here is, in every way, the needed outlook and centre for this needed educational endeavour, so let us climb a little peninsular hill in the sense of the fairly long tower stair which brings us out upon the topmost turret. We see with eyes freshened out of ordinary unobservant dullness of habit, we see the immediate roofs and treetops, the rivers uniting into one and the city around these shining waters; its houses and streets and markets and busy circulation to and fro are all below us and its palace towers, its monumental dome and spires are new on our levels. All are seen with a new vividness. The town plan which should be painted upon the roof platform of the main tower beneath us is thus but the condensed and pallid abstract of the living city below; the reality in all its fullness of detail, all their synthesis into beauty, this lies around us in the concrete. - Around us in this wealth of varied impressions, unified as landscape, lies the world of nature and of human life, to which education if not initiation is worse than no education at all. From this vital immersion in the concrete even our pale schoolroom abstract may soon be all drawn forth with fresh force and variety."

Additionally, a preliminary report on town planning in Colombo was published in 1921 which includes a chapter on Colombo/



Colombo Museum which, whilst posing its past and present administration, suggests that an essential element is missing. Geddes wrote,

"that one great collection is still lacking, the Gallery of Geography, for here we should find first of all, the splendid relief models of Ceylon. Beside this, naturally, also a good big model of Colombo, an exhibit of the greatest value for education and town planning. On the walls, not only such prints and other historic documents as the adjacent library may doubtless furnish, but also copies of the plans and photographs of that growing city survey from which the Peasant Report begins and on which it has been based. - Nor should other essential features of Ceylon be lacking, for instance, representative photographs and pictures of the manifold landscapes and characteristic vegetation of its orographic and climatic regions and illustrating both wild nature and the varied labours of man. - Nor can a geographical collection end with Ceylon, this is only the beginning. India, first of all, needs illustration and the fuller the better."

As early as 1901, the Fifth Zionist Congress passed a resolution calling upon its executive to examine the possibility of founding a Jewish College in Palestine, but it was not until the meeting of the Eleventh Congress in 1913 that the executive could announce that steps were being taken to fulfil the desire of the Jewish people to make Palestine the seat of cultural activity. The following year a special committee arranged to purchase a house on Mount Scopus which had been built by the late Sir John Gray Hill, the idea being to make it the nucleus of a proposed Hebrew University.

Geddes was asked to draw up designs for the University and he and Frank Mears spent the autumn of 1919 working out plans. These were exhibited at the Royal Academy. In fact, there was little need to incorporate an actual Outlook Tower in the scheme for the site enabled the whole university to be such a tower and as such, gave full expression to Geddes's conception that learning is incomplete unless sensory outlook be balanced by inward vision. The details of this work will be considered in a later chapter.

The primary plan was to be one of a three-fold star leading towards a central dome of unity. This, in fact, was built, though the remaining elements in the plan never came to fruition.

Although the first Outlook Tower commanded a view over a city, /

city, the concept of the Outlook Tower as devised by Geddes involved every community, large or small, having a Tower as a symbol of its own aspirations. A rural outlook tower is, in fact, intrinsic, therefore, to the conception. One such instance was achieved in the village of Domme in the Dordogne in France, where Monsieur Paul Reclus reconstructed an old tower with a commanding view, in a way that gave some lead to a local centre of regional research.<sup>1</sup> This particular Outlook Tower, near the village of Domme, stood on a steep cliff rising nearly 500 ft. above the ruins of a mediaeval castle. The original castle had been destroyed by Richelieu and some time later a windmill was erected on the crest near the castle ruins. It was suggested by Patrick Geddes, who acquired the land, that his old friend Paul Reclus should restore the windmill tower and convert it to a museum. In order to do this, a large open upper chamber was created and the internal organisation was fashioned partly upon the original Outlook Tower in Edinburgh and included topographic maps orientated with the silhouette of the visible horizon, orientation table, geological and geographical models and a terrestrial globe (made by Paul Reclus). These items were complemented by a series of documents dealing with the development of the region, geographically, historically and through literature and art. In the Geddesian vein, certain rooms in the building were given over to elaboration of the locally grown crops, particularly maize and wheat, their world distributions, trade and significance in the development of civilisation.

There is one other notable instance of the application of Geddes's Outlook Tower, that being the one in conjunction with the/

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1. This no longer remains except for the lower part of the tower.

the College Ecossais which, at the time of its construction, lay mid-way between the developing urban area of Montpellier and its rural hinterland, lying south of the Massif Centrale.

Outlook Towers - Resume and Purpose.

Outlook Towers, as devised by Geddes, expressed his philosophy of action stemming from thought. At all stages the Outlook Tower is orientated towards the individual citizen. Geddes expresses this point in an undated memorandum on the Outlook Tower and its significance.

"I take it the great lesson of the Camera is that it makes us see and observe things with our own eyes. The camera isolates the picture, cuts off all the interfering rays and influences. Thus we see the things we are looking at as they are; we are not tempted to read into the picture the opinions and views of other observers. First and primary essential of science is to see and observe, or try to see and observe things as they are with one's own eye. The seeing of things as they are involves two kinds of observation, the student must observe them and study them piece by piece, in detail and in particular, but he must also see them as a whole in their different relationships one to another, to the whole scheme and scope and design of nature and the universe."

It is suggested that in this phrase is the key which explains the nature of the material exhibited in the Tower, the order in which it is exhibited and the critical path insisted upon by Patrick Geddes for an observer to follow in order to obtain the optimum benefit from the Tower. This is a clearly linked organic unit, the object of which is the creation of a synoptic mind.

"The first use of the camera is that it makes you see things with your own eyes. The second is that it keeps you in mind of two kinds of observation. It brings before you both details and particulars and also the moving scene, the panorama of things and events as a whole."

- "The Tower acts as a reminder to you of the need of such study. It prompts you to go out into the fields and streets and do it if you have not done it already - if you have done it already, it will give your thoughts new light and new power. With the help of this new illumination you will go out and make still more profitable detailed study."

The format of the Tower was directed towards this specific end. It was created as a geographical institute in the Geddesian sense - a point of reference which embodies, focusses and unifies all/

all the special sciences. He remarks -

"The visitor who walks round the room may be an astronomer, meteorologist, botanist, etc., but he must needs conclude as geographer, for he cannot escape from the impression that all the specialist sciences are merely contributing their quota of knowledge to the one great science of geography which observes and interprets the world and all that therein is."

In this sense, the Tower becomes a visual and synthetic encyclopaedia in which the different items of knowledge have been placed and are classified and co-ordinated in an orderly and not merely an alphabetic system. It was in this way that Geddes devised the proposed geographical institute with a central reference point of geography, with annexes radiating from it which contained all the specialist sciences. Complementary to the notion, expressed in the tower, of linking together of phenomena and the observation of phenomena, is Geddes's attempt to create a discreet scientific framework of knowledge. The accumulation of government material relating to the region, local and general, geographic, sociological and historic surveys of the area, innumerable books, monographs and papers, together with the local newspapers, provides the framework for a statistical section, or a reference library of statistical data which, at all stages, will pin the observer down to provable fact on which observations can be realistically based.

A further crucial element is experimentation. Geddes records in his exposition on the Outlook Tower, that the visitor may base interpretation upon observation, observation in space - geographical, observation in time - historical, but he carries on to note that observation is only one of the two great instruments of progressive science, the other being experimentation. This experimental approach is termed geotechny, through which sciences and sub-sciences are linked together in an experimental study which arises from the suggestions produced in the mind of a visitor by the arrangement of the exhibits and the critical path he follows. The mental stimulus which arises from the Tower, brings into operation/

operation a further objective, that is that the Tower itself stands as a clearing house of organised knowledge, as a point of reference within a possible chain of centres of reference.

This survey Outlook Tower allows for its status to become highly scientific. Indeed, the Outlook Tower becomes a machine for the testing of scientific hypotheses. In this way the Tower fully epitomises Geddes's own activities - the observation and interpretation of data, the formation of hypotheses and the constant testing of hypotheses and through this, a possibility of revision of the original supposition. Given this conception it is readily understood why Geddes was at great pains to create the Outlook Tower as a centre point of research and a clearing house for data produced through experimental research. This view also bears out the supposition that the main formative ideas which Geddes applied into the field of Planning were developed prior to and during the major efforts he exercised through the Outlook Tower.

The accumulation, at the Outlook Tower, of a considerable mass of scientific data, specialists in various fields, amateur researchers, stimulated by the format of the Outlook Tower and its critical path method, allowed Geddes to work out in detail, through the Tower itself, a number of his own hypotheses, and receive the results of particular research investigations which extended on these hypotheses. He was placed in a position, therefore, to revise his own views in accordance with these researches.

This notion of the importance of experimentation is also borne out by the fact that the Outlook Tower was to act to promote not only an understanding of, but a participation in, current affairs. Geddes records that the primary purpose of the Tower was to be an interpreter's house. It is certainly true/

true that a student cannot interpret truly unless he is something more than a mere student. He must be a man of affairs also - if he is not, his social perspective will be false. Thus the student, in order to complete his own development, must become a man of action whilst remaining always a thinker.

"Our Tower, therefore, must be not only a focus of study and research - it must also be a centre of action. Absorption and reflection must become expressed in activity. Degeneration comes from over-development or under-development either of thought or of action. Growth and progress spring from a well-balanced inter-action of them both".<sup>1</sup>

Geddes's Outlook Tower was to have become the launching pad for the implementation in social action of an educational experiment. It formed an early example of an 'open university' having no entrance qualifications, a wide variety of subject availability underpinned by a central direction. Geddes was central to the whole conception; he gave the philosophy and translated this into layout and programme. As he noted in 'Ideals and Ideas' -

"Without a philosophy the encyclopaedia can but remain alphabetic - without an encyclopaedia a philosophy is but an individual's blank cheque upon the bank of knowledge or at best, one too large for his accumulations and which may overpass his credit".

The two aspects of the Tower; critical progression from general knowledge to the particular and a carefully devised schemata of teaching combined to produce "a place of think, of meeting, of searching".<sup>2</sup>

The fusing of specialist teaching under the penumbra of Geddes's philosophy was less difficult than would otherwise appear. Arthur Geddes recalls his elder brother noting that so many folk concerned with teaching in the Tower were original in mind but that their ideas tended to mirror those of his father.<sup>3</sup>

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1. Outlook Tower - a museum of ideals and ideas, 1898

2. *ibid.* 1898

3. Discussion with Arthur Geddes, April, 1967.

This apparent element of uniformity is understandable if one accepts that the Tower was a centre of propaganda; and environmentalism in the widest sense, its comprehensive study and concerted action towards its improvement. The inbuilding of attitudes made little appeal to the established centres of higher education; nor to the academic world of learning. Staff of the local University in Edinburgh were only peripherally concerned with the Tower and its work outside the improvement schemes undertaken through the Town and Gown Association. Even here the applied nature of this work had little appeal to academic sociologists. Geddes's own uncompromising view of sociology partly explains his failure to obtain the first Chair in this field at London.<sup>1</sup> In fact, the Tower was regarded as being something apart from the normal run of university and academic teaching. Geddes himself had fled from Edinburgh University to seek a wider view under Huxley and it would appear that he tried to emulate for others what Huxley's department had offered.

"The curricula of the university offers little to those amongst the students whose intellectual aspiration is not only concentrated on a specialised subject, but desires to complement his specialised studies by a wider outlook. This desire, the student's first step towards reaching something of a synthesis of his own, is that which the Tower may seek to help."<sup>2</sup>

This divorce between Tower and the established world of learning restricted the opportunity for a positive feedback effect into the Tower. Geddes envisaged the Outlook Tower as forming a part of a world-wide system of similar institutions directed towards regional study and action. The accumulation of data along the guide lines set down by Patrick Geddes would eventually produce a self correcting international data bank.<sup>3</sup> At each local level ~~pioneering/~~

1. See G.D. Mitchell, p.22, 100 Years of Sociology, London, 1968.

2. *ibid.* 1898, P.3.

3. The Tower and the Future, manuscript, 1903, page 5.

pioneering surveys would produce continuing up-to-date reference material for the region. There is some evidence that Geddes incorporated the results of local work into tower exhibition material. Indeed, he noted that one criticism of the Tower was that the exhibitions were under constant review.

"Most of the criticism of the Tower is that the architect seems constantly changing his plans when not leaving them unfinished and indeed has always been doing so, sometimes even more than is observed and always must go on doing so - yet criticism is not only welcomed but desired, demanded, let each stand and deliver it for by the very hypothesis of its being this should be his tower and not merely mine. At best the architect is but the old enchanter who is ever rebuilding his inherited palace and hoarding its treasures and gathering new ones yet holding these open to each new questor to be enriched and altered and so to grow on generation by generation".<sup>1</sup>

The long term result of the feedback process came with the grouping of the Tower exhibition material into the Town Planning exhibitions which had a considerable impact on the then emerging planning profession.

Additionally - perhaps of greater significance - was the influence of the Tower on Geddes confirming and extending his belief that education towards local and regional citizenship was an essential element in successful planning. This consideration loomed large in his work in Dunfermline - the Scottish town where in 1904, his expertise as a planner was to come under scrutiny.

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1. The Outlook Tower, a synthetic laboratory, page 3



## CHAPTER II    CYPRUS - THE REGIONAL EXPERIMENT

The view that Geddes's basic theories regarding urban and regional planning were developed before 1905, is supported and illustrated by his first experiment in regional social and economic planning. This began in January, 1897, when Geddes sailed from Marseilles to study, at first hand, the problems of the Eastern Mediterranean, with particular reference to Cyprus as a possible growth point into which could be rehoused Armenian refugees from Turkey.

Geddes's activities merit a close investigation, owing to the insight they give into his wide-ranging and inter-connected system of planning, both theoretical and practical. The work undertaken by Geddes indicates that at this period of his life he had developed the system of survey before action and also a considerable realism in relation to the needs both economic and social, for a successful promotion of a venture which required financial assistance. Additionally, Geddes clearly demonstrated his ability to grasp quickly the essentials of a regional problem, assume leadership in a developmental venture, integrate various specialists and their disciplines through co-operative action and propagate self help through his own precept of the establishment of growth institutions. This assertion that by 1897 Geddes had become a mature practical planner is substantiated by his work in Cyprus and additionally, by its relationship to other activities which he was involved in at this period.

The Cyprus enterprise follows closely upon his renewal activities undertaken through the Edinburgh Social Union in an attempt to renovate the Royal Mile and additionally, through his conception of the Outlook Tower as both a type of Thinking Machine and base for the testing of his hypotheses. Indeed, the relevance of the Outlook Tower to Geddes's thought at this period is clearly evidenced by the methods which he applied in Cyprus/

Cyprus and which are documented in a series of typescripts written during his stay in 1897, which frequently contain the phrase 'a type colony in tower arrangement'.<sup>1</sup>

In order to obtain a comprehensive view of Geddesian thought at this period it is necessary to closely document the stages of involvement of Patrick Geddes in the problems of Cyprus. A comparison with the reports Geddes produced in India at a later period indicates that the planning methods devised by him before 1897 remained virtually unchanged during the subsequent fifteen years and were again utilised in the decade after 1914.

The earliest manuscript material relating to Geddes's thoughts on the problem of Cyprus and the Armenians is contained in a series of manuscripts dated August to October, 1896.<sup>2</sup>

It is evident from these papers that before Geddes embarked for Cyprus he had involved himself in considerable preliminary background work and had devised a series of hypotheses which he clearly envisaged testing on the ground within a very short period of time.

Geddes wrote - "First a word as to our preparation for this undertaking and the causes which led to our embarking upon it. Some measure of preparation we have had -

- 1) from ten years' work on old Edinburgh slums and problems, poverty and destitution and their attack by economic rather than the usual philosophic methods;
- 2) from general geographical studies and that of the eastern question from the point of view of social economics.

Hence our journey is to be with a view to general geographical and social studies, but at the same time with a general economic and/

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1. Typescripts and written memoranda. Cyprus: A Type Case in Tower Arrangement, 2nd February, 1897.
  2. Cyprus, Its History, August, 1896. Cyprus in the East, August, 1896. The Geographical Problem of Cyprus, September, 1896. Cyprus and Famine, October, 1896. Some notes on Cyprus Investigations Possible, October, 1896. Eutopia? October, 1896. The Armenians, A Case for Action, October, 1896.

an educational purpose of Cyprus, therewith such organisation of Armenian labour as might prove possible."

He records that -

"As in all tropical countries, we have to anticipate the occurrence of lack of rain with consequent deficiency of crop and resulting famine, leading to and intensified by the poverty of the people. These are the lean years. On the other hand, we have in years of sufficient rain a corresponding wealth of fat years. This wealth is consumed by the people in spending and enjoying, or by an increase of population; but for those who are older, however, there may be the memory of the lean years and the consequent forethought and from this survival and initiative there arises the village granary, a sort of savings bank in kind. This, however, requires an organisation more than that of elders who die, or of younger men who may plunder and from this we pass to state guarantee, to the protection of the ruler, till we have the saving becoming at length the property of the ruler, who, if he be a young ruler, intoxicated with dreams of victory, glory, or with the praise of bards and women, in a good time appropriates the fund as war treasure, for war or conquest. On the other hand, if he be an old ruler, an old vizier greedy of power, in a bad time he buys land and the people become enslaved, are easily conquered and we have ruin analogous to that of the Pharo and Egypt. And now, as regards the individual, the individual cultivators must begin again. As before, from the good and bad years, arise the forethought and elders, but those no longer acting as a village council, but as individual usurers, while the less forethoughted become the individual bondsmen of the usurer who forecloses and turns them out to the desert to starve - so far this world's drama of social disease."

Geddes records in the manuscript 'Eutopia' that an answer to the perennial problem of Cyprus is to devise a new form of financial organisation which he calls a Finance of Health. This, he envisages, should take the form of a credit bank concerned with social credit, whose leaders are devoted persons concerned entirely with the development of the individual cultivator and the individual craft system.

"How shall we now start an experimental germ?" he writes. "How introduce a new vaccine? How change these urban politics of gold and King Midas of war, this Helen to a rustic politics of ideals, or peace into paradise, Eutopia?"

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"The farmer" he proposes, "must be placed to anticipate the bad years as in irrigation, etc., so giving us fewer bad years. We shall thus have granaries of abundance, actual reserves. But how shall we keep money in the development of other improvements? Bad years and disasters will not always occur simultaneously at different points. Hence we may use reserves at different points, varying them with complementary disaster."

For Geddes a secure economic base will result in an overall growth of economic health -

"But note that realities of saving mean the evolution of wealth and with this the economics of consumption with complexity of services. Let us experimentalise here for seven years then let us write a 'New Poverty and Progress'. Not to shake the world as that book did and with no practical result but to steady it in carrying our University Hall to the East, carry with it an order of finance."<sup>1</sup>

One object in Geddes's visit to Cyprus is to test this thesis -

"First to know - savoir - we must record and interpret, therefore, see and predict - prévoir - and lead - pouvoir. Thus, after every period of action there follows a period of thought - and here we may make the opportunity for a paper, not only for Armenian sympathisers but an interpretation for those to whom the Armenian text may appeal - an object lesson in the financial development of order, a finance of health, differing from that finance whose symbols only too closely resemble the visions of delirium tremens. In the early 19th century we had a period of coal and steam and electricity, multiplication of towns, an increase of population and the development of the physical sciences and the period of Darwin. From this follows pressure of population, colonisation, land grabbing and the acquirement of lands, but now we are passing to a new rustic period - the one of hygienic science, of evolution, of education, etc."

Geddes is convinced that the Armenian problem can be solved within a context of Cyprus, but that also Cyprus itself is a suitable environment for the exercise of a growth point philosophy.

It is clear that, well in advance of his arrival in Cyprus, Geddes/

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1. This is a reference to the administrative organisation of Geddes's own University Hall with its considerable freedom for individual development based upon a provision of basic facilities.

Geddes had devised a system of thought within which was contained a chain of factual data relating to the problem of the country and the people within it. This is borne out by his meandering route from Britain to Cyprus. He did not go direct, but spent some time in Southern France and Asia Minor attempting to gather collaborators for the work he proposed to do within Cyprus and also to test some of the hypotheses he had devised in consultation with specialists in various fields, particularly financial and agrarian studies. He wrote at length in January, 1897, to Pollard in London<sup>1</sup> -

"Let me say what I have done yet and first en route. :-  
 1. London - worked at Geographical Society and Colonial Office, supplemented for Tower and supplied information to Armenian Information Bureau; private enquiries, industries and agriculture of Cyprus; met and brought out companion, the younger brother of an old college acquaintance, Lionel Fox Pitt, son of General Pitt Rivers. Fox Pitt has studied at Downtown and Coopers Hill, farmer in Canada and help on his father's estate. He now wishes to start in Cyprus and so has come out at his own expense as my assistant, etc., without salary (if need be for a year, if things develop as he hopes and if our schemes develop). He may be of great help too to them as he has some excellent qualities, primarily that of getting on with everybody from Governor downwards. (At present he is riding over a large section of the Nicosia district with a police inspector, while I am on a different tour with a bank manager - an excellent way of learning to know the country). In London also, I looked into the question of University Hall, Gordon Square, which had been to let very cheap but also just too late. It would have been an excellent centre and we need one.  
 2. Paris - Stayed at University Hall, just started under the auspices of recent French visitors to University Hall, Edinburgh and on similar lines. Made calls for Franco-Scottish Society; opened question of putting in an Outlook Tower in Exposition, 1900 and looked for material for this, so the Armenian Committee in Paris, some leading Armenians from Nubar, Pacha downwards or up.  
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1. First of four letters, Cyprus to London, January-February, 1897.

3. Montpellier - University Ecole d'Agriculture - refreshed old friendships, found our Franco-Scottish scholar (my assistant in Dundee) greatly distinguishing himself. He is a future colleague of great promise and particularly interested, from his general botany, in Mediterranean studies, in the same problems as myself. He would be able to look after any beginnings, Armenian or wider, which may be possible here;<sup>1</sup> engaged on behalf of Mr. Bunting's Armenian refugees fund, best student of the Ecole d'Agriculture as Smith is of the Institut de Botanique - this man is a young Armenian grower of Broussa who cannot return to his country at present (who is a good general farmer but a specialist in silk which is a prime desideration of the island). He has been getting up Cyprus and things useful at Montpellier then looking up his capable countrymen at Alexandria, etc., so as to get picked labour if we find a place for it. He arrives here tomorrow.

4. At Nimes - I saw another old acquaintance, leader of the French and International Co-operative Movement and secured his promise of help in placing any productions we may be able to undertake upon the market. At Marseilles I found a capable and, I believe, trustworthy Armenian correspondent who has already been of use in finding other young Armenian agriculturalists who who want to work and seem fit for it; so you see, the snowball rolls - here we are, already three Musketeers and recruits officer.

5. Smyrna - I renewed acquaintance with one of the first University Hall men, Dr. Chassand, whose social science and Le Play studies at Summer Meetings and with Herbertson in Paris, have given him an intelligent interest and an unusual grasp of the problems, also through American missionaries, etc.

6. At Constantinople we saw various people of interest, particularly the correspondent of Temps and Daily News, stayed mostly with Judge Tarring and at American College for Girls; lectured and arranged a little historic and art gallery - a most instructive exercise for a tower and further help to feeling the immense field for the regional education of the Summer Meeting, tower, etc. in place of the present fraction of education. It was a great and new encouragement to persuade a school so thoroughly, I do not mean yet, to adopt my proposals, but to satisfy them of their soundness and get them to begin trying them. (Sometime I shall go off on a propaganda in the U.S.A. after this - transport the Summer Meeting for one year and we shall be able to import bright, /

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1. Refers to R. Smith.

bright, young Americans - and especially, Americaines - afterwards.) The fortnight in Constantinople was useful too for many reasons - historic and actual studies - a little for practical arrangements also and the indirect contacts are no less interesting and perhaps useful, e.g., with the American missionary system which bears so largely on the East. Near Constantinople we stayed in an English house, five minutes' walk from where Xerxes and his Persians crossed the Bosphorus to attack Greece. Up on the hill, in the noblest outlook situation I have ever seen in the world, stands a great Philistine American College, as dreary as a barrack-cram shop, as the world can show, defacing the whole landscape with its blind ugliness like the barracks of Edinburgh castle - yet what might not be made, what must be made, of both places?

7. At Rhodes, as at Athens, we had but a glimpse of a few hours. At Beirut, a couple of delightful days and then Cyprus."

Geddes began a survey of Cyprus. His technique was elemental and yet direct. It involved a series of discussions with experts, both governmental and non-governmental, who had been concerned with the total aspect of the Cypriot economy and its principal problems. He spent up to three months in the island and during the first few weeks of his trip undertook a series of traverses on foot or on donkey. The voluminous material that amassed during this survey in itself offers an interesting pointer to Geddesian methodology. At no point during his stay in Cyprus did he appear to produce a coherent document containing his survey data.

He accumulated a series of cards and quarto sheets with Valley Section diagrams, a number of thinking machines in squares - an arrangement of words and word sequences and notes on individual settlements.

It becomes obvious from an investigation of this material that Geddes's approach to the problems is an evolutionary one. His Valley Section diagrams occur on approximately two-thirds of the material and are devised in a manner which has been derived apparently from W.M. Davis's geomorphological cycle which it would seem, Geddes uses as a key to the degeneration of the environment, which he then complements by diagrams of a regenerative nature.

Upon/

Upon further perusal of the material it transpires that this highly abbreviated system of shorthand portrays the essence of place, its *raison d'etre*, its possibilities and possible courses of developmental action. The fact that Geddes appeared to make little differentiation between survey, interpretation and plan in his technique, allows for a considerable degree of condensation of written material without loss of substance. A typical example of this approach, on three pages of quarto, entitled *Kythraea - A Village Community* - page 1 consists of the regional context, three diagrams - two of them Valley Sections, the third the two Valley Section units joined together to produce a panorama of a central plain. The only written words on this page are - material activity social result, water, silt. Detail - irrigation, trees, silk, cereals; area, family, labour, special product. The Valley section drawings are annotated so as to isolate characteristic possibilities.

Page 2 contains a series of Thinking Machines in four squares.

1. Thought, action, feeling, college, farm, village, place, work, farm, unity of energies, unity of organisation type, material and social universe.
2. Conduct, reading from left to right on three lines -  
Morals, ethics, politics, economics, organic social  
Mind, business, organic  
Beauty, utility
3. Unity of energies, unity of type, unity of social type, unity of art, divorce of work and thought.
4. Facts of geography, facts of history, facts of civilisation, races, relation of races, occupation of races, philosophy of races.

Page 3 appears to draw the strands together. It contains no diagrams but a series of hyphenated phrases and words. View from distance - barren hillside - widening river of green - in opening glen and delta- perspective - feeble strength and organisation - honest men - verdure, goodly olives - streamlet, swift in channel, dusty way, detritus laden (at other times black and dirty) - middle of/



of village - trees - cafe view up and down, lemons and oranges, vineyards, olive, orchards, meadows, corn, wine and oil - land of wealth.

Planting different trees: verdure - wheat below - glimpses of old houses (pictures).

Oasis - contrast of bare hills - planting hills - ruined picturesque-ness of place? - prettier as it is.

Disorder - bad roads - dirt - delapidation.

Capabilities - utilisation - new mills - old mills - one mill? - why not? - one big mill? - why not? - all thoroughly wasted on people?

Cafes!

Essential element of ethics and mind - wealth possible? - not so easy - obvious under-nose!

Sit down to evolve economics and business - how to do it - road, port, market, trade.

Market - town or port.

Thought, action - random talk, corporation? - how to renew?

These series of notes illuminate a mental process. The first page is clearly a regional context. Geddes is looking at this village in terms of the overall situation of a regional economic background. It would appear that this particular village is situated in a plain area, the slopes of which have been eroded and denuded both by natural forces and historic processes of economic development (or mal-development). The Valley Section here is one of the few occasions when Geddes links the slopes of the valley in one systematic diagram and as such is using this symbolic process to obtain an insight into overall region, economic capabilities and the hierarchy of settlements. The Geddesian process in this context indicates that a synoptic approach is required at the outset. He envisages some possibility in his Valley Section regeneration diagram of reclothing hillsides by re-forestation and by introducing various agricultural and grazing occupations.

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The second page appears to be an attempt by Geddes to record for his own working purposes, the bases of economic and social action - the relationship of the socio-political context to economic life. He distinguishes in his own mind the requirements which would be necessary to promote a change in the physical environment, which he has already indicated on the Valley Section diagrams, by influencing the behavioural environment.

Page three is an analysis of the village; some elements of its economic life and social problems. The idea here is to fuse the village and the region into a wider economic system and to bring about needed environmental changes, both social and economic. Geddes begins to think through the mechanism of social change, possibility of discussion with local people to transmit his ideas of economic redevelopment, to try and link the village into a hierarchy of trade patterns and to isolate the prime market for any products which would come from <sup>the</sup> village and its region. Geddes is clearly exhibiting, in these notes, a capacity for a rapid interpretation of the actual social and economic climate within an area and the selection of lines of action to remedy the most serious deficiencies. The inter-meshing of socio-economic and physical planning in the strong synoptic methodology is clearly evident. This total operation, in fact, took one morning.<sup>1</sup>

By June of 1897, Patrick Geddes had published in the Contemporary Review, an article on Cyprus which clearly illustrates his capacity to portray the results of his field investigations.<sup>2</sup>

The multiplicity of notes which Geddes amassed on his journeys throughout the island were codified into a graphic picture/

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1. Letter to Pollard, 4th February, 1897.
  2. Contemporary Review, June, 1897, Cyprus, Actual and Possible, A Study in the Eastern Question.

picture and the travelogue approach which was adopted was later used with equal success in the Dunfermline Report.

He introduced the paper by a striking and telling sentence -

"Up from Larnaca, the port to Nicosia, the central capital, the journey most of the way is more desolate than beautiful - yet, before heading on, let us pause for a moment to interpret it. This desolation is the work not of nature but of man - the always wasteful and often wanton destruction of forests, which has been the crime of almost every successive race - how far the desolation and decadence are manifest in every Mediterranean country, from Spain to Syria, is the fault of man - how far also a natural process of questions hard to settle in the exact proportion, and still likely to be long in the debate? There is no doubt of the co-operation of both destructive agencies. In the West the human factor is the more obvious, but as we go Eastwards the cosmic factor appears more plainly. Thus it is no longer a matter of speculation but of geographical fact, the comparison of maps of the Caspian twenty years ago with those of today shows a lamentable shrinkage - vast spaces of what was then not only marsh but even blue water being now represented solely by drifting sand - how this means, for the surrounding regions, still hotter winds, still scantier rainfall, needs hardly to be explained."

Geddes then makes a telling comment, partly deterministic, on the relationship between the increasing desiccation, or even periodic desiccation and the movement of nomads from the desert areas on to the pasture lands of the neighbouring valleys, which he then weaves into a theme about both natural and climatic changes which introduce in their wake results no less disastrous than those, in fact, caused by man's ill-usage of the environmental possibilities.

Geddes goes on to introduce the idea of central place, having selected Nicosia as the focal point for the island.

"Before us lies Nicosia, a miniature Damascus, with its minarets and palms. All possible excursions conveniently radiate from this central, strategic point. The great south road, for instance, takes us over hill and dale to Limassol, the second sea-port of the island - indeed, the first for some things, carobs and wine especially."

In the interior Geddes has noted, riding westward through the rich plain of Limassol, that it is as well clothed as an English park and that one sees the secret of the Templars' art, whereby they were said to amass the wealth which cost them so dear." It/

"It was the simple, agricultural art of shrewdly choosing soil and climate, of wisely managing water supply, in a word, whatever their symbolism and ritual may have been, their wealth sorcery was that of the irrigator and farmer of the vineyard and the olive press. To the matter-of-fact modern, especially to the boastingly practical man, with his instinctive preference for illusory paper investments, all historic associations are suspicious, sentimental, savouring of anything save permanent security and safe return. But here, as everywhere else, the would-be economic Philistine is non-economic, for on the least consideration these historic positions are justified - people prospered the longest there, so have left the most mark, for it is surely where population was most numerous and was rich that it could leave most tombs and treasures, could build best temples or towers - your shrewd agricultural prospector, after keen scrutiny of soil and climate, of water and health will probably fix himself in turn, often find a very strategic point of old the best for market or port today."<sup>1</sup>

To Geddes there always appears to be some possibility for man's intervention in the apparent environmental determinism involved in economic factors. He mentions in the area of Episcopae that -

"We find little, long forgotten groves of ancient olives - our everyday agricultural and economic science often forgets that with agricultural things they grow agricultural thoughts - the one as real and as permanent as the other, but the more thoughtful comparative agriculturalist is one to point out, for instance, how the traditional turbulence of Corsica is associated with its chestnut forests and its impenetrable maquis, or how the misery of Sicily is almost as closely associated with the prickly pear, as Irish poverty with the potato, or how the useful carob with its lavish, yet irregular, shower of coarse fruit without labour, is the very tree of the prodigal. The associations of agriculture with social culture and of both with spirituality and cult - are the very constants of social geography, permanent laws, that is of human life, material, social and moral throughout the Mediterranean lands. From one side is the start of the living mythologist and his golden bough; and the other independently sets out thinking agriculturalist and botanist with his social geography. But already they begin to meet and both begin to see how, for the future as for the past, the long-tended olives stand with the House of Peace and how amid the deep-rooted palms there is literally flowing, albeit silently, after the surface view and scene, the water which bears the essential concrete possibility/

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1. Pages 5,6.

possibility of restoring at once material and social order - with these, the moral order also of renewing the sound social mind in sound economic embodiment. Such ways both begin to understand the traditional sacredness of the palm tree and to think out together how the palm oasis became the Holy City, the goal of Pilgrimage, the prototype of Paradise. With water of irrigation goes the water of a better social and individual life."

Geddes goes on to comment that, in fact, the whole basis of the economic system in the East is related to agricultural possibilities.<sup>1</sup>

"So the Eastern question is ultimately an agricultural question. One main ineptitude of the Great Powers has been the agricultural ineptitude of their representatives who have been diplomatic or military, parliamentary or journalistic almost to a man. Their futility is but the common urban incapacity to govern agricultural populations, to deal with rustic questions and further, that with the advance of deforesting and desiccation of mutual impoverishment comes on economic ruin."

These are, according to Geddes, the elemental facts of geographical economics.<sup>2</sup> Geddes in an oft-quoted comment sees that - Il faut cultiver son jardin - that there is a necessity for revitalisation of the agricultural base of the area under review; that with this there should be a complementation of a source of co-operation between the factors of labour within the area. This theme is carried through Geddes's article. He ranges widely through the island to Salamis and Famagusta illustrating the situation of monastery, village, town, but also commenting upon their essential economic bases and concludes - "Here then, as elsewhere in Cyprus, the ways of active initiative lie open."<sup>3</sup>

The survey and interpretation has been condensed into one clear and forceful statement. Elements which became incorporated/

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1. Page 7
  2. Page 8
  3. Page 10

incorporated in this statement of objectives arose from an additional factor in the survey process. This was a specific consideration of the question of the Armenian refugees. The total objective of Geddes's work in Cyprus was to bring about a realisation of its possibilities, primarily to provide an increasing economic base for the Cypriot refugees, his philosophy fully worked out in a lengthy hand-written document entitled - The Armenians, A Practical Suggestion.<sup>1</sup>

In a preface, entitled - "Is Cyprus Worth Keeping?" Geddes noted that -

"The place can boast of a fertile soil, an excellent climate, a thrifty, patient and orderly population, an unrivaled geographical position and the protection of the most civilised country in the world. These advantages occur but must be realised with haste, because the problem of the Armenian refugee is pressing. - Seeing that while the statesmen are negotiating the winter is also closing in apace, is there nothing that we can do meantime? -the practical instinct is an unmistakable desire for immediate action of some sort and whilst we would realise the danger of intensifying political or religious antagonism, whether at home or abroad, we would in no wise embarrass statesmen in their effort to maintain peace amongst each other, to allay the disorders in the East, yet we feel that there, as here, in ordinary life, there must be ample room for private action, for silent energy - there are already funds and agencies, or at least the beginning of these and if we may doubt how far on the one hand such funds can continue to really reach their purpose, or on the other, how far they may hope to keep up their hold upon public interest throughout the long winter, we may safely leave these questions to those more immediately concerned. With the statesmen again the question of organising either the protection of the Armenian remnant or its exodus elsewhere must also be left and thus, it is no wonder that the main body of the public should already be turning their attention to other scenes of this most eventful year. - Is it not time there were again some place in personal thought and private action, if not yet in public policy, for active peace? To achieve this purpose" he goes on, "there must be a re-appraisal of one's approach to rural planning. In our age of coal and steel, of urban inventions and consequent agglomeration in cities, the urban type political thought naturally predominates. - Is it not time for a deeper rustic principle?"

For Geddes an attempt to assess the *raison d'etre* of a rural environment/

1. An undated manuscript, presumably late 1896.

environment is basic to any redevelopment project, a project which he spelt out step by step.

One primary approach was to utilise all available skills and to accept that the Armenian refugees may be a considerable source of investment themselves.

"The women are skilled with the needle and the loom, they attend not only their houses but the farm stock and are accustomed to work with the men in many ways. Men there are too and these are not merely petty usurers and bazaar store keepers, but workers of all kinds from the patient and laborious peasant to the sturdy and willing porter, to skilled artificer, etc. - Although it is not our province to advise the statesman, may we not as his constituent, ask him if he has sufficiently appreciated the ultimate value of such immigrants to his own country or colony."

The problem to Geddes was that given this availability of skills, how would they be successfully organised. He believed that one answer to the problem of finance was to form land syndicates and labour camps. He felt that the investment would be forthcoming. Another safeguard -

"one which might re-assure some foreign critics, is that the organiser of labour colonies need not always be of his own nation. In many a Levantine firm, one partner is an Austrian, another a Russian, the third is an Italian, the fourth a Frenchman or an Englishman and thus the little house has behind it the flags of half the powers. These days of international investment there is nothing unusual in this. While at a time when partial and united co-operation of Europe is indeed more than ever needed, such international co-operation as in private life might quietly do much to promote an increase of good understanding."

Geddes spells his objective out to -

"organise labour, to establish a labour colony or labour colonies at suitable points, on such a scale as capital might allow. This would, in the first place, afford a centre of relief, but proceed forthwith to work for the industrial methods and ideas which would be of practical applicability elsewhere."

And he later explained in Cyprus, Actual and Possible -

"By cheap and simple methods, we might on the one hand vastly improve Cyprus for the Cypriots, a much needed service, which it is full time we should undertake and on the other, make Cyprus an object lesson and training school for the East, for India and the Colonies....."

....." "Here in Cyprus in one such experimental field, alike for/

for colonial development and colonial education." The base was to be the land, the organisation point the village economy and the method an applications of common sense.

"Let us now cross-examine the geographer and economist and let us ask what is the family economy, the village economy, district by district, race by race, then mixed as they have been for ages, often indeed in peaceful co-operation. As we come to understand this we see there is less and less to hinder private enterprise, here and there, at suitable points, to re-organise this, nay, to organise it in some respects, it may be better than before - and so to do for the statesman by our village efforts the preliminary and experimental work which the hygienist does for him with his hospital, the mechanician in his workshop, the electrician in his laboratory. This does not require any great development of science but only the application of everyday organisation and common sense to the existing and familiar industries of town and country. There is a constant market for corn and wine, cotton and tobacco, oil and fruits and so on. There is ample field too for improved agricultural methods in these old cultures and a field also for fresh initiatives to introduce oranges and silk, need time as well as capital, but also give a return from the first year - one such as fibres may well attract the speculative agriculturalist and also maybe a member of the medical medicinal plants, of which so many come from the Levant and which with a little supervision could be easily cultivated by women and children. From the purely economic standpoint sites and soils for such insipient labour colonies are not far to seek - indeed, few realise how from end to end of the Mediterranean how much there is of unoccupied or ruined land awaiting development or reclamation and how much room there is for population and prosperity before we even recover the historic level of the past, much less increase upon it as modern civilisation should enable us as elsewhere to do. The most obvious economic centre of such proposed activities is, of course, Cyprus - good land can be bought in these places as elsewhere at moderate rates, why should we not buy it and set to work?"

Geddes spelt out the stages to realise this objective.

"Time presses, for if anything is to be done next spring it is time, capital and direction who are choosing their starting points. Definite centres are needed. It is time for these to be offered at once. One other suggestion arises, naturally enough, from the organisation with which the writer is connected - an extensive scheme of improvement among the slums of vacant sites of Edinburgh Old Town, which is in the course of its ten years' incubation and has increased its initial turnover two hundred fold and has now become a limited company with considerable increased capital and widening membership and is already exceeding its expectations. A special feature of this organisation is that whilst conducting its business operations in the ordinary way, its affairs are directed on the one side by business citizens and on the other by senior and junior members of its collegiate and educational undertakings. Here we/



we have what is practically the association of the business company with a modern college, into something of a lay-order whose building and hotel keeping, education and publication, dividend paying and public health, promoting year by year into a more stable and prosperous whole. Here then are men who have reasonable specialist knowledge of some leading town industries and even of country ones, who are accustomed to accounts and finance and who had alike the character and their capital to lose if their efforts failed, but as so far from failing it improves and steadies and as its responsibilities become taken up by an increasing number of hands, the proportion of its former organisers may be spared for a season. These are willing to attempt to develop and carry out the scheme indicated above, at such suitable place or places in the East as may be found at Cyprus or elsewhere - a limited liability company is still to be formed and surplus profits, if any, will remain at the disposition of the director on the spot who will be employed by them in such ways as they may see best for renewing and improving the scheme."

Geddes goes on to suggest that through this type of co-operative action "a permanent solution of the economic phase of the Armenian question can be realised". The agricultural colonies which he envisages and which are a fore-runner of the Kibbutzim should, he believes, be made "to yield considerable return at the end of the first season." The complement to the agricultural developments was to be an educational policy aimed at creating the skills which could be applied and also organising industrially self-supporting communities. -

"The policy of alms-giving must ultimately run dry and in order to prevent destitution it is necessary to transform these homeless folk into an organised industrial self-supporting community."

Geddes goes on to note -

"There is no such thing as an abstract political economy but I believe that there are regional political economies. As we go into some actual region of disturbance and see the actual difficulties, as in Cyprus, then shall we be able to do something real towards a solution".

Before discussing in detail Geddes's report on the progress of his work, it is necessary to carry further an understanding of his philosophy. This Geddes spelt out in a lecture he gave on Cyprus, in 1898, 'Interpretations of Utopia'. His philosophy was that the history or civilisation, its many races and religions, in connection with Cyprus and also of politics -

"was to be interpreted by deeper underlying study of geography and/

and history, viewed as the study of region determining the occupation of races and then the occupations coming to determine the social organisation, even the moral, spiritual and intellectual ideas, so that the natural history of man is continuous with the natural history of place."

To Geddes the functioning of the social organism could be understood with respect to the primitive occupations. "In terms," he recalls, "of the elementary relations of man to the world he inhabits, the facts of history are to be interpreted and explained."

He introduces the concept of geographical base as a fundamental prerequisite to the understanding of the environment.

"My thesis is that geography is fundamental to economics and that economics is not an abstract science but a regional and descriptive one from which, of course, we may generalise afterwards, but only then."

Of Cyprus Geddes indicates that it is impossible to impose any stereotyped planning scheme.

"You know a tourist has no new practical ideas at all. His first tendency, his first advantage and danger is to try to project upon the existing world his own world, so that recalling the enormous benefits which our country is deriving from roads or railways or the like on our consequent wealth, population, etc., he prescribes roads and railways to the countries he visits. Thus it is that we go to find countries of roadmakers and railway-makers and so forth, but comparatively seldom and only later do we learn to be irrigators, as irrigation is not our business in this little island of ours. Yet it is irrigation that is the main want of these Mediterranean countries. Re-afforestation is another want, but here in England especially, one does not so much see the need of re-afforesting, so it is that we are slower to develop irrigation and forestry in those countries than we have been to make roads. In the same way we are all naturally familiar with, let us say, the growth of cereals but not familiar with the cultivation of silk, since we have no silk growing here and no silk worms, except as specimens. Thus we have to face the question of adapting ourselves to the soil and conditions of the country and of not simply to discuss the things that have been useful to us here. We must face the question of relativity of economic development in each country, what its own geographical conditions and population require - that is, of course, the whole procedure."

This view is carried by Geddes into an attempt to indicate a number of ways of looking at the actual situation. It is possible, he believes, to look at irrigation from a person's view of doing the best he can with a small stream. Alternatively, a geologists view -  
a/

a larger and more comprehensive attitude which introduces the concept of artesian wells and similarly, the engineer whose approach is to construct a dam. For Geddes these large-scale operations required considerable investment.

"Could we not, without absolutely ruining the peasant, and doing as they are doing now, recover what former peasants actually did? The present state of Cyprus, as of all other Mediterranean countries, is a very degenerate one, from its former busy agriculture. Suppose one goes to a water district, charming mountain area of Kitima, where great spring rushes from the rocks, watering the whole valley. The unmixed contrast of the arid hills is broken when you see that every orange tree is absolutely sick, and why? - it is not from drought, but from the opposite - the trees are being positively drowned, the fruits are water-logged, drenched with water past endurance. In the same way the mulberry trees sicken and are attacked by mould because they are over watered. Everyone is apt to imagine he cannot have too much of a good thing, at least of water, whether it is needed or not - so the peasant quenches his trees."

Another view which Geddes suggests may be adopted is well-illustrated by the example of California, for there -

"we see the active and inventive modern world face to face with the problem of irrigation and in conditions more like those which we have to face in Cyprus and those which prevail in Egypt and India. There our irrigation service, most remarkable and distinguished, is dealing with the task in some respects exceptionally gigantic and in some respects easing. There is an enormous supply of water from the river so you get great reservoirs, stupendous engineering achievements for storing the water of vast areas for months at a time. The Americans used to do this sort of thing and run the water on their crops with consequences in some ways like those in Cyprus, the trees became sick. Now they have learned that instead of giving the tree as much water as you can, you ought to give as reasonably little as it will do with. This enables you to spread your water over a far larger area and you have far better crops as well. The water which is now spent in Cyprus in sickening the crops of the villagers would, if properly used, water well nigh double the area."

Consequently, for Geddes, there is a third opportunity which he believes "is far older than history itself." It is an operation which he sees as very simple.

"You think of the Thames as a visible river then, thinking more carefully, you see at once that there is more water flowing through the pebbles than probably ever flowed through the bed of the/

the stream itself. The visible river may be regarded as an overflow of an underflow. It is this idea of the river as an underflow that is so important in all world irrigation, for you may sink in the channel of a stream under gravel, not only a well but a chain of wells connecting these by short canal, then your water stream comes out and you can carry it as current some distance."

The advantages, for Geddes, are overwhelming, a continuous, regular water supply, less lost through evaporation, no pools as a source of fever and pure water instead of stagnant water.

Additionally, and of crucial importance,

"works of this kind are within the reach of the ordinary peasant, assisted by some modest capital grant for loans. In this way an old-fashioned possibility of irrigation arises which also stimulates an activity in agriculture of the whole population."

It is necessary, believes Geddes, that one must look beyond the normal facade. He quotes, in this document, a newspaper report of the return of Carnegie from a trip across Australia with a comment that as Carnegie has seen no gold he regards the country as entirely worthless.

"It is the characteristic assumption that what contains no gold is entirely worthless, though it is not quite fair to say that. He fails to see two things, both very essential matters. Firstly, that if the mode of the life of Australians consists in burning down vegetation, there is going on in Australia a process analogous to the deforestation of Cyprus. The barren hills of Cyprus are a definite product of human activity, so may be the Australian desert itself, a definite product, not of the harshness of nature, but of the destructiveness of man. The second point is this - the enquirer always goes along in the same way by catching a native and driving him to show where there is water. They come to some hole, a place a little deeper in the plain, dig for water and find it and say that there is water after all. If it be low, a simple system of this kind is well calculated to bring it out. In this way one might go over such exploration a second time and reverse the verdict of those previous enquirers. I had intended to go on to compare in detail what might be called the engineering view. It starts with the concept of so many inches of water, so much water required over so many square miles, dams of such a size from which the water is run onto the fields. With the agricultural view, which starts from an entirely different standpoint, not/

not from a great geographical sun but from the microscopic details of structure and soil and action of water on roots. From this point of view we should see an apparently dry soil, every particle surrounded by a film of water and every film in contact with the others and a capillary current wherever the roots begin to absorb. Thus there tends to be rising through the whole plant a continuous flow of water. Thus, vegetation tends to raise the water point, as one may call it. Planting trees tends to keep the ground moister by the action of these multitudinous capillary forces which summed up make a stupendous whole. In this way one gets utilisation of the rainfall at once without the necessity of so many dams. Again, there are minor matters of irrigation, entrusting in their way as a point of detail. Over the whole northern mountain range of Cyprus the irrigation is largely from wells in the limestone. Thus, they are, of course, strongly calcareous so that it is easy to repeat the miracle of Moses by striking the rock, at the right place, of course, for Moses was a clever man, to restore the strength, for the spring has simply closed itself up as the spout of a kettle does in any calcareous country - practically, it is true that a good kick or a blow from a geological hammer, or two hours' work with a pickaxe or a charge of dynamite is enough to open the spring again."

Geddes goes on to develop the theme of irrigation -

"A study of irrigation is only at its beginnings. Quite seriously, we are in sight of a transformation which will reverse the process of ruin, carry back wealth and prosperity throughout innumerable areas of the Mediterranean - we begin to see the possibilities of a literal and concrete transformation in the substitution of action for mere words, in the transformation from desolation to the wealth of peace. I say the wealth of peace because irrigation is not simply an economic process yielding an increased crop, although this is important, for in Cyprus they have not in any form as much as one a year. They will have the choice of having one poor crop every second winter (in the next year the land must lie fallow) and of having not only this one winter crop, but two summer crops and then as they will have cattle and can manure the fields they can have four and even five crops instead of one and, of course, five rents and five populations instead of one. This is an example of the scale and magnitude of the possibilities of irrigation which are very strongly to be insisted on in this age of gold mining and in this great city which is so much transformed from the capital of commerce into the capital of gold speculation. The real gold is in earth gold and water gold and comes not from the mine but from the sun and soil. - But since all phenomena are completely associated, since definite activities produce definite social and moral results, we do get more or/

or less complete demoralisation and disorder from gold mines, while we get order, prosperity and settled peace from irrigation and agriculture. The contrast between the 'Argonauts' of 1849 in California and the present population is familiar evidence of that. Another way of putting my thesis is in the action of the French in Sahara. Wherever an artesian well is sunk the nomads settled down and turned from dangerous enemies into active, co-operative friends; instead of scouring the desert and fighting the French with all the superiority of light horsemen who know the country over any body of more ponderous troops of a European power, these same wild opponents settled down into comfortable, prosperous date growers, supplying the Algerian market and becoming sedentary. It is in this definite connection that there grows up the most complete and perfect social order which the world has seen, the civilisation of the oasis, which in its order is its necessary minute economy of water and soil; its necessarily scrupulous fertilisation of the palm tree, gives us alike the ideals associated with the palm tree and the historic civilisation of Mesopotamia and Damascus."

Geddes goes on to illustrate his view that the environment must be considered as a complete unit. In addition to irrigation, which he sees as one basic element in the economic process, there is that of re-afforestation.

"The great question of re-afforestation is being solved partly by the protection of the wild forest, the great enemy of trees the goat being the chief difficulty of the case. The wild olive and indigenous wild carob are, of course, sources of constantly increasing wealth and in the same way the planting of grape vines for raisins or wine, the growing of winter crops as well as summer ones may be suggested and all through the world of agriculture there are possibilities without number. I have here a whole stack of possibilities.

Additionally, Geddes finds that the great resource of Cyprus is silk -

"But it is wonderful", he says, "how little the island makes of it". The ravages of disease to the silkworm can easily be overcome, by a concerted effort of education.

"The peasants", he had noticed, "have borne too long, as a matter of fate, of Kismet, the episodic occurrence of disease which comes through an incapacity, or a disinclination to destroy all the artifex used in silk preparation".

He sees, then, that the possibilities of resuscitating the silk industry is in the hands of the islanders as soon as they choose to adopt the resource and methods of Pasteur.

The intensive use of labour is also seen by Geddes as bringing considerable/

considerable economic and social benefits. "The business of silk growing", he recalls, "is a woman's industry par excellence. It can never be a capitalistic one." He goes on to suggest that there are considerable advantages -

"of making the women more productive with the largest share of control over the destinies of the family and the home. As you improve the position of these peasant women, as you improve their importance and their responsibility, you improve their whole economic standing in the family. You have a further opportunity also, as silk can be wound at home. You can get something of clothing in silk and the difference between clothes in silk and rags, the different estimation of women in the eyes of men, need not be largely commented upon. In the same way, the great women's art of needlework still lingers in the village - alas, at the central schools at Nicosia and Famagusta you see the young ladies making such abominations as you saw here twenty-five years ago, expressing the lowest standards of middle-class western taste, instead of the beautiful things they have of their own. That will be got over and needlework in its best form will be restored. Notice how the culture of silk, its concrete way of carrying through the eastern household hygiene instead of dirt. It is a cleansing process and there are very severe penalties and so cleanliness, prosperity and the rest come in the wake of this highest textile industry. Every kind of social activity has its determining reaction, not only upon the wellbeing, but upon the whole quality and organisation and morals of its community and we cannot introduce a single modification of agriculture or of industry without the entire social organism vibrating to its very apex. The merchant who trades in silks or wine as a definite entity has accustomed us to think of these things detached from their social results, but in the country it is altogether vital to the conditions of the world whether you grow rice or grass, the vine or the olive tree."

He goes on to say that,

"agricultural calendar of events supplies us with every theme, large and small, from staple cereals to flowers for perfume, or drugs of different kinds; each has its social, its economic and its ethical, even its poetical significance and it is these that we recover in the East. In every detail of the local agriculture one might work out matters of interest. For instance, the locust is one of the old pests of the East - the locust does not thrive in cultivated soil nor in the forest, but in the dry and barren wastes which are the result of deforestation. It disappears with skillful irrigation/

irrigation and cultivation."

For Geddes these are only beginnings, as he concludes his lecture -

"These are only suggestions of what may be called the detailed process of amelioration, which is a matter of systematic **instruction** of the geographical facts on the one hand and of the resources of science and engineering and agriculture on the other. It requires a geographical revolution of things, a study of the degenerate population coming downhill and a study of possibilities of moving things up again."

In his conclusion he traces out the clear lines of his thought -

"I insisted upon the troubles of the Eastern question being due to a descent in which the hunters, shepherds, peasants, were all successively moved downwards making the country support a smaller population. The opposite process is possible with irrigation. your culture becomes immensely more intensive and smaller areas maintains a man. Upon each acre you have far more crop, intensive culture makes the field into a garden. The fields travel far up the mountainside and with this comes the restoration of the forest itself - so it cannot be too strongly insisted upon that the troubles of the East admit not only of economic explanation but of economic solution. The arrest and reversal of degeneration is a matter of definite practical possibility, quite as interesting to contemplate as the political disagreements of these impoverished lands. In Cyprus we have an island lying in our hands and we have a means of showing how alike we might make it prosperous for itself and in regional influence make it a credit to us, for even in colonial development and policy I have tried to show how it contains suggestions for Rhodesia, Australia and the like. It is a centre where we have to deal with what are sometimes called backward races, simpler economic types or alien types. We have, therefore, at once, the possibility and the necessity of doing this in a harmonious and cordial way, for these populations are essentially in race our equals as in tradition they are our superiors, so we have a problem of co-operation, not only of man with the soil, but of many different races and religions in an economic peace. And so we reach the idea of peace, not simply as latent war, but as active peace, the highest form of war the struggle not simply for existence, but for the highest glory of existence, the struggle of a continuously progressive artificial selection applied to nature and to man by man."

This particular lecture is an extremely far ranging document within which the message is clearly drawn by Geddes that the philosophy of regional planning involves fundamentally a conception of a total environment, both social and natural. It appears that Geddes/



Geddes envisages, at this stage of his career, that given a particular regional problem it should be possible for a planner to trace fairly quickly the relationship of cause and event, to trace through a critical path on these lines of analysis and to select a key element or a group of key elements which when introduced, produce a chain reaction of beneficial results. His policy for Cyprus as outlined, involves remedial action in an agricultural context and through which he envisaged a total increase of the net economic and social product. This, in turn, restores a degree of confidence locally in the future of the area and encourages further growth.

As an essential pre-requisite for this process, there has to be a refashioning of stereotyped ideas in relation to the planning of the environment, to take account of especial local and regional circumstances. The approach may be summarised as essential grass roots planning on which a system of improvements is based. By February, 1897, Geddes had not only undertaken his survey, but had clearly selected the critical path of action upon which the structure, as he envisaged it, would stand or fall. The critical path is clearly shown in a series of letters and reports sent from Cyprus to London at this time, in which Geddes outlines not only the realised results to date, but sheds light upon the difficulties which he faced.<sup>1</sup>

In addition, the letters to Pollard are of some considerable interest, in that they also contain more general comments relating to the development of Geddes's general philosophy at this time. Numerous references occur throwing light upon the reception of Geddes's ideas in his native country, amongst his academic and non-academic colleagues.

Geddes's immediate reaction to the situation in Cyprus is stated/

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1. To Pollard, c/o High Commissioner, Government House, 4th, 5th February, 1897, February, 1897. A preliminary draft report 25th February, 1897, draft outline report of the organisation of labour for Armenians in Cyprus, winter 1896-97, up to date 19th February, 1897, continued 16th February, 1897, continued 13th March, 1897.

stated succinctly in a preliminary draft report of the 25th February -

"As I know from personal experience the difficulty of realising schemes of agriculture and gardening in town, so different is the urban perspective and philosophy of life from the rustic one, I was patient for a preliminary explanation and pardoned for such abstractions and dissertations as may be the vice of my own (urban) calling as a Scots professor; for such apparent coldness too as is proper to my faculties, medicine and science. First, we are agreed at starting - that we see and that from the more spiritual point of view, that good intention is the main thing for the giver and that, for the receiver also, sympathy is the best of gifts - but there is also a time for everything and that for antiseptics and for millions is with us now - the kindly, but somewhat casual committee - the kindly and helpful ladies who bring succour and consolation- the kindly policeman who keeps order outside, all are wanted, of course, but they must go a step further and that in their own development, before they can be of much further use to the patient's recovery, much less to his start in the world afresh. And this is what I want to say - here is where public authorities, where private people and organisations are all failing - but here again is the point I wish to press - are we sure we know how to help them?"

Geddes's own methods of working the critical path he personally devised was clearly aimed at resolving the doubts he might have had as a Westerner and as an urbanite to cope with the rural problem. His survey had been most intense and thorough, his interpretation likewise, and through discussion he quickly began to grasp, not only the essentials of the regional culture and its problem, but also the possibilities which were inherent in the site. He records some of these views in his letters to Pollard. After having landed at Cyprus he established contact with specialists already in the area.

"First the forestry dempartment; Mr. Bovill is struggling with difficulties of every kind but is getting some first-rate work at length started (of which my photographs are the first vivid means of getting rubbed into the Governor, etc., and I trust next the Colonial Office) but I imagine a desert beginning, not only to be verdant with Australian wattle (mimosa) but to be ready for cutting in six years from planting. Yet the Agricultural Board of Cyprus, a body of lawyers and officials, of course (who cannot be got out of town for the six mile drive and ride necessary to see this) lately invested their money in New Zealand!'. It makes one feel quite at home in Edinburgh again to hear such things: - the/

- the forester is a capital fellow, vigorous and manly, knowing and liking the people and ready for a big career if he can get it in this re-afforesting, on which the renewal of the East primarily turns. As I can help him in ways, at any rate such as that indicated above, i. e., by teaching the people in general and local and home authorities in particular, what he is about, I have no fear of his ability and willingness to help me, if need be, in such matters as lie within his field. Next, and still more sympathetic, if possible, is Mr. Gennadius, the newly appointed Director of Agriculture. He is brother of a well-known Greek Minister in London and was formerly Professor of Agriculture in Athens and then Director of Agriculture. He has studied in Illinois University, in Germany, etc., and is as sharp as a Greek from Chicago might be expected to be, but a simple peasant withal, a most fresh, active and genial mind, full too of adaptive resources and determined to regenerate Cyprus or go home to Athens again, in no case to become as the ordinary, respectable official, to sit still. Gennadius, then, is just starting. He has travelled over and over the island and has written reports of its possibilities. You may remember my telling you of the remarkably encouraging way in which I found these reports to co-incide with my own suggestions to life and general knowledge, Montpellier, etc. Now he wants to get something done and here I can help him. With N. Milligan, again Three Musketeers, we are planning out an itinerant school of silk culture for our young Armenian agricultural missionaries so that the whole process may be made clear and this slowly decayed industry, one of the best too for women and children, may be revived. Why silk you ask. Well, one reason will do, there are many. This is the best variety known and to revive it is, therefore, a useful thing to all concerned (as per report of Sir T. Waddell, President of the Silk Association, whose knighting you may have noticed the other day. Waddell writes me that he may come out). A further reason is this, here is one industry whereby the destitute Armenians can be, in some measure, relieved at home if we can train people to be industrial missionaries just as those have been developed medical missionaries. Think of the work of the latter and consider the former. The industrial missionary is just the old monk at his best, Celtic or Benedictine. Here then is one of the ideas I want to put before you, that of organising industrial missions or missionary industry as different people may prefer to look at the two sides of the shield..... While I am trying to plan out and work out these things with practical men of all kinds, I am getting at every capable man I can hear of in the island. (There are none of the difficulties and hostilities of our good old town). But how can we make education regional and practical, agricultural and industrial, social and moral? (Why in Cyprus, do you/

you ask, why not at home; just what we want to do at home. But here is freer scope for experiment and we will come home too, never fear, with freshened mind, more experience and, I trust, a better chance than heretofore, for would not Edinburgh and Scotland respond more favourably by useful work in fields more before the public eye)".

Geddes goes <sup>on</sup> to write to Pollard in a more general vein and pinpoints an obvious advantage of Cyprus which has been very much on his mind.

"Do oblige me by looking at it on your atlas of the hemispheres. Of course, this is not a port of call but it might easily become so if they dredge a harbour. The point is, the capabilities of its situation, the admirable centre it affords, for example, for quietly and privately doing a piece of work which, when sufficiently advanced would act on public opinion and this alike of commerce and politics, war and religion. We are gradually developing towards a crystallisation of a labour college. If it goes well, the nucleus of a labour colony. One reason why I have had such an uphill time in Edinburgh is that there is such a lack of travelled students. The older professors and even lecturers have usually only been in Germany and too little, the younger ones not at all and thus it is that we get the provincialism of Edinburgh re-inforced by the narrower provincialism of Oxford and London. Look again at the atlas and see how many routes there are to choose for the way home; the rays of a fan radiating between Algeria and Odessa and see what a wealth of ideas the students coming in, or going, can choose from, especially when he can be franked as needs be, into the keenest group in every university. Look at the excursions too - for example, up to Damascus or Jerusalem in a day or so. See how we might organise a vacation tour to the Holy Land. Why should not our young archaeologists learn Greek and excavate here at the same time? For ancient or for modern history and languages, no place could be better situated and quite seriously, therefore, I think of and wish you to consider and criticise as a possible development of our educational work in general and of Summer Meeting in particular, a winter, spring or autumn school here, one more or less migratory to suitable points adjacent. Of course, there is no urgency for this. It would have to be worked out in detail gradually but the geographical and other organisation is already available from Reclus and others of the Fathers of Geography to Marr and Smith and their pupils in turn. But all this is mere collateral detail of a larger scheme already faintly outlined, but of what I shall call it, college labour colony, college farm, agricultural school, in which University Hall students, Cypriot farmers and orange growers, foresters and irrigators are combined with Armenian and refugees, pilgrims with colonists and missionaries with unregenerate young adventurers, not to mention town and gown directors and their various capabilities as philosophic educationalists and canny Scots - in short then, this long performance may conclude with the above complex ballet of many costumes and characters. In the/

the next letter let me outline how I propose to stage the transformation scheme of this literal pantomime. Scene I - Desert Island to Scene 2 - Wells of Peace."

The next letter Geddes wrote to Pollard (4/2/97) carries forward Geddes's ideas. He clearly realised that there may arise a problem of communication and he begins the letter -

"I hope my last letter did not alarm you or any other. Pray talk anything over with Thomson who knows me best and longest and whose biological and other education (and idioms therefore) are likest my own. And just as at the foundation of the company careful conclaves were necessary, so now I quite realise that you will feel many anxieties and see many obscurities and gaps in my rambling letters, my many ideas and suggestions, my practical proposals, etc. and that I am asking you to decide things without time for correspondence about them almost for a Director not only to run away, but to try to inveigle his' colleagues into new responsibilities, clearly caution is not the root virtue in my case nor, let me say, in yours. Insight is what is wanted, is it not? But firstly, a personal word, that I have not run away. My life lies before me with Edinburgh as its centre as clear and clearer than ever and I am coming back to that with a strength in body and mind and a stouter heart. But there is a time for everything and a season for every purpose under heaven (hence even a certain northern seasonal has methods in its madness) - so there is a time for me, after ten years' work, mostly outside my profession, to do a spell of work at that. If I were more productive and effective as gardener botanist, if I had not sacrificed so much of late years, I should be more use to you, even in town, with university and with public, of more weight whether in science or in the state, and I need an opportunity of explaining myself by recovering my professional reputation. Recall I have just said to Thomson that I am only architect and scavenger, lodging keeper, or art school planner, as you know me in Edinburgh, as an amateur; my real professional competence is to be trusted in my garden at Dundee and to be verified at Montpellier and among my brethren there, professors who are not primarily dons but thinking rustics and leaders of thinking rustics. Every summer in Dundee, I have been maturing on this side and contact with practical men at every point on my journey has satisfied me that if I was reasonably safe and certain in tackling these enterprises in Old Edinburgh as an amateur to every issue concerned (hygiene, buildings, finance, lodgings and all the rest) so I feel reasonably safer and more certain in proposing these developments in Cyprus, for which I am prepared by the essential and central disciplines of my life and by the Edinburgh experience as well. Frankly speaking, I think this better business than Old Edinburgh. Why do I declare this? - because I have gone into the matter and going into it and not alone, with all kinds of experts, far more carefully than/

than I ever did in any speculation before and instead of being a distrusted outsider in official circles etc. in Edinburgh, whether it be the Principals or the Lord Provosts, I am welcome friend and ally everywhere and that counts for much. Things are going to move in Cyprus - and this means, I trust, a good reception at the Colonial Office when I return."

Geddes was keenly aware of the necessity for continuity in any work which is developed. At this stage of his life he had a belief in his own ability to inspire others to carry on along the lines which he had initiated. He records this view to Pollard -

"But if anything happens to P.G., or something else happened to P.G. in Edinburgh, for he has disappeared from there for a whole winter, but things go on all right, don't they, and if I can get a body of colleagues in Cyprus corresponding to those at home won't you have more confidence? Thus, for ex-Lord Provost Russell I have to get ex-High Commissioner and so on down to the youngest names on the list. But remember that that was the idea with which I set out. Beginning now with the young ones, I know from Montpellier experience of the Armenian agriculturalist who is the Eastern pendant to the Scots gardener and just as I know the two gardeners I have left in Scotland, without any supervision, are working faithfully, so I know that I can work an analogous vein of ability and character for agriculture here. I have begun on it. This young Armenian fulfils what the Montpellier people promised and more, for he has the requisite business rudeness and power of managing men which already the early events have proved, as well as the combination of scientific training and practical experience with personal character to which they certified. Again, just as for example, Whitson or Ross have a shrewd knowledge amongst their brother accountants of their standing, or a young doctor of the aptitudes of his brother doctors, so Salmaslian knows his brother ingenieur - agronomes. It is no small part of the suicidal policy of this sultan to have thus scattered and expelled the agricultural leaders of his people. (When the real reforms begin the ambassadors have to go to the bankers, but when they can raise no more loans they must raise more taxes. The bankers go to the Régie des Tabacs and to those bureaux of taxes must soon go, for there must be something to tax. To the Ministry of Agriculture, this one resource, where there is neither commerce nor manufacturers). In a word then, the hope of the future, the key of the situation lies not in chancelleries, nor in embassies, in external armies or ironclads, as little as in internal bombs, but in that resuscitation of agriculture, afresh alike in field and in peasant, for which I am here to organise the colleagues and to found the hall. (This is all very conceited, do you think? Not at all, and there is no time to say things by half). We have got a list then of those agricultural captains/

captains and their special aptitudes, silk, cattle foods and so on. We are organising a Cypriot school and I have taken a fruit and mulberry garden for two years to plant out the poor Armenians in the first case, test the organising and centre of power of one or two of these leaders and select the best for larger work as it develops. I have lent £20 from the small fund, placed at my disposal by two armenophile friends at home to capitalise the fruit garden of other young Armenians, on whom I will have an eye and so on. Every incentive then, which these people can have is being brought to bear upon them from personal to patriotic and I have the immense advantage over my best record in Edinburgh of not only more experience on my own part, but more experience on that of the new colleagues. In Edinburgh I always had to ask young men to do what even they don't understand and what their friends or their elders alike don't approve of, or generally themselves either, but when I give one of these fellows a garden he goes at it with a very different start and with very different surrounding sympathies. Suppose that in Edinburgh I had hospital appointments to supply, wouldn't I have got on more easily without all those mistakes and misunderstandings. (It is like helping cats to mousing instead of teaching them fishing)."

For Geddes a link of cause and effects was all important.

"I am setting going a machinery not only (1) collecting agricultural competence and enthusiasts, i.e., not fools but artists, but (2) testing them in every way on a small scale and with small responsibilities, before entrusting them with large ones. (3) managing them in the first place to their own countrymen (Salmaslian assisted by Fox-Pitt) keeping an eye on them, not only myself, but with the help of the best officials and so on. - Well, here are the beginnings of a co-operation more intimate and more energetic, more full of skill and resource of science and even practical knowledge than these had first put in the field, so I do well to be confident knowing the great rustic charter of promise and blessing (your urban thinks its a curse), that whatsoever a man soweth, that will he also reap. But caution will say wait, other seasons wait - have I not to return home? - and before another year will not these same agriculturalists be scattered and never such a chance occur in any country in a generation."

This approach of Geddes is vastly different from that which he has seen in operation elsewhere. His letter to Pollard is partly motivated by a desire to get funds and he pleads for an investment by friends, businessmen, the Town and Gown Association. As a result he has been extremely frank but as he goes on to point out -

"It/

"It is very difficult to explain the economics of a colony which it has taken a winter's work to get hold of oneself and of which one is daily learning, of course, but the country was nearly at its last gasp before the occupation in '78. - It had been managed ignorantly and badly. The place is full of costly officials, hospitable and well-intentioned souls such as you'd meet by hundreds in Edinburgh, who know little generally of the country and nothing of the organising industry of any kind, but faithfully carry out every Turkish process of hampering industry, taxing the wrong things, etc. Cyprus, in a word, has been run by ignorant clerks in London who do not care more about it than any other ignorant clerks and they boss the people out here who are honest and well-intentioned policemen. Capitalists have come out and failed - that's another discouragement. I have inquired into this and I found the usual results, survival of the fit, elimination of the unfit. Again, there is practically no agricultural knowledge in Cyprus. - Not a single young Cypriot I can hear of is getting an agricultural education. There is no market in Cyprus because hitherto no communications. This magnificently situated place with at least one of the finest harbours in the world, choked by neglect, has not been allowed help for regular postal and carrying services till this year, by the stupid Colonial Office. - The wells spoiled for lack of capital and encouragement - the elementary geology of water circulation, the elementary nature of soil, the elementary facts of root-drinking are often ignored completely, but I know, primarily from common sense observational knowledge of the country, where the irrigation is likely to begin and I offered just now farms in that very area for which it will be cheap in any case."

Geddes's ideas gradually took shape, and by the middle of February he was able to write an official outline of his scheme for developments within Cyprus.<sup>1</sup>

This particular report documents in some detail the precise schemes which Geddes promoted and encouraged. The starting point towards practical solution of the problem, as seen by Geddes, is not - "in industry and in agriculture, alike the first need; is not even capital, nor land, nor markets, but men; competent leadership, industrial captaincy."<sup>2</sup> Hence, Geddes has spent a considerable time looking for, and selecting men of considerable/

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1. Draft Outline Report of the Organisation of Labour for Armenians in Cyprus.
  2. Letters to Pollard.



considerable potential and proven specialised knowledge. These he proposes to feed into his scheme of rural redevelopment; specialists in the field as interim guides to action; and the selected Armenians, tested by small plots, small gardens, small enterprises, and eventually trained to a position whereby they would be able to take over the work of the foreign specialists in larger schemes. Geddes shows a capacity for the selection of men. The appendix to this report contains sixteen names of persons selected by 18th February, 1897 and appended to this is Geddes's own pencilled notes with interesting comments on the strength and weaknesses of each of these individuals. For instance, one reads, Mr. Elmassian, Director of the Agricultural School at Adana since 1893 and trained at the Ecole d'Agriculture de Montpellier -

"an all-round skilled man, excellent manager, likes Salmaslian whose deputy he would be. Excellent organiser of men; Ourahian - trained at the Ecole Centrale, Constantinople - engineer, linguist and traveller; farmed in his youth, synthetic outlook, rustic view. Zulalian - Ecole d'Agriculture, Constantinople and Rennes - excellent specialist knowledge of cattle; practical management and rearing of stock. Nicomedian - general agriculturalist; foreman; easy to work with; good disciplinarian."

Having found a body of experts, the second stage in the critical path was to organise an agricultural credit system, but at the same time, an agricultural educational system, coupled with some small beginnings in craft and technical training. Geddes records -

"The important development in this regard is the preliminary one and the principal is that we are really taking shape as an agricultural school of which your hundred is mainly applied to the educational funds, the other sums in our hands to the agricultural advance fund, the nucleus of an agricultural bank. I repeat then that I utilise all funds at my disposal either on the lines of an agricultural bank or of agricultural and technical education and as far as possible, keep these two sides of activity together, like healthy body and mind, hence our gardens on the one hand and our silk schools on the other. Hence too, the/

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1. Ibid, page 8, 18th February; and later, Ibid, February, 26th.

the one is developing towards larger horticultural and new also large agricultural undertakings, thus in Cypriot farms and gardens, i.e., active and I trust, paying work. Hence this other is developing towards larger sericultural and now also larger agricultural educational undertakings, thus incipient school of agriculture, i.e., active and I trust, profitable study; yet both co-operating and reacting in many ways. The next stage is the implementation of the expertise and the funds. At the beginning, only the smallest nuclei can be undertaken which will be extended as more capital can be obtained."

From this small beginning which Geddes spells out item by item, in his report of February, 26th, he concludes that,

"We have already five or six sides which it is intended to develop as means allow - silk worms, gardens, fruit, stock, forestry, crops, irrigation, drainage, etc., and on, that each is capable of development as fast as we have men to lead and that into each we could pour Armenian labour - give me money to drain a swamp and plant it with eucalyptus and we'll make money circulate too. We'll be doing with it work which will be of public use and that what we spend will come back again in the shape of the very best land for cultivation and well irrigation. Fever - well, we'll settle the germs of the marsh with iron sulphate as we proceed, a good antiseptic and needed manure in one."

Geddes was at no small pains to acquire land from whatever source. His activities were largely concentrated on Larnaca and Nicosia where he purchased a large number of parcels of land (to be used partly as training grounds for potential Armenian leaders), settled agricultural colonists and prepared plans for model villages. He scoured the country for loans or for gifts of land and one of his major schemes, a proposed village on a hundred acres, was to be on land donated by an Armenian monastery. His objective, even in this particular instance, was to seize the opportunity to expand if the money became available - "£500 for a village cultivating 100 acres", with the hope of making this profitable and thereby acquiring from the monastery a further 3,000 acres of land.

The range and diversity of Geddes's activities in effecting a resettlement policy for the Armenian refugees is part of a still wider scheme. Side by side with the agricultural developments was a scheme for the development of rural craft industries, particularly the development of silk and textile concerns. Each particular community which Geddes begins, even a small number of/

of families, is to be as far as possible self-contained. Once a scheme has been initiated, then it is envisaged that the unit will continue under its own management with the appropriate technical assistance called in when required. This assistance will vary in scale from simply a matter of offering advice to promoting and carrying out major public works such as drainage and irrigation schemes. Clearly the overall conception is one of creating not only a system for the amelioration of a particular problem, in this instance the Armenian problem, but at one and the same time a model or type case in rural planning which will act as a showpiece for bringing much needed improvements throughout most of the East. This hope he recorded in a letter to Pollard;<sup>1</sup>

"A general idea then, is after administering, of course, the few hundred pounds of special relief funds at my disposal upon such economic lines, but for the exclusive advantage, of course, of the Armenians, to go on to develop other and wider lines of work of advantage to the colony and the general population of the island and to the surrounding East, employing here in Cyprus and in the East, as far as may be, skilled direction and unskilled labour, but upon lines fundamentally like our existing undertakings".<sup>2</sup>

Geddes's hopes for a wider meaning to Cyprus were also indicated in 'Cyprus, Actual and Possible'.

"It is rather for Cyprus to offer to larger countries a comparative microcosm of irrigation methods in which economy and efficiency of local adaptation might really combine, so becoming the spot where not only the Eastern but also the young engineer for India or Egypt, the young colonist for the Cape or Australia, may be forced to learn his business more simply and rapidly than on the immense scale of these larger countries, and thus, by cheap and simple methods we might, on the one hand, vastly improve Cyprus for the Cypriot, a much needed service which it is full time we should undertake and on the other, make Cyprus an/

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1. 5th February, 1897.

2. The opportunity to work in a wider context in the East was not, in fact, to be realised until Geddes was later invited to participate in Planning in Palestine.

an object lesson and training school for the East, for India and the colonies. - Nor is Cyprus a potential centre and school of hydrology and irrigation alone, but of agriculture, also of acclimatisation as well. - Here then, is a possible centre, agricultural and educational, both regional and oriental, both Mediterranean and colonial, which we might, with little outlay, develop and utilise..... Here in Cyprus is one such experimental field alike for colonial development and colonial education. Here our contacts with well nigh all the problems of nature and man, present and future, home and colonial, European and world-wide, which the world can at present show - it is then Utopian, or rather Eutopian, to be found here our needed colonial college..... Our possible college might not be only of local technical and colonial, but of general interest and importance." <sup>1</sup>

Cyprus provided for Geddes a testing ground for his numerous ideas of social and economic planning on a scale which had not been possible in Edinburgh. In Scotland his problem had been one of housing, whereas in Cyprus it was a problem of the revitalisation of a total regional economy. The detailed documentation of Geddes's thoughts on Cyprus and his practical activities offers a synthesis of the numerous lines of thought upon which he had been working and which, by this period, he had begun to codify into a comprehensive philosophy of planning. His early training as a scientist and observer of the landscape and its component parts is clearly visible in his capacity to analyse the topographic and geological elements within the Cyprus morphology and to seize upon the essential facts of the geographical bases of the island, particularly the relationship between vegetation, geology and water resources.

Additionally, from his biological training, Geddes draws and applies the conception of the individual self-contained and self-regenerating organism which can function within the geographical environment./

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1. Ibid, pages 10-13.

environment. This is clearly evident in the manner by which he envisages small, self-contained hamlet or village groups with a wide diversity of functional inter-relations through agricultural and industrial pursuits, together with his introduction of a philosophy of self-help. He aimed at the creation of the environment within which the organism can flourish most effectively.

A third theme is derived from the obvious fusing of the geographical, biological and social facts of the situation into an elaborate place, work, folk conception. This, of course, was derived from the notion of Le Play and is clearly evident in Geddes's numerous notes, articles and lectures on the Cyprus problem. It is also documented at the time in an interview he gave to the *British Weekly*<sup>1</sup> -

(By interviewer Lorna) - "He told me that the germ of many of the ideas he is now carrying out would be found in the works of the great French economist and geographer, Le Play. This writer he considers in some ways the most important social and scientific thinker of the century and the attempt to introduce his point of view into this country has long been a main purpose."

At this period of his life also, Geddes shows a capacity for well developed value judgement, coupled with a considerable degree of pragmatism. He has clearly been aware of the need for speed of action, also a socially and economically sound conception which would appeal to "hard-headed businessmen". At all stages there is clear evidence of a mental process which places side by side a survey, interpretation and analysis with the analytical element being concerned, above all, with an economically sound and realisable scheme. From the welter of date which Geddes acquired, he quickly siezed upon the essential/

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1. *British Weekly*, 8th July, 1897, London - The New Scheme for Cyprus - an interview with Professor Patrick Geddes.

essential causes of regional degeneration and the prime elements which would have to be introduced to bring about effective regeneration in a regional context. These he clearly wound together into a hierarchical system which was programmed accordingly. The critical start point for Geddes was not in massive investment, but in the selection of men of high intellectual capacity, a flexibility of approach and a secure foundation of specialised training. This formed the army which was to undertake the major battle, that of establishing the initial projects and beginning the initial educational venture.

Geddes spent a great deal of time and effort in selecting the appropriate expertise to fit into the order of battle. He was well aware that through his own particular background and experience he would lead the venture, but it is striking that realising he would be required to leave to resume his duties in Scotland, the greatest care was taken by him over the selection of the general manager on whom the brunt of the responsibility would fall once Geddes had departed from the scene. The fact that Salmaslian (the general organiser) was not a continuing figure in the Cyprus experiment was due to factors completely outside Geddes's own control and which are documented elsewhere.<sup>1</sup>

The further element in the scheme which affords an interesting commentary on Geddes's view of regional planning was the creation of a structure which would be internally self-supporting and which would additionally bring about a planning philosophy concerned with the total environment. It was clearly not by chance that Geddes combined together the creation of agricultural credit facilities and promotion of practical agriculture with an educational structure including schools of agriculture and sericulture/

1. See P. Mauret. *Pioneer of Sociology*: London, 1957, Chp. IX pp. 82-98.

sericulture. Through the effective working of these two elements Geddes hoped it would be possible to induce a realisation of the place significance of any one project within the total conception - regeneration of the total environment. Once this essential operation was completed, i.e., an educational and practical venture, then and only then, did Geddes consider that it would be possible to enlarge the scale of the operations.

Geddes attempted to make a considerable success of this venture and believed that there were fewer vested interests to overcome than in Edinburgh. On this hope he built the notion of a widening scope of co-operation between various nationalities and differing specialisms, which would eventually produce a type case in integrated and thorough regional planning. His preparation for this venture had been considerable. Geddes had envisaged a type scheme modelled on considerations built into the Outlook Tower. Before he left for Cyprus he became well briefed and en route to the island amassed specialist support. A feature of some interest is that apparently, the notions he had developed and the schemata which he had produced in advance raised no insuperable problems when implemented on the ground and his advisors in Cyprus were not in the slightest manner disturbed by the framework of the scheme he imported. The success of this operation clearly indicates that by 1897 Geddes's experience, both theoretical and practical, had placed him in a situation of being able to pose the relevant questions about planning and to compose the answers into a comprehensive and integrated scheme. It is not surprising, therefore, that Geddes's thinking machines or questionnaires become the essential tools for planning in all his/

his subsequent activities and that the combination of survey, interpretation and suggestions for plan as a single operation became his own personal method of working. This method was tested with some effect in Dunfermline in 1904 and to Geddes not found wanting and was used extensively in his planning work in the Near East and Far East in the decade between 1913 and 1923.



### CHAPTER III THE DUNFERMLINE REPORT

The only major commissioned planning report Geddes produced in Britain appeared in 1904.<sup>1</sup> At the invitation of the Carnegie Dunfermline Trust, Geddes was asked to advise on the possible modifications to one section of a Scottish provincial burgh; Dunfermline. His study appeared at a time when planning in Britain was at a turning point. Ebenezer Howard had already produced a blueprint for new town development and his Letchworth model had been launched.<sup>2</sup> The time was ripe for a comprehensive study of how replanning of existing towns should be approached. Geddes's report offered just this.

The Dunfermline study came at the culmination stage of years of work in the Royal Mile of Edinburgh. Social analysis, civic renewal, regional re-appraisal, had characterised this period and the Outlook Tower had been shaped with these ends in view. Dunfermline was to test the maturation of these corner stones through its needed attention to details of urban site planning and the principles on which such planning had to be based. Geddes's own conviction of the success of this practical planning venture is amply mirrored in all his subsequent planning studies. These show clear evidence of the self same synoptic methodology and style of report presentation he adopted in Dunfermline.

The town of Dunfermline appealed to Geddes's sense of history. Its western limit is dominated by two outstanding buildings; the Abbey and Monastery; buildings to catch the imagination/

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1. A Study in City Development, Park, Gardens and Culture Institutes, A Report to the Carnegie Dunfermline Trust, Dunfermline, 1904.
  2. E. Howard: Tomorrow. A Peaceful Path to Reform, 1898.

imagination and which he envisaged could form the core of visual and aesthetic planning. They could offer the corner stone on which Dunfermline's future role could be created. The town required a positive and clearly defined niche in the hierarchy of Scottish towns; a hierarchy already dominated by the administrative and commercial capitals, Glasgow and Edinburgh. One opportunity lay in the cultural heritage of the town; another in the possibilities for purposive and enlightened environmental design. One further consideration dominated his thinking. Geddes was well aware that society was entering upon a period of change. For planning to have beneficial and lasting effect, a prerequisite was the acceptance that each new generation must have the opportunity to inbuild their own traditions though without losing sight and sense of what had gone before. He observed that a successful scheme is

"an exercise in some form of the imaginative powers, not with a view to leaving nothing to future development, but with the aim of creating circumstances for progressive improvement whereby public interest and co-operation will be continually available. This alone can achieve lasting success."<sup>1</sup>

It was necessary, he believed, to assess the currents within society and to plan ahead to meet their anticipated results. Hasty, restrictive and inflexible planning could add little to the future well being of the town and its citizens. What was required was a launching pad; not a once and for all finished article.

Geddes was only supposed to plan for modifications to the Pittencrieff Park which forms the western green boundary of Dunfermline. His remit was specific on this point. He considered, however, that the park and the town were one organic thing and must be planned as/

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1. Ibid, page 19.

as such. Hence he evolved the notion of the park as a cultural core for the whole town; not simply a place of beauty but a focus for a scheme embracing purposive community development. His task initially was one of breaking down barriers; and firstly, the inhibiting confines of his original remit. It would be possible then to eradicate the barriers (between the town and the park) - the stone ones and the mental ones. At the outset, he noted,

"the problem compels its own restatement as that of the culture policy of a small but fairly typical city as far as park and associated buildings are concerned - buildings large and small must be fitted within an overall concept of civic needs both present and future and that there must be a degree of organic unity in the final design."<sup>1</sup>

Geddes tried to forestall the anticipated opposition. His scheme was to be "practical" but at the same time it was unconventional in many of its recommendations. There was to be no preservationism as a fetish, only careful appraisal for constructive conservation; no keep off the grass philosophy for park planning, only the provision of opportunities. In essence this example of Geddesian planning was

"to appeal to each level of age and culture and meet the many requirements recreative and educative use, of individual taste and social culture..... neither destroying the past in the supposed interest of the present, nor too conservatively allowing the past to limit this, but incorporating the best results of the past with the best we can do in the present, towards the bettering of the opening future."<sup>2</sup>

Having 'nailed up his thesis against all comers' Geddes asked for its appraisal to be without preconceived prejudices.

"I assume", he suggested, "that since the problem has been set from the first not only upon the best usual level, that of utilising and adopting the best that has been done and taught in the world but beyond this where it is practicable upon the most ambitious height, that of pioneers always ahead. And in short then,/"

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1. Ibid, page 10.

2. Ibid, page 14.

then, I plead that the unconventional nature of some of the following proposals must in fairness be set to their credit, at any rate not used as an argument against them."<sup>1</sup>

Step by step Dunfermline is surveyed and analysed to "produce a clear observation of the thing as it is and <sup>the</sup> design of it as it may be."

The structure of the report is unusual, there being no marked division between survey and recommendations. The two aspects of planning are treated together. Not that Geddes believed that this would be invariably the best method. Indeed, as the pioneer of the planning principle, 'survey before plan', Geddes influenced his successors in the direction of making such a division of substance in reports. His own intrinsic way of working, nevertheless, was one conducive to a fusing of survey and plan. His complex thinking processes permitted a consideration of actual and possible as one mental operation. The translation of such synoptic thinking back to the separate components of survey, then analysis and proposal would have been tedious and uncharacteristic of the man. The original survey notes for the Dunfermline study include many Geddesian ideagrams; hyphenated phrases scattered across any one page inexorably leading to definite proposals. The start point and the conclusion of these notations are clear but one may assume that once the moment of survey and recommendation was passed the recreation of the precise mental process leading from one to the other would be extremely time consuming if not impossible to achieve. Geddes had little time available in Dunfermline; less than a year to produce the finished report. He overcame some of the necessity to write elaborate explanations by the judicious use of photographs of a feature as it was, with a juxtaposition of how it might be.

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1. Ibid, page 14.

This in itself becomes a pointer to one method by which the specialist and insight viewpoint can be projected forcefully and tersely to a less competent audience. Indeed, Geddes appears to have understood the need for such direct communication between himself, (the planner) and his audience - the Carnegie Trust and the general public. He adopted a conversational style of presentation; he took his audience on a conducted tour of the town and he tried to show by direct comment accompanied by photograph and sketch, precisely what he had seen and deduced. He reserved for lengthy treatment in words only those aspects of the report which evoked a statement of principle. This method of presentation makes the report an educative document in itself; something far more than an answer to any one particular planning problem.

In one further respect Geddes's study shows unusual treatment. He worked in great detail, especially in those parts relating to site planning. At no time, however, is there given the impression that Geddes is swamped by this mass of detail. One would expect a clear line of progression from feature to feature; a critical path which must be followed. At first sight this appears not to be the case. He constantly shifts his target for appraisal; moves from the general to the particular and back to the general. This grasshopper technique appears to have its own inbuilt logic. This results from his conviction for the necessity for the integration of short term planning operations within a long term strategy : the priorities of which must be advocated by Geddes himself, the consultant planner. The prior operation is to obtain agreement on the fundamental philosophy related to the direction the scheme must follow. Wherever improvement is desirable it is noted but at points where controversy might emerge at the expense of the clarification of principle, Geddes turns his attention to other items/

items less controversial. The point of departure, however, is not lost sight of. Geddes frequently returns to attack the difficulty from a different start point. A notable instance is afforded by Geddes in the isolation of an area of comprehensive development; the PittencrieffGlen. He discusses its shortcomings and its possibilities and then leaves the topic to analyse other less costly improvements. By working through these other items he eventually can show that many elements of his comprehensive scheme can cheaply and quickly be replanned. The total comprehensive scheme is thus realisable. In this way a possibly insuperable difficulty is overcome.

In the introduction to the Dunfermline study Geddes states clearly the principles he intends to follow. The report as prepared by not only "an ambitious museum planner but as one long occupied in pioneering education", is to place on record the long term developmental possibilities for Dunfermline. It is based upon a detailed survey of place; its social, economic and geographical actualities and possibilities; and a central and unifying conception that planning is more than a simple arrangement or re-arrangement of buildings. That planning is social service. He contends that -

"Larger human and social uses must dominate our constructive tasks,<sup>1</sup> theirs the demands which must determine the supply and thus it becomes our concept of civic progress which must determine our selection amid the many possibilities of life."

Thus Geddes's start point is elemental but vital. It arises from asking questions of a fundamental nature, relating to what people require to experience a 'full life'. Amongst other things Geddes pinpointed a human need for safety to walk, talk and meet, contact with growing things in nature, a stimulating visual environment;

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1. Op. cit. page 19.

a wide range of educational and recreational facilities; a sense of creativity and community pride. These were the things he aimed to give through his purposive planning scheme. Geddes was not **unaware** that economic wellbeing was a necessary prerequisite. Development had to be paid for. Thus, a secure economic base for Dunfermline was necessary as was a clear allocation of the priorities for development. The latter was easy to delimit; the former, a stable economic base, lay outside his immediate control. Because of this fact, Geddes is necessarily drawn outside Dunfermline to consider the whole growth potential of Central Scotland. Only by this wider regional appraisal is he able to propose meaningfully an economic base and future for the town. It becomes evident that the Dunfermline study was to exhibit a wide ranging preview of what Geddes believed planning should be. As such it merits close study.

An initial task was for Geddes to establish that a wide synoptic approach to Dunfermline's problems had to be adopted. A visitor would note one immediate drawback as he approached the town; an imperfect adjustment of park and boulevard near the station approach.

"The disastrous loss to the improvement of a city," he records, "through looking at each of its public parks as well defined property enclosed within its own boundaries is here at once realised. We may readily see how its present beauty might have been doubled had the approaches and inter-connections of its parks been adequately studied first instead of independently conducted on the one side by a Parks Committee, on the other by a Streets and Buildings Committee and so practically by **unlucky** chance. Here at the very outset, the landscape gardener may at once define his habitual viewpoint, that of combining into picture, co-ordinating in little perspective, the standpoints of these two civic committees and with helping, so far as he can, towards co-adjusting the immediate field of the Park Superintendent with those of the City Architect and of the Burgh Engineer."<sup>1</sup>

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Geddes's/

1. Ibid, page 22.

Geddes's answer is simple and direct - "The creation of a vista of organic unity from the station;<sup>1</sup> the method equally simple; through tree planting - the result a net gain to the amenity and dignity of the burgh."

However, Geddes is well aware of one of the major problems involved in a planning scheme, that of time. Planning in the widest sense, he realises, is not achieved overnight, whereas people need visible and immediate proof that the scheme is operative and of benefit to them. He writes, therefore, that "tree planting involves impatience as no other calling does." The modern technique of transplanting mature trees was not yet available nor even envisaged by this master of botanical arrangement. However, Geddes does not avoid the issue. He believes that the imagery of the tree-lined parkway could easily be grasped by the reader. As such it constituted the less controversial item and could quickly establish the basic philosophy of the plan, its total comprehensiveness.

Geddes immediately proceeds to present the Trust with a wide-ranging essay relating to the needed unity of physical and social planning. In this there appears a close analysis of the use of the possibility of site, particularly gradient and degree of shade in the creation of a number of ecological associations (trees, shrubs, lakes, animal groupings, miniature zoo). Absolute safety for children is made a condition and part of his comprehensive approach and all the year round use is ensured in the multi-purpose recreational scheme. This is an ultimate objective and in the manner of an artist, Geddes presents the totality of the plan, but quickly goes on to comment that, "the outlined scheme, so/

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1. Ibid, page 21.



so far, is quite impracticable for the present."

The total conception sketched by Geddes is dependent, he records, at this stage, upon a purposive, comprehensive planning operation which is "the fundamental condition both of the naturalist and artistic improvement which lies before us." A condition closely connected, "not only as a symbol but as practical help or hindrance to the whole task and problem of material and moral betterment upon which Dunfermline is entering."<sup>1</sup>

Surrounding the Pittencrieff Park are a number of houses. To Geddes they form an integral part of the setting for his overall plan; there was also an open site adjacent to the park, available for buildings. He sees some danger of a permanent injury to amenity should open sites be built upon in the ordinary tenement fashion.<sup>2</sup> He considers that it becomes the responsibility of the Dunfermline Trust and, therefore, to Geddes, must form an integral part of his submission, that some integration be achieved between the Park Redevelopment and its neighbouring property. It is not undesirable, he believes, that a park should be overlooked and this is clearly in accord with his view of the essential relationships of folk, residence and play. He believes that co-operation between the Trust and local property owners can be quickly achieved by the Trust offering to create vistas into the park if adjacent property owners improve the appearance of those parts of their buildings visible from the park.

However, Geddes goes further. He suggests that the Trust must be a catalyst in this matter - its status implies that it must be a leader in civic matters. It has a responsibility to set an example in the /

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1. Ibid, page 25.

2. Ibid, page 31.

the provision of hygienic and well-designed housing. "It is for the pioneering body like the Trust to insist upon its architects keeping in view this consideration."<sup>1</sup> Thus the Trust must either build on vacant sites adjacent to Pittencrief Park, or acquire open spaces for future building. But further, Geddes insists that as "one of the most immediate practical and important suggestions of this report" the Trust sponsor a comprehensive social survey of the Burgh as part of this wider social responsibility.<sup>2</sup>

In the long run, Geddes believes that the whole culture policy of the Trust will be measured in terms of the comfort, the culture and character of the Dunfermline home and specific instances are suggested in terms of neighbourhood planning and the creation of neighbourhood social centres.<sup>3</sup> From these small beginnings Geddes foresees that the direction of social improvement throughout the whole town will be diverted towards the creation of community areas. "My concept then, is of the rise of one after another of these gradually growing centres."<sup>4</sup>

This life orientated aspect of Geddes's conception is carried further in his understanding of the relationship between physical planning and the personal need for ease of movement, contact and enjoyment of surroundings. Nowhere in the report is this more succinctly stated than in chapter IV, entitled, Parks and Gardens. An initial supposition sets the tone for this section -

"This portion of the park, the most accessible and convenient, should, therefore, be especially laid out for the young children and for old folk who do not care to ramble far. This contrast of ages is one of the happiest combinations of human life - the old finding their keenest pleasure in watching the activities of the young."<sup>5</sup>

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1. Ibid, page 31.

2. Ibid, page 35.

3. Ibid, page 39.

4. Ibid, page 39.

5. Ibid, page 42.

young".

Geddes is clearly mindful of the problems created by children in a park which arise from the childish view of the nature of play and also of the restrictive needs of "a verdant park view". His answer to this problem is to produce the conditions for the uninhibited expression of continuous play in a series of inter-connected play areas which are relegated to a secondary place in the visible environment. To aid supervision there would be a specifically allocated adventure play area. Characteristically, Geddes goes further and recommends to the Trust that in this physical arrangement may be found an ideal training school for play teachers. The notion of recreation as a continuing process is pursued in a recommendation that an open air gymnasium, and open air theatre, should be built. In the play areas themselves there should be introduced elements which are educative - miniature museums, geological, palaeontological and naturalist, a Japanese garden; so that, "he who would see the world may literally do worse than come to Dunfermline."<sup>1</sup>

Geddes lays considerable stress on the function of the Trust as a prime mover in pioneering innovations of this nature. The Trust is to provide the framework and then local initiative and creative activity would be encouraged to ensure continuing interest and success. On occasions this may appear a remote possibility in so far as planning for the future may necessitate action contrary to 'popular civic' opinion.

During the survey stage of the report, Geddes had noted "that popular sentiment is frequently expressed in a desire to remove the aged and decrepit structure." He himself moves carefully in a belief that "it is the duty of the gardener and architect/

1. Ibid, page 59.

architect to resist popular sentiment and that good work should be respected and incorporated, not destroyed."<sup>1</sup> It may be, "that passages in this report may give little satisfaction at that particular moment of time, but which may afterwards be seen to be of most value." The memorial to an architect is renovated and the balance of its simplicity and proportion maintained; an existing garden is re-organised as a botanical laboratory; another garden is to be the site for a tennis court. In each instance Geddes shows an appreciation of site in relation to possibilities, not a pedantic preservationism. "The difficulty is an opportunity", he says. "My plea (for retention) is on no merely historic ground."

Geddes's suppositions relating to the cultural institutes and recreational facilities which must occur within the town are contained in the first ninety-seven pages of the study. To achieve the required environment for the totality of this complex, Geddes finds that the area of the Pittencreiff Park is too restrictive. "There can", he notes, "be no major improvement without a consideration and elimination of difficulties within the whole catchment area". He makes proposals for a further extension to the Trust property - in fact, "I can see no escape from this."<sup>2</sup> There is, he advocates, every need for the comprehensive planning of a whole part of the Burgh from loch to plain. A section of the Dunfermline Report is entitled, "Parks and Buildings in their Bearing on City Improvement." This heading is a clear indication of the nature of the subsequent part of the Report towards which Geddes has been working. It would appear, thus, that he felt the need to restate clearly and unequivocally the philosophy of planning which should guide the Trustees.

Initially/

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1. Ibid, page 61.

2. Ibid, page 84.

Initially his supposition is that there are two schools of planning, the "formal" and the "naturalistic", each having "its place and use."<sup>1</sup> He suggests that both forms should become interwoven into the future Dunfermline - a town ideally equipped for a rapid and well planned growth. The latter is possible, given the right approach by the local authority and the Trust both working to influence governmental action.

"The occasion is of transcendent importance not only to local but to general progress. To allow this supreme occasion to be lost, and the future city to arise in the ordinary way, as a muddle of a new port with a huddled industrial and residential town, and of all these with the usual confusion of railway communications and inadequacy of road and street ones, would be a disaster to the world and a disgrace to all concerned..... No one can live for any time in London or even attempt to do a day's business there, without realising the enormous calamity, the permanent and increasing waste of life and energy of all kinds, which has been entailed upon seven generations past, and perhaps as many future ones, by the non-acceptance of the simple and admirable plan of Sir Christopher Wren."<sup>2</sup>

To Geddes the lack of an overall strategy has produced in London a chaos of ad hoc planning - a maze of routes, indiscriminate dissection of an urban area by railway routes "without a suggestion of systematic or linear order", and isolated buildings without a master conception or integrated areal composition. Although the renaissance form, as applied by Wren, might have been ideal in the case of London, it may not be the answer for Dunfermline. Its essential character, its situation, morphology and traditions, would suggest that,

"here is the place for the conservative treatment, the naturalistic, in the sense of making the best of things as we find them - this does not prevent the formation of open space wherever possible, in fact, it encourages it - but it does not enter upon any regular plan of improvement comparable to that which should be designed for the new city which is to come."

Geddes/

1. Ibid, page 97.
2. Ibid, page 98.

Geddes believes that the case for gradual modification can produce "a far better result for a town of this type than could the greater schemes of clearance and widening which have been from time to time proposed for it."<sup>1</sup>

The nature of such planning is pinpointed as being "fairly obvious" - the application of the 'vista' concept in one part of the town, the creation of open spaces within another, the replacement of buildings only where blight is excessive: the present town and its possible residential growth points to be unified by an overall public transportation plan. Comprehensive design, due regard to the particular urban problem and the application, where appropriate, of the various forms of planning layout are the techniques Geddes advocated. At no point is there any suggestion of indiscriminate use of type planning cases. Geddes shrewdly makes no apology for the "excursion beyond the strict and necessary limits of my immediate problem of the park and its associated improvements" for, as he turgidly records, "In fact, these are associated improvements".<sup>2</sup>

Geddes has produced the blueprint of, and philosophy for,

"An old hill city preserved in all essential characters, even renewed; its group of culture buildings around the Abbey, Church and Monastery, its stately Palace and venerable Tower; we see its two parks brought together by their verdant parkways and this splendid central group spreading out its radiating avenues to suburbs, country and coast towns, ancient and modern. Here then we should have a complete city, Old and New, which would be, in its way, the first in Scotland; in fact, an example and encouragement to city progress throughout the United Kingdom and even beyond."<sup>3</sup>

The thesis has now reached a crucial stage. That part of the remit from the Trust, relating to associated improvements, is to be considered as necessary contributing factors within the/

1. Ibid, page 98.
2. Ibid, page 99.
3. Ibid, page 99.

the design of the opening city. The two cannot be dis-associated. An acceptance of the empirical view is unavoidable. Only at this point is Geddes in a position to take up again the substance of detailed planning in the wider environs of the park and with respect to the constructive work of the Trust.

Three wide ranging suggestions follow; his return to the question of stream improvement serves as the basis for advocating multipurpose use of a reservoir for water supply and recreation, and the creation of lakelets to minimise flood danger within the valley. These suggestions are futuristic. Geddes goes further - he sees the valley as forming an ideal focus for an educational experiment. "We now come to one of the most important and necessary buildings which can be erected by the Trust."<sup>1</sup> Valley improvement should be enhanced by the addition of a Nature Museum, a place of recreation and meeting. Dunfermline, he suggests, should pioneer a much needed venture, the creation of a Geographical Institute. He sees here the possibility of a unique contribution in the field of education, especially of the young. The natural progression is then to balance the indoor and academic with the outdoor and creative. This would be the "Primitive Village", a number of 'holiday' workshops for individual creative activity and expression. The combination of academic study with practical activity was somewhat unusual as Geddes noted.

"However, my proposals may seem in advance of public opinion or educational practice in this country, they are but to utilise the experience or the scientific outlook elsewhere attained, and if possible to overtake the successful educational pioneering of other countries. The absurd irritation or even accusations of 'lack of patriotism' of 'faddism' or the like, so familiar to everyone who has endeavoured during the past decade or two to inform his countrymen of foreign advances in educational theory/

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1. *Ibid*, page 109.

theory or practice has at length abated; but the practical difficulty of having these modern resources and ideas even fairly tested in detail, much less introduced, still remains. For in the present phase of educational transition, as the writer well knows, nearly everyone readily grants one's general appeal but is afraid to give trial to any of its particulars. Upon such lines then, there is no small field and opportunity, even of national pioneering before Dunfermline."<sup>1</sup>

This aspect of educational philosophy is then followed, in the report, by an interesting break of sequence. One might have expected a continuation of this theme. The immediate juxtaposition, however, is with the Mill and Smithy. The theme becomes one of the philosophy of conservative surgery. One may suggest that this is deliberate. Geddes has been at pains to advocate radicalism in the field of education. Perhaps he sees the necessity to convince that such radicalism is not hairbrained but based on a mature and objective analysis of the situation. Bearing in mind his constant reference to the parochialism of current attitudes, such a belief may well have been well founded. Indeed the section on the Mills and Smithy is introduced by reference to Jesmond Dene at Newcastle, - "a broadly similar 'den' or 'dene' as a type example of naturalistic gardening undertaken by Lord Armstrong." Geddes records his view that those who advocate indiscriminate removal of buildings see little of the tourist attraction for such apparently decrepit structures. This is a reflection partly of an incapacity to view a building from numerous vantage points and to place it in the context of its naturalistic, futuristic and historical context.

"What contrast in architecture anywhere, for instance, can be more surprising than that of the two aspects of the palace ruins - the back a gaunt, dilapidated, two-storey wall seen from the north, while seen from the glen the visitor is startled by a front which may be fitly compared to that of Warwick Castle?"<sup>2</sup>

What/

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1. Ibid, page 124.

2. Ibid, page 129.



What of history? Geddes indicates that romanticism is frequently mistakenly equated with history.

"The many houses in which Queen Mary happens to have slept in her peregrinations seem partly thereby preserved, yet such an incident is not, of course, a serious historical reason at all. - History is primarily social; it is by their place and part in social changes that places, buildings, individuals, have historical importance at all."<sup>1</sup>

The Smithy should be removed on architectural grounds as being "a blot upon a great architectural composition", the Mills on historical grounds for its essential *raison d'être* in the historical process was in the context of Church and State and these elements with their historic value are retained in the Palace and Abbey. However, Geddes finds a case for some form of retention for posterity on wider educational grounds. He advocates minute documentation of the buildings as an appropriate study in Industrial Archaeology. He pleads also for the construction of a new smithy within a new craft centre. The essential historical link will be thereby retained.

Any planning scheme for the Burgh of Dunfermline must include some reference to its outstanding architectural feature - the Abbey-Palace complex which dominates its western limit. Geddes had constantly referred to the wider context of the Pittencreeff Park and had drawn these dominating features into park vistas. He left till late in his study the detailed consideration of these buildings. A judicious sequence of photographs supports his view that unsightly structures should be removed. The point is made that,

"Judge now this whole monumental scheme of the proposed Monastery Place. - Is it not evident that these improvements, with that of the Mills and Bee Alley Garden, may now be counted twice over, both as Park Improvement and as City Improvement? - thus uniting these long separate halves - giving new spaciousness to/  
to/

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1. Ibid, page 129.

to both?"<sup>1</sup>

He also works into this scenic improvement a site for an Institute of History, the complement to the Geographical Institute. The site of the latter was in the naturalistic setting of Pittencrieff Glen, whereas for the History Institute, Geddes finds its natural location to be within the historically significant Monastery area. Other schemes for landscaping around the Monastery and Abbey overstep the park limits and call for co-operation between town and Trust. These improvements, according to Geddes,

"will increase the park perspective and carry the park and its garden right up to the Abbey, thus creating, through church yard gardening, a correct setting within which an Abbey should be seen. History, Architecture and garden design produces a scheme of policy stretching beyond our time, our opportunity, our capacity, and for that very reason a Culture Policy indeed. That the beginnings at any rate are practicable will not be denied, and if any do not think this of its ultimate ones, of roofing of palace and hall, he may see all this and more in progress from Edinburgh Castle, with its restored Parliament House and King David's Tower, to St. Giles; as by-and-by he may see it at Holyrood. Past cities have had their Acropolis and Forum; why should not we also renew, even surpass, these? - Let us then, at this time of reflection, shape out the highest ideals for our city that we are capable of devising: to shape any lower ideal is to ensure that realising of a lower still."<sup>2</sup>

His plan to group buildings at the east side of Pittencrieff Park is one contrary to ideas then current. He points out that,

"The very first suggestion offered me when beginning this work in October last, was to continue Bridge Street through the Park to the Coal Road and the next was to use this north-west section of the Park as the site of the museums and other buildings. After the fullest consideration I have no hesitation in maintaining that the series of sites I have selected along the town side of the Park are greatly preferable. - The suggestion of a street I, of course, entirely disapprove. One can make a new street anywhere else but not a new Park. - As regards buildings, there is no doubt that a magnificent group could be erected on this site.....  
However", /

1. Ibid, page 141.

2. Ibid, pages 166-7.

However," he continues, "it is necessary to segregate the park element on the one hand, and the buildings on the other. This will produce a dual advantage....."

The essential merit of and claim for the present scheme - that it improves the park as park, the town as town".<sup>1</sup>

In essence, Geddes leaves intact the essential quality afforded by the park -

"Though now filled throughout its range with new and varied interests and beauties, (it) has the same restful expanse of grass and trees as ever, the same shady and sequestered dell, and this although all reasonable monumental demands, as of a stately approach from the High Street, of an elaborate formal garden within, have been fully met. But this is very different from cutting up the park for buildings and thus also practically leaving the town unimproved by them."<sup>2</sup>

Geddes preserves the unity of the Park and uses his monumental building complex to support the Abbey and Palace dominants. By so doing, he attempts to create a larger municipal unit which organically links town and park. This link is achieved partly through physical planning but also by the extension into the town of the socio-cultural objectives of the park improvement. Thus, all sections of the community can find an opportunity for the expression of their specialised or general educational needs and their recreational and social requirements. Whilst this monumental complex would appear to be the necessary culmination of his report, Geddes appeared to realise, however, that its very nature is likely to create opposition and become shelved.

"The richness of detail and variety of appeal", he wrote, "may readily obscure the underlying unity of conception. The principle here adopted carries with it a corresponding risk of seeming to overload the design."

It is at this point that Geddes adroitly begins his conclusions. These contain four inter-related parts. The initial section leads directly from and is contained within, the general review of the

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1. Ibid, page 195.

2. Ibid, page 195.

the significance, within the whole scheme of the monumental planning. The Park and its environs, as conceived, are shown "to satisfy as far as may be not only all sorts and conditions of men, all occupations also, but all phases of life - childhood, youth, maturity, age." In this context Geddes once again stresses that his planning is for people: for the creation of, not only a satisfactory physical environment, but one of a comprehensive social and cultural nature. Once this point is made, the plan is placed within the context of the aims and objectives of planning, as seen by Patrick Geddes at this point in his career. He notes that he has dealt,

"with the specific problem and situation - that of improvements to Dunfermline so far as directly related to the new park and its associated buildings. These proposals have - it is true, been related to more general ideas. - Now, however, it is time that the general conception of civil development and culture policy, within which all these proposals fall, should be briefly indicated, the more since some of the proposals above made depart from conventional lines."<sup>1</sup>

The epoch has arrived, he notes, within which the techniques and knowledge gained from the **Industrial Revolution**, must be applied to "the completest social art of city building". The contemporary city, according to Geddes, constitutes "the central problem to which all the sciences lead up to - and to which all the problems of the individual are related."<sup>2</sup> A sound understanding of the nature of urbanism is needed and may be derived from three primary sources. There must be a clear appreciation of the intrinsic nature of urban growth in relation to "civic organisation and democratic life." He has no desire to return to the past order of things but that from a study of the past one is able to identify the essential spirit of the town, its problems and /

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1. Ibid, page 211.

2. Ibid, page 211

and their solution over time. Secondly, Geddes calls for a systematic study of the contemporary city. The lines of such an investigation encompass study of situation and morphology, culture resources, actual and potential, and the real significance of municipal administration. Finally, but equally important, is the comparative study of the contemporary city.<sup>1</sup> This approach Geddes has used in the preparation of the Dunfermline study and from it certain conclusions have been drawn and applied to Dunfermline. He sees a general tendency for city planning to operate for a period and then to stultify. Geddes makes a plea for a continuing re-appraisal of the planning process and its objectives for both the "environment without" and "the life within". He points out that a town of the size of Dunfermline is within the hierarchy of urban centres within Scotland and its future must be assessed with this in mind. The metropolitan centres and major regional capitals must inevitably be superior in the provision of certain services and functions. However, future growth of regionalism in Scotland, together with the need for urban population decentralisation, will produce the situation within which a town with the characteristics of Dunfermline can carve out a significant role. He suggests that eventually Dunfermline may well become an ideal commuting centre for Edinburgh, and an attractive residence for retired persons. Further, Dunfermline's immediate regional opportunities place emphasis on its own role as a central place within the County of Fife. Once given the initial replanning of the town along the lines advocated, this future growth potential will be realisable. This would become based increasingly upon a "quality environment". The juxtaposition of differing types of amenity - visual, educational, recreational and cultural, could be the magnet for tourism/

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1. Ibid, pages 211-214.

tourism and for attracting to Dunfermline and then retaining a scientific, educational and managerial base. It would also allow Dunfermline to assume greater significance as a 'king' settlement in Eastern Scotland.

"Dunfermline", Geddes observed, "will and may enlarge and develop but it cannot become a Glasgow or Edinburgh. What is the vital element which must complement our provincialism? In a single word it is Regionalism - an idea and movement which is already producing in other countries great and valuable effects. - It begins by recognising that whilst centralisation to the great capitals was inevitable, and is in some measure permanent, this is no longer so completely necessary as when they practically alone possessed a monopoly of the resources of justice and administration, a practical monopoly also of the resources of culture on almost all its highest forms. The increasing complexity of human affairs with railway, telegraph and business organisation has enabled the great centres to increase and retain their control yet their continued advance is also rendering decentralisation, with local government of all kinds increasingly possible. Similarly for culture institutions the development of the local press has long been in progress, the history of the city library movement is in no small measure identified with that of this very town while the adequate institution among us of other forms of higher culture is just what has been discussed in the preceding pages. We see then that the small city is thus in some measure escaping from the exclusive intellectual domination of the greater ones and is tending to redevelop, not, indeed independence but culture individuality.... looking then at the position of Dunfermline upon the map, so conveniently situated upon great lines of communication also, we see that it may readily combine the advantages of an ancient and revived culture city with those of garden city."<sup>1</sup>

This statement as to the possible development of Dunfermline is an unmistakable indication of the synthesis of urban data within a regional context. Its appreciation of the problem of town growth within a regional urban mesh, is clearly in advance/

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1. Ibid, page 216.

advance of contemporary thinking. Indeed, the concept of growth points within a regional plan, current in planning sixty years later, shows little, if any, significant advance on this Geddesian thesis. This advanced thinking is also reflected in Geddes's desire to see citizen participation within the planning process.

"Since our park and gardens and buildings are but a stage on which the men and women are the players, what is to be their part? Mere passive receptivity, whether of immaterial or material dole, is of no value."<sup>1</sup>

Geddes recommends that ~~positive~~ planning can only be the result of a fruitful and continuing partnership between citizen and administration - a 'Civic Union'. Every possible avenue should be explored to encourage and further this essential prerequisite for continuing success.

Geddes offered a number of specific suggestions. He was insistent that an essential step was the isolation of "goals to be ascended to". That there must be a "well matured and clearly maintained policy and principle albeit adaptive in detail". The responsibility for strategy must lie with the administrative body, the Trust (or municipality) but that its formation required assessment of a wide range of possibilities, a number of which could be offered by interested organisations, local associations and societies. In Geddes's view it becomes a charge upon the local authority to promote as wide a comprehension as is possible of the factors on which strategy decisions are made, through exhibitions and publicity. This would allow for the emendation of detailed proposals through the guidance of those with special local knowledge. Clearly Geddes envisages two levels of operation - policy isolation as the responsibility of a planning body; and policy implementation through a /

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1. Ibid, page 224.

a joint action of authority and citizen. In the long term Geddes sees that local amenity societies and Civic associations may come to participate in goal assessment. The basis for this is a supposition that planning and thereby goal assessment becomes a continuing process and that there is a deliberate policy of education promoted by the authority. Geddes sees the basis for participation arising through voluntary community work which becomes expressed and codified in associations of varying kinds. This may be stimulated through a flexible plan. Geddes's own idea that young and old can work together to improve their environment by, for instance, creating playgrounds, building craft centres and workshops, will promote community spirit and arouse a continuing interest in civic matters. This opportunity for constructive action was built in to many of his proposals. It is in this way that Geddes hopes to reach the mass of citizenry.

The ideal as outlined by Geddes may have appeared Utopian at the time but the phrase, "Except the ideal build the house, they labour in vain that build it", conveys the essence and objective of the study.

#### Comparison of Geddes and Mawson Reports,

An interesting situation was created by the Carnegie-Dunfermline Trust in that it commissioned two planning reports on the Pittencrieff Park. At the same time that Geddes was preparing his report, T.H. Mawson (Architect) was engaged upon a similar investigation under the same remit.<sup>1</sup> In consequence, an ideal situation is created whereby a comparative assessment of Geddes's work is possible.

Mawson's report runs to some forty pages and in general lacks/

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1. T.H. Mawson, Scheme for Pittencrieff Park, Glen and City Improvement, 1904.



lacks the finished presentation characteristic of Geddes's study. In fact, Mawson found some difficulty in meeting the time deadline. He noted that,

"Many of the illustrations included in the Report are reproduced from unfinished drawings" and also that, "the latter part of the text has not been finally corrected and may require adding to."<sup>1</sup>

Another significant difference is that of style. Mawson adopted a more direct and forceful style and avoids reference to the wider philosophical aspects of planning and the need for acceptance of principle in any design. Mawson's approach is architecturally orientated and the final design is very much in a renaissance monumental style. The introduction to Mawson's Report is similar to that adopted by Geddes.

"The best advice I can give you is to closely consider and firmly grasp the problem of the whole before you allow yourself to design the several parts."<sup>2</sup>

Given this, according to Mawson, it will be possible to make good gardeners, foresters, craftsmen and housewives. The attention of the Trust was directed to the remit given by Andrew Carnegie and to John Ross's inaugural address as Chairman.<sup>3</sup>

Mawson concluded that the Trust is wedded to the conception of controlling, directing and inspiring others to a high degree.

"If the Committee are to be pioneers it cannot be too plainly stated that they must go to work as wise pioneers do."<sup>4</sup>

Like Geddes, Mawson concentrated on some of the salient characteristics of Dunfermline as a town. He said that as an unbiased stranger an immediate impact upon him was made by the magnificence of the Palace-Abbey complex, the squalor of much of the housing condition, and the disequilibrium between major road/

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1. Ibid, adendum.

2. Introduction.

3. See page 151.

4. Page 2

road approaches to the town, its relief and the internal urban road mesh. Consequently, Mawson's primary approach is from the standpoint of traffic engineering.

"The principal streets are not arranged to cope with increasing traffic. To provide for this increased street traffic seems to me to be the most pressing need and the one on which the city beautiful must be founded." <sup>1</sup>

From this keynote the scheme is devised:- A commercial centre, in which would be found the Guildhall, post office, banks and other monumental business premises. From here would radiate broad boulevards and streets arranged "like spokes of a wheel, each road taking the most direct line to its destination". Indeed, one such street would be an extension of the existing Bridge Street through the centre of Pittencrieff Park - a view rejected by Geddes in order to preserve the organic unity of the park space.

Mawson did suggest a redeeming feature in his scheme in that he advocated a garden suburb or industrial estate for those displaced by the new road scheme.

The clear impression from Mawson's Report is that it is unequivocal. It is forcefully presented under twenty-six headings.<sup>2</sup> These include the creation of vistas by clearance schemes; a master plan of Dunfermline linked by radial routeways and boulevards and focussed upon the created central area; the creation of model artisan cottages and buildings of architectural merit. Indeed, in his twenty-six items, the last only, is concerned with the layout of the Pittencrieff Park and its Glen. Mawson, in fact, plans Dunfermline de nouveau and within this the Park and Glen figure as insignificant items. Geddes, on the other hand, has remodelled outward from the Park, using the present and selectively introducing the new. Mawson left little for the future - Geddes draws the future clearly into/

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1. Ibid, page 8

2. Ibid, pages 10-13.

into his scheme and provides an opportunity for creative action by others.

Likewise, in the order of priorities, Mawson differs radically from Geddes. For Geddes catchment area planning is a key element, whereas Mawson is concerned with the dominance of Dunfermline Abbey and sees the Park as an appendage to this. The Park itself presents, according to Mawson, all the advantages of site, aspect and potential used to make it truly a part of the city, just as a nobleman's garden and park and as such the scheme, which includes monumental entrances, separation of its two parts by an extended Bridge Street and the creation of other broad avenues and vistas, is clearly a renaissance garden style.

The essential difference between the two reports was summarised by a later consultant to Dunfermline, J. Shearer.<sup>1</sup>

"There is no evidence that Town Planning was ever consciously applied to Dunfermline before the first decade of the present century ..... the plan (Mawson's) is an example of a plan so drastic that it was never seriously entertained and had it been carried out very little of what is familiar in Dunfermline would have survived."

Of Geddes, however, he wrote that,

"His plan is of a different order and although most people now agree that it would have been a major error to impose on the green spaciousness of Pittencrieff Park, the series of large buildings sketched out in the Geddes Report; that Report as an introduction to Town Planning has had the respectful attention of Town Planning Authorities and students alike all over the world, even since it was published. In so far as street alteration is concerned, Professor Geddes's proposals were modest. They consisted in linking the public park by two tree-lined avenues; he also advocated the extensive planting of trees to relieve the grim monotony of many of our streets and drew attention to the attractive possibilities of a feature which until then, no-one in Dunfermline had noticed and which happily is still a possibility open to us, the presence of a green belt stretching almost without interruption all the way from Pittencrieff Park to Townhill Loch. He drew attention also to the possibilities of Townhill Loch both as a valuable recreational asset and as an equally valuable amenity. My Advisory Plan incorporates the green belt advocated by Professor Geddes and I without reserve, endorse his opinion of the recreative and amenity value of the Townhill Loch."

1. Dunfermline, Advisory Town Plan and Description, 1946 - J. Shearer, R.S.A., Dunfermline, 1949, pages 15-17.

Loch as a subject for thorough investigation."

Reception of the Reports.

The reception given to the two reports prepared for the Trust is well documented in the Minutes of the Carnegie-Dunfermline Trust.<sup>1</sup> The original bequest by Andrew Carnegie was supported by a letter from him to the Gentlemen of the Commission.<sup>2</sup> It included a directive as to the conception of the Trust as a pioneer in social matters. Carnegie noted that the Park and Glen provided,

Carnegie also recorded the view that in such pioneering work the Trust should aim to lead the people upwards in the wider social educative sense.

The considered view expressed by John Ross, Chairman of the Trust at the period of the Geddes Report<sup>3</sup>, has a different emphasis.

"The park and glen improvements were seen to give us work for years to come and capabilities afforded could lead to considered community benefit through the provision of recreational, sport and musical opportunity". But Ross also specified that, "every shilling spent will, I hope, be spent with a view to its yielding an adequate return." It appears, therefore, that the original remit given by Carnegie and the interpretation of it as given by the then Chairman of the Trust, were somewhat contradictory, a fact which may have influenced later events. During meetings of the Trust of June, 1904, the Geddes and Mawson Reports were considered. Mawson, in fact, was refused an **interview** on account of the nature of his report which, it was later noted, by far exceeded his/

1. The writer is indebted to the Dunfermline Trust, especially the Hon. Secretary, for the provision of this information.
2. 2nd August, 1903.
3. 28th August, 1903. Address by Dr. John Ross on the work of the Trust.

his remit.<sup>1</sup>

Geddes's view of the replanning of Pittencrieff Park was more cordially received although here too little was acceptable for implementation.<sup>2</sup> He too was guilty of exceeding his remit, though in the Report, "there are portions of it which would be in the power of the Trustees to adopt if so advised."<sup>3</sup> It transpired, however, that Geddes had managed successfully to convince the Trust of his basic priority, the need for a comprehensive control of the Glen. Discussion of other items of the Report were not minuted though during August a move by the Secretary of the Trust to realise the implementation of Geddes's suggestions for a further civic survey of Dunfermline was defeated.<sup>4</sup> Nevertheless, the Trust was prepared to print a hundred copies of the Report for Geddes and this in itself indicates their view that the Report was an outstanding document as such.

Patrick Geddes himself anticipated a cool reception. In correspondence with his wife and friends in 1903 and 1904, it is noticeable that he expected that a difference of view between himself and the Trust would prevent the full realisation of his scheme, but that in time a number of his recommendations would be implemented.<sup>5</sup>

"I have, of course, long been prepared for no consideration whatsoever", he wrote. "The previous October, hopes were there. It should thus become a convenient paper reference on those subjects for workers outside Dunfermline as well as, I trust, some immediate interest to the Trustees and their immediate public."<sup>6</sup> - However, the problem of short and long term views has always been there..... Ross is auditive as naturalist and lawyer, of course, tend to be and so he is more appreciative of directly human improvement and less so of environmental ones,  
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1. Para. 396, 20th June, 1904, Carnegie-Dunfermline Trust Minutes and Para. 445, 26th July, 1904.
  2. Para. 397, 20th June, 1904.
  3. Para. 445, 26th July, 1904.
  4. Para. 500, 22nd August, 1904.
  5. Correspondence, 23rd May, 1904, no address - Dear Beveridge; 14th October, 1903 to Talcott Williams; no date, 1903, to Whitehouse; 28th December, 1904 and 4th March, 1904, from London
  6. 14th October, 1903.

I perhaps conversely."<sup>1</sup>

To Mawson, with whom, in fact, he had frequent discussions during the period of the investigations, he recalled a meeting with the Trust members where he had to insist<sup>s</sup> that,

"not only the purification of the stream, but the improvement of the approaches follow upon a general educative and social policy and that although I am assured that many, if not most, of my recommendations will be carried out in due time, I do not think it will be in Dr. Ross's time at all, 'our opposite views about the old buildings being only one of the various differences."<sup>2</sup>

By February, 1904, Geddes had felt the need to recall that much of himself and the past work has gone into the Report.

"You are getting the cream of these years' work, but it seems once more, as in the university for twenty years, I am to have that one encouragement with which every bit of pioneering in thought or action is met, that of the disapproval of my seniors and the indifference and suspicion of one's contemporaries. That, as I said before, is the real investigator's pay."<sup>3</sup>

Mawson too, had felt an antipathy between his views and those of the Trust. In a letter to Geddes in March, he had commented that,

Other of Geddes's thoughts on the matter were expressed to his wife. In February, 1904, he wrote that Mawson's work was vastly different - "By being vastly different in conception, this may, by contrast, elevate my own in the eyes of the Trust."<sup>5</sup>

In January Geddes had noted,

"H.B. tells me that they mostly don't like it, but there is really/

1. Undated letter to Whitehouse, 1903.
2. Letter to Mawson, 28th December, 1904.
3. 15th February, 1904 to Beveridge.
4. Mawson to Geddes, From London, March, 1904.
5. 16th February, 1904, letter to Anna Geddes.

really so much good in it, as they will find out" - and in March - "Mawson and I dined together very amicably the other night. His plan is very American and Haussman so I don't feel crushed. The job is a gigantic one to both of us, not even he, with all his experience - he has **thirty-**one other Park and Gardens on hand this winter - has realised it, least of all do the Trustees. - I am convinced that here, as so often, the less they like it the more they will be wakened up by it and come to it in time. It doesn't pay alas, but if we had wanted things to pay we should have kept a public house."<sup>1</sup>

It transpires from the Dunfermline Trust minutes that the grounds for rejection of the two Reports were,

- a) that both schemes greatly exceeded the remit, but
- b) that the cost of implementation would be too excessive.

Geddes's report became available to a wider audience. The architectural and planning profession at large welcomed it with open arms and numerous letters document this view. Some instances of its reception may be cited.

Perhaps, however, the most direct praise came from Ebenezer Howard, who wrote, "A copy ought to be in every public library and in the office of every architect of every local authority."<sup>4</sup>

As Geddes foresaw, many of his suggested schemes have, in fact, been realised in Dunfermline. This is documented in a/  


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1. March, 1904, to Anna Geddes.
2. Whiteing, 14th November, 24th November, 1904, from London.
3. H.A.J. Herbertson, Oxford, 7th November, 1904.
4. 2nd August, 1904.

a report of the Dunfermline Trust and its work and specifically may be mentioned - landscaping in the vicinity of the Abbey, a museum, a climatological station, a music pavilion, a craft school. As with other schemes produced by Geddes, the spirit and occasionally the substance, has appeared long after Geddes had an original proposal rejected.<sup>1</sup>

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1. Andrew Carnegie, *The Trusts and Their Work*, Centenary Publication, Pillans and Wilson, 1935, Edinburgh, pages 35-67.



### Conclusions.

The Dunfermline study contains many items of considerable interest. It was published at an important stage of Geddes's career, coming at the culmination of an active period in the Royal Mile of Edinburgh. It carries this work in Edinburgh a stage further and shows a wider appreciation of the implications of the Place Work Folk trilogy. There is, in the Dunfermline study, a continuation of the folk participation ideal. In Edinburgh the motive was renovation and the agents the Town and Gown. In Dunfermline, the hard guide lines were to lead to an enrichment of a whole town and its inhabitants and here the agents were the Trust, the local authority and the citizen. Likewise, the Outlook Tower in Edinburgh had been a focus for regional thinking; Dunfermline gave expression to theory and carried it one stage further. Here was a clear understanding not only of town and its region; but also this organic unit in its relationship to a wider national setting: .

In matters of details Geddes showed a considerable capacity to assess trends within a society. In a similar manner to the 'Buchanan' Report some fifty years later, Geddes pinpoints significant aspects of change in technology and in the manner society is evolving.<sup>1</sup> Geddes had come to envisage a new technical age (the neotechnic) and in the Dunfermline study he applied his concept of 'neotechnic' to isolate a role for the town. It would appear that Geddes was well ahead of his day in seizing upon the possibilities which may result from a 'quality' environment. In the short term this asset could attract retired persons or Edinburgh commuters whereas in the foreseeable future it could provide the key to economic growth. The concept that industry/

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1. Traffic in Towns. H.M.S.O., 1963.

industry could be attracted to a locality because of amenity is inbuilt into the Dunfermline recommendations and is prophetic.

In other fields Geddes seizes upon trend, not necessarily as a determinant of policy, but as a guide to action and a means to actual community participation. Amongst the factors isolated by Geddes are those relating to the possibilities for community service through the scouting movement and the developments in adult education and for regionalism in its varied forms. Geddes sees that Dunfermline can become a significant regional focus but must first develop a positive community consciousness, a sense of pride to express throughout a region. An essential prerequisite was a continuing effort to involve the young in shaping the community towards recognisable and attainable goals, and to ensure that the type and range of facilities in the town matched the needs of all ages. This was a long term, albeit fundamental, scheme for action. It raised its own difficulties. Geddes accepted that however purposeful a planning scheme may be, it was subject to two essential controls. One was fiscal, the other that it must be seen to work quickly. Thus, in spite of his insistence on the totality of his developmental scheme, Geddes fashioned a series of limited stages which could be rapidly achieved and with economy of finance.

Another aspect no less important arises from the requirement to project planning as an agent of rapid change. Geddes believed that planning is a social service. He was well aware of the inimical effects of overcrowding, poor housing and an ugly visual environment. Reasonable living conditions through minimum housing and environmental planning was a prior start point. He moved then to a minimum provision of social opportunities; recreative and educative, for he considered that physical planning must be complemented by positive social planning. It is this aspect of developmental/

developmental activity; the social welfare consideration inbuilt in partnership with re-organisation of space, which can be seen to promote immediate and beneficial results within a community. Although these two aspects are specialised fields of activity in themselves, Geddes never wavers in his view that they are complementary and proper fields for study. In this he anticipates by half a century, the now current socio/planning investigations into phenomena such as delinquency and suburban 'neurosis'. Such a search for cause and effect may create the opportunity to promote citizen involvement in planning.

Participation has been noted as a keynote of the Dunfermline Report, yet the charge may be levelled that there appears little by way of a healthy interchange of ideas between Geddes and the public, for Geddes himself isolates the goals and programmes and the steps to achieve them. This apparent contradiction between theory and action may be resolved if it is accepted that the ultimate goal of the Dunfermline study is effective participation by the public. The structure Geddes devised could, over time, bring into being a critical community consciousness. The pre-requisite is a period of limited participation in community building and a growing awareness that planning is a field of interest by reason of its influence on things seen and experienced by the individual. The provision of minimum standards based upon a socio/biological view, combined with a continuing process of education inbuilt into institutions, were means to this end. Geddes takes upon himself the role of initiator of a process and, as such, in the immediate, the arbitrator of goals.

The Dunfermline study thus shows something of the fundamental ideas of the man himself. Geddes was fifty years old yet his work is of the liveliness one might expect from a younger man. There/

There is a distinct impression of self-confidence, even excitement. There comes through also a sense of urgency; that creative planning must take a great leap forward in order to meet the challenge of the twentieth century. This period in Dunfermline was, in many respects, pioneer days for Geddes. His career in planning had been quite short and there was, as yet, little to show for it in concrete terms. The Cyprus scheme, after an auspicious start, had lost its impetus and news value when Geddes returned to Britain. As a publicist and radical Geddes had brought considerable improvement to the Edinburgh tenements. However, eighty-five reconditioned flats, four hostels and a small scheme in Dean Village, Edinburgh, would seem insignificant when compared with the new Garden city at Letchworth or Chamberlain's slum clearance activity in Birmingham. There is no documentary evidence in the possession of the Dunfermline Trust to explain why two consultants, Geddes and Mawson, were employed on the one scheme. It might well have been that Geddes, as a man of ideas, should be complemented or tested against Mawson, who had many realised schemes to his credit. In the event vision and idealism were to produce a classic study of what planning should be; a comprehensive appraisal of the actual; a forceful statement of the possible and desirable; the clarification of goals and the programming of plan to these ends.

1904 could have marked another turning point in Geddes's life. His report could have resulted in Dunfermline becoming Geddes's Letchworth, perhaps followed by numerous other urban consultancies elsewhere in Britain. Neither happened. The only other study he produced was for the Edinburgh Zoological Gardens/

Gardens and this nine years after Dunfermline.<sup>1</sup> It might well be that the visionary elements in the Dunfermline study, together with the extremely comprehensive nature of his recommendations, priced it and Geddes out of the contemporary planning market. With the notable exception of Howard and his own collaborators, contemporary thinking about towns and their future showed little appreciation of the nature of change and the need to plan ahead. Only a limited few could share Geddes's sense of urgency, an urgency derived from his view of the likely distillation of the town into conurbation and countryside. Fewer still could share the synoptic appraisal that planning has a crucial correlative role in the process of social change. In the event, Geddes's career as a publicist was confirmed. He was to refine the Outlook Tower display material in national exhibitions. These established his reputation with a wider audience, at a time, following the first planning act in Britain, when this new discipline was before the public eye. It was also through publicity that Geddes's work drew the attention of educationalists and politicians overseas who in turn provided the overdue opportunities in practical planning.

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<sup>1</sup>Scottish Zoological Society's Gardens. Report to the Council, 1913.

PART 111

THE FLOWERING OF GEDDESIAN PLANNING - INDIA AND THE  
MIDDLE EAST,  
(1914- 1925).

The period between 1914 and 1925 presents the student of Patrick Geddes with evidence of his most prolific period of activity within the field of urban and regional planning. Between these dates Geddes travelled extensively in the Near and Far East and became involved, as a consultant planner, in schemes for some sixty-six cities in the Indian sub-continent and Asia Minor. The voluminous material which existed in the Geddes collection relating to this period of his planning career requires careful examination. Evidence from his earlier work suggests that by 1914 Geddes's philosophy relating to the nature and the practice of planning had matured into an all-embracing system theory. If this supposition is valid, then an examination of the Indian and Middle Eastern planning reports should indicate that there is a fundamental degree of consistency in the manner in which he approaches the problems of each individual town and regional area.

A previous study has been made of Geddes in India by Jacqueline Tyrwhitt and others which falls far short of such detailed analysis. This work, 'Patrick Geddes in India', was based on an analysis of nine planning reports. By judicious use of quotations from Geddes's writing, his planning was here summarised under five major headings - diagnostic survey, conservative surgery, a social approach, planning health, open spaces and trees. This approach of using Geddes's own words has the merit of reproducing his own inimitable style of expression and yet leaves something to be desired. The reader is left to draw his own inferences relating to the complex range of Geddes's thinking processes and the linkage between the philosophical and the technical aspects of the planning processes he operated. Evidence has come to light, through the Geddes collection, /

collection, that he prepared planning reports for sixty-one towns and cities within the sub-continent alone. This evidence is in the form of a map, drawn and annotated by Geddes himself, indicating that his planning activities ranged throughout the length and breadth of the sub-continent. This map is also supplemented by a series of personal notes relating to each of these places. The duration of his studies varies considerably from a matter of a few hours spent in towns in the Madras Presidency to some months in Indore. Consequently, it is important that both the major and minor reports prepared by Geddes should be contained in an analytical study in that, together, they illustrate on the one hand, the processes of rapid analysis and synthesis and plan, and on the other, the results of a lengthy study of a planning situation and its problems. The following analysis of Geddes's work in India has been compiled from a study of forty-six reports - fifteen reports which were prepared by Geddes have never been traced. From a correlated study of the contents of Geddes's work an attempt will be made to illustrate the range of his thought, by using his own words. It will become clear that a logical and consistent approach to planning had matured in Geddes's mind and this approach lends itself very clearly to a number of sections, each of which will be compared with his philosophy as illustrated by his work in the Middle East.

The separation of the Indian and Middle Eastern reports calls for some comment. Previous biographers of Geddes have concentrated upon his work as the planner of the Hebrew University in Jerusalem and have largely ignored his considerable efforts in the field of urban and regional planning in this region. Geddes was involved in the planning of Aden and of four cities in Palestine; Jaffa, Tel Aviv, Haifa and Jerusalem, in addition to suggesting a number of proposals for rural development. Evidence of this extensive work in the Near East has been limited to the material then available in the Geddes collection. This was relatively sparse/



sparse and only included the actual planning reports prepared by him. It is now possible to place these in a wider context. Documentary evidence of Geddes's involvement through memoranda and letters has become available through the good offices of the Israeli Government, since access by the state of Israel to the Zionist archives in the then Jordanian sector of Jerusalem was made possible after the 1967 Middle Eastern War. The writer is indebted to officials of the Israeli Government for providing material from this source.

The Indian and Middle Eastern Reports prepared by Geddes are indicative largely of his travelogue style of presentation of material and as such, with the Dunfermline Report, form major educative documents as prepared by a consultant planner. Geddes himself noted that this was the position he held.

At no point in the twelve years of active study, as illustrated by Geddes's planning writings, does there appear to be any radical departure from a basic style or methodology - the techniques of appraisal of a situation, its analysis and synthesis follow a clearly defined system in all the planning reports. The principles of the system appear to exactly mirror those which Geddes adopted in his studies of Dunfermline and Cyprus and which he imposed on the schemata of the Outlook Tower. It has become evident that Geddes's planning approach, which had developed and matured at an earlier date, was applied in the Near and Far East to both large and small towns and to Patrick Geddes was not found wanting in any major respect.

## Chapter 1

### The Indian Reports

Geddes's Indian Reports may be analysed in numerous ways. In order to throw light on the totality of Geddes's planning conceptions, the method which has been adopted here has been to consider each of the forty-six reports individually and abstract from them, the elements of planning as stated by Geddes. These individual items have then been cross referenced and classified under the broad headings of Philosophy Technique and Practice and then under a series of sub-headings. Each of these will be discussed in turn and illustrated with reference to quotations from Geddes's own writings. Whilst this method gives little idea of the total contents of any one individual planning report, it has the merit of allowing for a comprehensive statement of Geddes's philosophy of planning as applied to all sizes of settlements within a sub-continental area. The sequence of treatment has been suggested by the material itself - correlation of the contents of the reports has indicated that a certain discreet body of data appears frequently and this repetition clearly indicates that the component items are constantly in the forefront of Geddes's mind. These major components, which will be discussed in turn, relate to the fundamental philosophy of planning, the qualities required of the planner, the framework within which he should operate and the techniques and practice which he should implement.

#### 1. The Philosophy of Planning.

Geddes's view of planning is exact and for him the planner plays a highly crucial role in the fashioning of society. From whichever discipline the planner enters the field, he must quickly adopt a rigorous, philosophical standard. This is essential if he is to fulfil his function and master a complex discipline. For Geddes, planning is extremely complex -

"Regional involvement and development and town planning and city design, as the writer has gradually come to see these through forty years and more of city study and endeavour, are tasks and problems much more complex than usually recognised by engineers, sanitarians/

sanitarians and planners, or by those who consult and employ them - the apparently simplest and most localised needs and operations of surgery have wide reactions throughout the life and the health of the patient than was later known. Hence even the oculist or the dentist looks deeper than did his predecessors. He discerns recently remote bodily diseases, at times he even ministers to the mind within". (Preface, Town Planning in Patalia State and City).

"The betterment of the city of the future needs renewal and development to vital idealism, the soul of all its varied religions, whose applications in life guidance have created what it most values, for the past fixation of these or the present lapse, there have come out many of the evils from which the city suffers and of such material decay, disease, poverty and more are outward symptoms; hence, these evils are really not curable by material methods only. The needed treatment is first of all to put heart into the community, thus renewing the sense of citizenship". (Patalia, VIII)

For Patrick Geddes, planning is responsible for the total environment and bad planning causes a disastrous chain reaction which is felt most significantly in the loss of confidence by the community through economic regression or decline. The planner as a custodian of the society's future, therefore, must possess vision and carefully dispose of the assets of the society. Town planning is thus creative and positive.

"The method of would-be city improvement, still most common in Indian capitals, as formerly in European ones since its fashion was set by Napoleon III for Paris (1854-70) may naturally be termed the metropolitan school. Its results are magnificent as regards perspectives - English utilitarianism though impressed, even more or less dominated by this school, had naturally to introduce its own ideas and phrases and these are still only too prevalent throughout India. Hence, for instance, sanitation, though too much under the facile and self-deceptive phrase of reducing congestion in over-crowded areas, has, of course, also of facilitating business communications and all naturally with cheering promises and best intentions of rehousing the people evicted for demolition and this better than before. Yet this planning failed to grasp the economic conditions, for example, of retail trade and those of poorer middle class, working class and labourers' housing and thus it concentrated on making new and wider communications unnecessarily to the old-fashioned quarters occupied by these and since one at first only thinks for the life and work within his experience and in terms of the class he is identified with, this planning has been essentially towards getting through these congested quarters and too little towards improving/

improving the trading or living in them. - But all these clearances have to be paid for and the improvements are expected to pay their way, at least in aggregate and as soon as possible. Compensations for buildings demolished are naturally estimated at current values and such properties are more or less depreciated, but an additional ten or fifteen per cent of compensation for disturbance is given and this appears liberal, or at any rate, fair and sufficient as it intends to be. Unfortunately, however, this total compensation is seldom sufficient for reconstruction on the required scale. Moreover, the recipient has only too often to apply this cash to meet other claims, so practically but little of the destroyed class of property is replaced by its evicted owners and their housing difficulty and retail shop scarcity alike increase accordingly. The invariable economic result of scarcity upon the prices of necessaries of life and their rise towards famine prices naturally follows and soon, with discontent amongst the sufferers accordingly. - It is of the essence of capital to be keen to see and speedy to act on any new line of approved gain. In this way the city's property market becomes active and soon in anticipation of further improvements, very active indeed. Speculation thus arises, increases and even inflates, with the resulting profit to the improvement scheme accordingly and at first with further public confidence accordingly, all the more because the members of its governing body are quite above speculating themselves. Old fashioned households, who would formerly no more have thought of selling their homes than their families, are thus attracted into the property market by their growing confidence in the scheme and its management; merchants, formerly concentrated on their own legitimate businesses, are tempted in too and values thus go on rising even by leaps and bounds. But every speculative boom has its limits. The banks, etc., apply this by ceasing to advance on such property with heavy losses to the large speculators which, however, at first seem but their own affair. It has, however, been overlooked by all concerned, not excepting the improvement authority which started with the best intentions towards the peoples' housing and their smaller trade, that its entire fabric of finance, with increased property values, speculators and the trusts alike, is based to a very great extent upon scarcity rentals and heightened prices also to the people, which its demolitions could not but create and increase. Good intentions here have, therefore, proved not only useless but worse, for despite all hopes and promises such improvement authorities find themselves unable to rehouse, without loss or even disaster, more than a fraction, sometimes indeed but specimens of the poorer population which they dispossessed in hopes to improve. And even this measure of housing has too commonly to be mere warehousing, i.e., in huge tenements (chawls) with small single rooms and at rents necessarily higher than of old and as capital values must be maintained, this new environment with its new forms of deterioration and insanitation replaced the old ones. It is now too substantial and permanent ever to admit of the easy demolition of the proceeding kutchra/

kutchra housing. - The popular dread of town planning and distrust even of sanitation which has thus been spreading all over India and are even plain here as elsewhere when one goes to Patalia, plan in hand, are thus no mere surviving prejudice to be explained as conservatism, backwardness or ignorance, as educated and governing classes, Indian as well as British, are wont to think and say. On the contrary, this popular public opinion is only too well founded in their bitter experience of too many would-be city improvement schemes hitherto of dispossession and increasing overcrowding at heightened rents with the resultant rise of prices generally, in short, of real suffering, that their inevitable resultant dissatisfaction, discontent and distrust are thus far too legitimate. My past eight years' experience of very many of the leading cities of India and of the results of their improvement schemes and in British India and native states too much alike, has left me no option but to recognise.

- Destruction is only too easy, reconstruction always difficult.

- The latter movement of improvement and development has arisen more from the criticism of the previous school in particular and of the utilitarian economics in general, than from following these, though it, of course, accepts and continues their elements of value. Its increasing clear characteristics are two-fold; first, a larger view both of social and of individual life than as limited by its mechanical and monetary interests, especially as exaggerated to the depression of others by the recent phases of western civilisation, its machine economy and price economy. It is, thus, not contented with adding current sanitation to the proceedings, it insists on the necessity of providing more and more fully for the completest possible improvement of the whole life conditions of the community and its members and these, as a leading American sociologist briefly puts them are health, wealth, sociability, beauty, knowledge and rightness. This statement might be further developed and this clarified also in terms of social science, but may here suffice for the present. The second character of the movement is that it increasingly bases this more comprehensive procedure upon a correspondingly full and varied survey. - Place, work and people are thus scrutinised anew and these separately with the help of the geographer, economist, the anthropologist and historian too, who have long been in the field, each with his separate aspect, but these separate studies now here combine.- To know and appreciate each and all of the vital elements in the distinctive social grouping which makes up this complex social situation of our city, to strengthen these by such fresh adaptations as may be, is already desired by all men of good will, but it is the task of social science to survey these more clearly. It thus prepares the way towards a fuller co-operation of these vital elements and as constructive factors towards what ends? The furtherance and enhancement of all that is best in the life of the community and its members, now seen no longer as mere struggling individuals of past economic theory, but as socians of an advancing society, citizens of no mean city." (Patalia, pages 18-23).

Planning is an active discipline and is concerned with the real environment and with living things. It is incumbent upon the planner, Geddes believes, to impersonalise his subject.. He must stand back and make it and himself professionally independent of any sectarian interest or influence. His is a responsibility to the whole community and not to sections of it. An adjunct to this is his role to educate the community to an involvement in the shaping of its own future.

"In private life or politics it is only too easy for individuals or groups to take sides with capital or with labour and to seek to advance the interests, real or supposed of one at whatever consequences to the other. Town planning, however, rarely does this. In practice its plans are found either to depress the interests of both, or to advance the interests of both these and with that of the public as well and this latter is what such careful and economic improvement and replanning of these villages as is above suggested, will do." (Report to Cawnpore Expansion Committee, page 8).

"It is not with criticism, sharp perhaps as a surgeon's, yet as truly without bitterness, and in good will and faith, that a town planner should end, but with hope and encouragement. Like almost everyone<sup>in</sup> these days, he has to escape from that literally hypnotic fascination of the straight line which drawing board and instrument can hardly but at first give him, since these so readily bring down to earth the mathematical heavens that he returns to the real world of varied nature and humanity and sees and deals with the real town before him in no merely mathematical mood, nor even in any simple projection of his personal predilections and powers; for here are place and work and folk to be better arranged and this not at our pleasure but for their good, not even our conception of this only, nor yet of their present conceptions only (as autocracy and democracy have brought in turn) nor yet as the concensus and resultant of these (as constitutionalism thinks today) but beyond all these alike in terms of the human needs and ideals, deeper even than those of mathematics and hence, of surer guidance for our planning; but these not abstractly like those of the good and true and beautiful of the philosophers, though yet separately as too much by the religions of the past, by the sciences and the arts of today, but now altogether. The good realises increasingly in the city's complex mutualism of kinship, caste and rank of private and public life and this both religious and secular, the true expressed by all these in the co-ordination of industries and activities and of education towards fuller furthering of the collective weal, more than of individual success. Beauty thus increases and the city grows fairer as its individual minds find expression in all their respective arts. It is this co-ordination of all the arts which is town planning proper." (Outline Report on Town Planning in Alwar City, pages 45-47).

"For/

"For the modern town planning movement is not mainly concerned with metropolitan magnificence, but with the humbler and more fundamental tasks of town and village efficiency, to make towns and villages alike better places to live and work in; that is modern town planning. Hence, it subordinates and utilises towards these fundamental tasks of man upon the earth - all these accessory specialisms, inventions and improvements, whether of railway and factories, of markets and finance, of education, learning and science as well." (Town Planning in Balrampur, page 28).

"Town planning is a trust, a carrying forward of a heritage, the creation of a new heritage - in the process of evolution the planner must fashion the minds of those for whom he plans, to people to accept the result of change, the rulers to accept the need for change." (Report on Ajmer).

## 2. The Planner - The Need for Leadership.

Geddes's philosophical approach, his inflexible standards relating to discipline, the nature of which he is at great pains to try to define, carry grave implications for the planner as an individual. In Geddes's view the planner must possess a high level of intelligence and be prepared to accept the discipline required in a field of activity which rests upon a high technical competency, but an even higher level of morality. The responsibility of the profession itself must inspire or inculcate in the planner a social awareness and a regard for both the mass of the people and the individual citizen. The qualities which Geddes spells out also carry implications for the training which a planner would require. There appears to be an expectation of a wide range of aptitude and capability, a knowledge of world trends in planning, the combination of an impersonal scientific approach with a highly motivated humanistic one - (the use of heart and head) - a detachment from, yet involvement with, local problems: a knowledge of a large number of ancillary disciplines, a capacity for succinct report writing and propaganda and an outstanding administrative ability. It may be deduced that Geddes is clarifying, through his Indian Reports, his own interpretation of the "chief" in the Comptean sense. The planner thus becomes a person of outstanding organisational ability. The essential components may be summarised as/

as follows:-

a) Planning is Leadership in the War of Reconstruction

It is a form of leadership which is no mere exercise of arbitrary powers, but one which produces a harmonisation of the efforts of the community towards the creation of long term objectives, primarily a balanced and healthy environment. Leadership is, in fact, community service at its highest level.

"When a government sends out its army to the war, the news they wish for is that of victory and in this is the highest point of their objective, the successful occupation of citadel and capital and for long they have to be content with news of much smaller activities. One cannot begin with the final achievement desired. The first advance is one of reconnoitering, in fact, survey; one's next is of a long series of minor engagements, the taking of villages in detail, then engagements upon longer routes and so onwards. The planning and reconstruction of cities and indeed, of their regions also, is comparable to the operations of war and this in curious completeness of resemblance as well as contrast. Peace planning is like war planning, conducted by studious staff officers over their maps and plans. It can only proceed from and with progressive and unending survey and its tactics are to work through minor engagements in village and suburbs, towards its final endeavour, its culminating attack upon the capital itself. - I am thus far from despairing of converging, thinking, planning my way into the old city, but the planner, like the soldier, needs time and proceeds by over coming small obstacles before larger difficulties. Of both efforts the aim is peace and though the planner happier than the soldier reconstructs as he goes, there is no denying, especially at the close of a report of this kind (In some parts, quite the most drastic I have had to write in India.) of the combative spirit and the purposes not absent in him. I can only hope that I have not wounded personally, but rather sought to elicit the real and high talents, the high purposes also, the engineers and sanitarians whom I have so often and so uncompromisingly to criticise, towards a fuller and finer technical because also vital, skill in the city's service. As they realise this they will in turn recover their leadership and surpass the still too imperfect endeavours of the school of Town Planning and of Civic Studies to which I belong and of which I too but imperfectly search out or apply the methods with openings to criticise in my turn. In such ways our present divergence may be succeeded by active co-operation and our professional differences and technical methods be reconciled towards multiplied and varied constructive results in every city and not least in Lahore." (Lahore, page 44).

"The world history of city development shows that this has only adequately taken place when the fertile union has occurred of a deeply civilised and well-skilled people, ideally minded too, with an/



an active individual leader, usually, therefore, their ruling prince, who has risen to the full height of his great position, with its comprehensive outlook and correspondingly wide appeal and who has thus led and organised his people towards the civic achievements of peace no less definitely as have others towards war. - The best later cities tell the same tale, on one side that of a community with artistic qualities and technical skill and with those deeper ideals, domestic, social and cultural, which the arts and above all architecture, are needed to express and without which art falls to mere luxury and over-decoration and social decline; then for such communities, the corresponding leadership, that of a prince rising from the comparatively simple and initial tasks of palace building, even to more temple building to city building. - For the ideal city can neither be built by prince alone nor by people alone, but by both together, since either alone is as an army without a general or a general without his army with him." (Patalia X).

"All these schemes for Bhatinda as for Patalia, or other cities anywhere, will be found to depend, not only on natural conditions or on general progress, or on the necessary finance or on state approval and patronage, though all these are necessary and are repeatedly emphasised above. They also depend upon the men responsible at each point in the general capacity and character and in particular, interest and skill for each development of this many-sided work and on the measure of interest, sympathy and practical co-operation accordingly, which they can arouse in others." (Patalia, 120).

#### b) The Planner Must be Action Orientated.

For Geddes, the individual planner has a duty to the community to pronounce upon the evils of the planning situation; he must have personal integrity of mind and clarity of mind and avoid over-concentration on details.

"We must distinguish between city surveys and city projects." (Lahore, 3).

"The survey and the proposed lay-out are unfortunately both being confused upon one sheet; hence, before entering into any criticism of these in detail, I venture to lay down as a general principle of clearness that an original survey should always be kept untouched as it comes from the surveyor's hands, this being his formal deposition and record of the facts as he found them upon the ground. It should never be used, as in this and other cases, as so much drawing paper for a proposed lay-out scheme. This principle should be strictly maintained and this just as clearly as is our accepted habit of keeping our books with receipts and payments in separate opposite pages; otherwise mistakes inevitably arise and these are superposed, both are blurred and confused with difficulty of understanding either the survey or the proposed scheme." (Lahore, 4).

"Here/

"Here, in fact, despite all the many differences between east and west, is the very same contrast as that with which I am familiar at home, which in the antique beauty of our simple homes and sacred buildings, which are the best elements of any historic town and the slum conditions which have in recent times largely invaded and immersed them, but instead of either vainly lamenting the past with the limitation of one type of mind, or harshly insisting upon the needs of progress, real or supposed with a yet commoner one, we may simply set to work. The conspicuous neglect and delapidation of the temple, well and neighbouring buildings alike, the fallen house, the miscellaneous rubbish and filth, may all be cleared away and this with moderate help, effort and outlay." (Balrampur, Town Planning in Balrampur, 36).

"Before leaving the subject of parks and open spaces, we would press the importance of making the most of the present possibilities of the city for the advent of the industrial movement must soon arise and of which the industrious commission is but one of the foremost indications. For, with this changing viewpoint it expresses and for the opening generation, far more than for our own, land values must inevitably arise, hence improvements comparatively easy and inexpensive now, will thus become more difficult later, perhaps even prohibitively costly and this just when they are most urgently needed. Now, in short, is the time and probably only a brief time for the enlightened foresight of the civic requirements of a greater Jubbulpore. Such foresight will be rewarded by the well-being and the gratitude of our successors. We all seek to provide for these individually, but the highest function of a municipal council, indeed of all forms of wise government, is to provide for them collectively also." (Town Planning in Jubbulpore, 9.)

### c) The Planner Must Concentrate upon Essentials.

he must select for the community the priorities which it must adopt. It is the planner's responsibility to make a careful review of all the possibilities inherent in the situation, both geographic and social, and to select the critical path which the community should follow to achieve the required results. A high order of value judgement after due consideration of all factual material and careful analysis, is of paramount importance.

"Our task has been to study this Trust plan throughout and upon the spot and to consider how far each of its local, as well as general solutions of the best possible in the circumstances and with this arises the question of how far these plans require or admit of improvement. For this purpose a method has been adopted which, though slow and laborious, is the only one reasonably sure, viz: that of considering each possible alternative and working it out on a fresh/

fresh plan. When, after such consideration, the result for any given spot or along any line, co-incides with the Trust plan, its proposals are thereby so far independently confirmed and when, as will also be seen to be the case, a different recommendation has to be made, the grounds on which this change is proposed will be clear to all concerned." (Barra Bazar Improvement, A Report to the Corporation of Calcutta, page 1).

"It is, therefore, necessary to prepare a further plan to indicate such measures of improvement as may be recommended for this opening generation; improvements compatible with the ultimate, even if not immediate, development of the new westerly business quarter, it also, whether or no, i.e., improvements in any case of practical value and permanent usefulness, both as regards communications and sanitation and so with such new thoroughfares as are most desirable and certainly quite enough to begin with." (Barra Bazar, page 2).

"After, in such ways, realising how little one really knows of Broach, and how its civic survey has as yet hardly begun, we return to the municipal office to set about making tracings from the town plan, quite inadequate as this is, upon which we may note down the first suggestions at least for such a civic survey. From the first of these tracings we endeavour to mark out the main communications, not only the leading thoroughfare routes and streets, but the railway and port, cart-stands too, etc., further questions arise, too numerous for consideration here; for example, why so little connection between railway and port? Is there not loss of time and labour in cartage accordingly? If so, is not improvement possible? If so, what, if not, why? what are the road systems, for access to port and to railway? what are the industries related to each of these and are not improvements in the interests of those desirable, for example, as of sidings for factories or of warehouses and quays? what of convenient situation for workers' dwellings in these neighbourhoods, and so on?" (Report on the Replanning of Six Towns in Bombay Presidency, page 10).

"There is a too common municipal caution and one which undeniably voices the depression of poverty of too large a proportion of each constituency which hesitates to undertake, sometimes even to consider, such improvements upon the grounds of their expense to the rates. By all means let us have the most careful and economic plans we can, but revise them before entering upon their execution from every standpoint of economy; but at the same time, let us be clear that of all possible waste, loss and extravagance, the very greatest and the very worst which can, does go on in Nagpur as in too many other cities and as death rates show in Indian cities generally, even more than in western ones, bad though these also may be, is the waste of human health and life. If a city be poor, all the more reason for decreasing this worse factor/

factor of poverty by abatement of the preventible diseases which decimated and which depress the **energies** and efficiency of the survivors and in a city with health statistics, on the whole so bad as those of Nagpur, it may confidently be affirmed that no increase of wealth, whether by industrial and economic development, or by aggrandisement, as a regional capital of administration or education can compare with this primary one of realising that the prime source and increase of a city's wealth lies in the city's health." (Town Planning in Nagpur, page 5).

"However, any further detailed criticism of this lay-out and the **standard plan** it follows and with this and in general account of town planning methods proper may be postponed to the question naturally asked me, what then do you propose? The answer is along the following plan. This it will be seen, sets out with the survey which has been verified upon the ground and brought up to date. It will be seen on this that the existing buildings are respective, the sacred marked yellow first of all, but the profane also marked red with kutcha-pukka, kutcha and ruinous, the existing roads, etc., as well. We see alike on the ground and on plan that the proposed thorough demolitions are not required; there is a saving of lakhs to begin with. What is desirable is primarily to develop the existing agricultural and other open land. The existing roads and lanes are the past product of practical life, its movement and experience, and observation and common sense alike show them to be in the right directions and, therefore, only needing improvements. Attention is paid to their entrances and to their crossing and due space is given to these, thus public convenience and safety are attended to and time will be saved; amenity is also given by the moderate planting and carefully selected position of trees, so that even without the expense of continuous avenues, verdure can be seen from almost every important point; moderate open space in which children can play and their elders take the air, are inexpensively provided; again a sharp contrast to the childless and desert aspect of the by-law plan, in this respect so peculiarly insanitary. Uniform breadth and depth of holdings to everyone throughout the entire quarter as is proposed in this by-law plan and still often imposed throughout India have been carried out to their extreme in Lancashire, where working people are herded together over dreary miles without a single better house, an open square or even a single tree. But the good old custom of India, like that of the cities of all civilised Europe before the by-law generation, has mingled rich and poor together and it should continue to do so, just as we are now again doing in British cities and in proportion as the by-law tradition, so hard to kill, becomes escape from. Hence, the suggested holdings of my alternative plans are of all sorts and sizes. They are spaced out beside one another according to my present, necessarily a best approximate, appreciation of the needs of the district and they are easily modified." (Town Planning in Lahore, page 8).

"Here/

"Here, in fact, is the point at which I may answer the Municipal Secretary's demand for an appreciation of the present drainage scheme, now so far advanced in progress. I do not, in any way, enter into its technical criticism; I shall, indeed, assume it to be the best of its kind as yet devised, but I frankly deny the policy which started upon such schemes without previous city survey and town planning and which decided to expend sums so vast upon this particular form of city improvement, however attractively presented, without consideration of the alternative possibilities of improvement and more immediate ones as in health returns, in wealth returns also and consequent increase of capacity of paying for drainage schemes if and when seen to be expediently undertaken. It is thus the whole perspective and way of looking at city improvement which is different, since for us the town consists of homes whose health and well-being is the prime object of municipal government and town planning alike. It is directly with and from these hopes that we should seek to begin and our methods should be those which take the line of least resistance, those indeed which are the most likely to win speedy, popular appreciation by their results as before long the people would give us both their moral and material support instead of their unwilling submission, their passive resistance, their active evasion, as is too commonly with every such drainage scheme in India." (Nagpur, 8).

"Town planning is supposed by many to be a new and special branch of engineering, by others of sanitation, by others again of building, or again of architecture, of gardening or other fine arts, but these differing opinions show that town planning and let us now use its greater name of city design, is not a new specialism added to existing ones, but that it is the returning co-ordination of them all towards civic well-being. It is the civic aspect and application of the higher and more general level of public and personal thinking which has long been here and there arising. Such more general thinking is now beginning to dominate the unorganised thought of the past and passing generation of specialists who have been so strong in details but so weak in co-ordinating these, that such scientific philosophy lies in details taken together as facts and factors of life, while the corresponding arts of life and particularly, therefore, city design, are co-ordinating them towards life more abundantly. It is the prime task of the city designer to find appropriate location of space and scope for the architects and this in all their capacities, all their specialisms of skill, as from palace and temple to railway station to factory and from huts to mansions. Similarly, he plans for the rural workers of the city and for those from their simplest vegetable gardens to fruit gardens, orange groves, mango and all the rest. Again he must plan from simplest playgrounds and air spaces, to pleasant and stately parks and to all the varied beauties of the botanic garden, innumerable trees of the arboretum, or even of the city's forest, so important in various European countries. There is here no separation between the detailed study of the town and its generalised survey and treatment. The fully efficient and economical development of communications requires at once a study of/

of traffic and a knowledge of the town and this not only street by street and lane by lane, but of the character of their houses also. It is with the design and the management of a city, as with those of a ship, the needful minute and thorough co-ordination of all details within the general design and the corresponding needs of successful management are all considered together and this in its building, as well as in its voyage; general thinking and direction are thus not opposed to specialised thinking and to detailed work. Whenever thought works clear these are seen to be complementary and mutually indispensable." (Town Planning Towards City Development, Report to the Durbar of Indore, 16).

"But this prospect must remain utopian so far as we fail to plan, to design and to initiate it as Eutopian, that is, no longer vague, everywhere an unrealised nowhere (Ou-topia) but definite regional and local, so making the best of each place in actual and possible fitness of beauty (Eutopia). Thus we may recover and make our choice between the contrasted meanings and destinies concealed by Sir Thomas More in the title of his immortal Utopia, but which too commonly has only the sarcastic half of its meaning understood, seldom its real and helpful one." (Indore, part II, page 14).

#### d) Sound Planning is Teamwork Under Direction.

It is the town planner's responsibility, according to Geddes, to correlate and subordinate specialisms to the overall requirements of planning. It is the planner himself who poses the questions for others to answer and the best minds must be utilised to provide the detailed answers to these questions. The resultant co-ordination of such skills should produce 'geotechnical' knowledge and can link centres of higher research to planning.

"Beyond conserving the traditions of learning and science, or even advance in these by regional research, the university has duties and possibilities of ever-extending usefulness to its city and region. And further, that by utilising these it may best train and develop the powers of its students and find useful outlets for them in many directions of public advantage. The cultural advantages of the university are thus not merely further diffused throughout the city, but its material activities are advanced as well." (Patalia, 26).

"How to arouse these energies is thus our problem; intellectually by a rationally schemed programme, large enough to wake an interest, even to stir imagination, yet also moderate enough to be realisable within a few years' effort with growing result accordingly and with some speedy results as promise of more. We have to mobilise skill and science towards remedies and towards fresh progress." (Report on Gallion, page 2).

"The proposed lay-out is thus of the very greatest town/

town planning, municipal and even historic interest and should be carefully preserved and for various reasons. First, as a warning to all concerned; secondly, as an example than which I have seen none more perfect of the by-law planning which not only survives in India amongst its belated sanitarians and engineers, but has even followed in their greatest schemes. This proposed plan gives a fair and even favourable example of back streets in Lancashire towns, the Black Country and elsewhere in England as they were laid down by sanitarians and engineers from about 1860 onwards up till 1890 and later, indeed, until the substantial abolition of all sub-standardised semi-slums by the Town Planning Act of 1910. This method had, in fact, reached its maximum at the beginning of the present generation, when the present heads of sanitation and engineering and public works, etc., in India were being trained at home as young men and it has thus been by them extensively introduced into India and now that they have reached, in the course of years, the senior positions such as planning as imposed by governments and practised by municipal authorities who can but accept what their specialists, both sanitary and engineers, have alike concurred in giving them as the best, because the only method they have learnt." (Lahore, 5-6).

"The engineers and sanitarians in India, as I have already in these pages and also constantly elsewhere, irritatingly to remind them, are wont to work out their schemes, not only with insufficiently strict economy, but without thought of their results and beauty and constant lapse accordingly into ugliness, while architects, gardeners too, often lay themselves open to the corresponding reproach of working out their designs as specialists also and with too little economy, and leaving sanitarians and engineers to make what they can of them afterwards. Here, however, is a definite example of and test case for, the co-operative and synthetic school of town planning here represented, for the plan meets the engineering and sanitary requirements and at the same time there is a civic dignity and beauty and all with the utmost possible economy, that of excavation at the nearest possible point and earth transport minimised accordingly. I must, therefore, seriously plead for, as I submit I may reasonably claim, the favourable consideration of all concerned in this matter, from this manifold yet unified point of view, that of engineering and sanitation, with the economy and with beauty, like health, not as a result of any separate and distinct outlays, but without these at all, as the normal product. The mechanical division of labour has well nigh alone had all the able exponents since the Industrial Revolution with its would be utilitarian political economy and philosophy, but this is now becoming seen as having been extravagant and wasteful to cities and their populations, beyond all previous luxury records and futitarian beyond all previous views of humanity and life, in fact, as the poorest and furthest from life of all recorded mythologies. Yet, like every powerful system, this dies hard and/

and the philosophy and practice expressed here, that of the vital concentration of labour bringing all its mechanical divisions into the service of life and the life of the community, even before that of the individual, has still many prejudices to overcome. It can convince and convert either the public or the professions, trained as these have been in mechanical division of labour and its ideas alone." (Balrampur, 50/51).

"The sanitary engineer has hitherto been in unquestioned authority since this is confirmed by the support of the medical sanitarian and thus has been doubly convincing to government and municipal authorities who are unable to withstand this **consensus** of specialist opinion and so are merely left the problem, often **difficult**, of financing the largest amounts required, not to speak of excess upon them. It is thus not without hesitation, indeed at first with general incredulity or worse, that the recent revival of town planning has been received and by all these groups, the technical and the responsible alike; for now we town planners, though usually unspecialised in engineering, less learned in medicine and necessarily with very little experience and administration of municipal government, venture to propose profoundly different methods from the customary ones, alike of looking at cities and dealing with them. To explain these methods in detail would exceed the compass of this or any report, but brief indications may be given. For us the problem is not simply as for municipalities and their engineers, today the removal of **sewerage** or tomorrow the supply of water, at one time the removal of congestion or supply of communications and at some other, the problems of housing or again of suburban extension. Our problem is to make the best of all these specialisms and their advocates. It is like that of the old-fashioned family doctors who sent their patients to dentists or oculists as may be required, yet still more like that of the modern consulting physicians whose general knowledge of the processes of health and disease re-interpret the specialist's view of the problem and may thus modify his treatment, or even change it all together. Again, our attitude differs from that of the specialist intent upon perfection in his own department whatever be the outlays, whether the delays to others accordingly, it is rather that of the housewife, the agriculturalist or the steward who has to make the best of a limited budget and not sacrifice resources enough for general well-being to the elaboration of a single improvement." (Balrampur, 2/3).

"This large scale handling of Cawnpore, the congestion of the old city and its extension alike will be accomplished, not as at present conceived, by the mere increase of taxation aided by doles from government and thus essentially at the expense of agricultural interests, but the better mobilisation and application of regional and civic resources and activities of agriculture and industry, of manufacture, transport and commerce. The town planning of Cawnpore thus demands, not/



not only a geographic and economic survey, but a geotechnic mastery to correspond. But even with this we might but have multiplied the people but not increased the joy; for this the city healthy, the city beautiful, the city in a measure rural, are all required and more. For city design a higher vision is needed than any of these and it is no mere Hebraic memory, but a generalisation as broad as the world, as old as history, that without this the people perish. Without something of this vision the expert town planner, engineer and architect, sanitarian and educationalist, geographer and economist, administrator and statesman with him, but fail more elaborately than can the amateur, as great schemes from Chicago and Berlin downwards in magnitude are bound to show." (Cawnpore, Report to the Cawnpore Expansion Committee, page 14.)

#### e) The Planner - The Attitude to Environmental Planning-

The culmination of the work of the planner is to be found in the preparation of a master planning scheme for the long term developments of town or region. Town and the region become linked together in an organic unit through regional planning and the various components of the urban place are likewise fused together through organic urban planning. The intellectual approach to the environment which must be adopted by the planner, is one which treats no separation of the components of environment, place, work and folk. Geddes appears to be asking for an attitude of mind which combines all elements of the behavioural and the phenomenal environment into one single, comprehensive approach. Throughout the Indian Reports there appear to be a number of factors essential to this attitude of mind. These components appear far too frequently for them to be chance observations. The basic element is the use of a scientific methodology, a rigorous discipline achieved through the impersonalisation of the analysis stage of planning. This is achieved through following clear precepts relating to survey, analysis and the synthesis. The survey of place appears to have clearly defined scientific objectives, a precise methodological content through which induction and deduction are combined. The recurring emphasis in Geddes's Indian work on the/

the importance and discipline of survey is a clear indication that this stage of the planning operation makes planning a "science" per se. The two other essential components which emerge from a study of Geddes's work relate to the nature of society itself. Geddes is aware that the preparation and implementation of a plan will produce an alteration in the existing environmental patterns. Fundamental items in the "naturally developed environment" include those economic forces which are generated through the demands of business and which become expressed in the creation of hierarchies of function. These are complemented by the demands made by individual persons to satisfy their basic wants - food, shelter, clothing, contact, which become expressed in the creation of a different form of hierarchy, that of social links. In Geddesian planning it appears fundamental that the individual planner must understand the mechanisms of these two essential components of life. He must, at first, possess a basic knowledge of the essential linkages which take place in the exercise of economic functions. He will then be in a position to utilise these economic forces and divert them towards planning ends. He must never destroy them. The corollary is a sympathetic approach to the problems of people and Geddes lays considerable stress on an organic attitude to the social milieu. The start and ending point of all planning must be the requirements of people and the satisfaction of their needs.

### 1) The Survey - The Objectives

"The ordinary description of a city, in this case Cawnpore, such as that given in the Gazetteer of India or in the best guide books, has thus to be expanded into a series and well illustrated city survey by the collaboration of the geographer and the historian, the economist and the statistician, the hygienist, the engineer, etc. All these facts have to be summarised and generalised, this with graphic presentment as far as may be. From these generalisation there arises a fuller and clearer view of the city's life than heretofore discerned since, with its advantages and qualities, its limitations and defects, are also more clearly seen and stated and all this forcibly enough to arouse both the city's pride and shame and so to stimulate its corresponding hopes to arouse and clarify these towards appropriate lines of action, here/

here remedial, there constructive and so in both ways lead toward city improvement and progress. With this extending survey, this ever clear vision and understanding of the city, the extension committee and the town planner will gradually form a more and more competent estimate of the city's opening future, economic and general. With this the planner works his way through toil and error towards adequacy, lucidity and economy of design. He thus progresses with sketches and drafts beyond number (analogous too, though from the first, less rude than that which has been above so severely animadverted upon) towards a town planning scheme proper, but even this is but in draft; as many sheets have now to be exhibited to all concerned and to obtain criticism from all their points of view. Only when provided with the many and various criticisms and suggestions thus elicited, here rebutting and rejecting, there adopting or adjusting, can planner or committee feel satisfied that their plans are really meeting the conditions of the city and providing for its growing requirement in all directions, within new limitation in none." (Report to Cawnpore Expansion Committee, page 12).

"For such city planning then, we need to see and keep in view the whole city, old and new alike and this in all its aspects and at all levels, from narrow lanes and urban dwellings the transition to better lanes, to streets small and great and to buildings of more and more importance and architectural beauty, all these peculiarly in an Indian city, form an inseparably interwoven growth. As this point of view is realised, the city plan becomes seen as no one network of thoroughfares nor massing of blocks, but as a great chess board with its manifold game of life in active progress. As an old student and votary of the game, I am privileged here or there to suggest certain moves, but any skill I may have, any success I may hope, must lie within its rules as I understand them. I must, therefore, survey each situation as it has arisen and ignore none of its difficulties, not evade them by making a clean sweep and starting a new in which I may express my own methods. My problem is towards improving the situation by turning its very difficulties into opportunities, as far as may be. Results thus obtained are at once more economical and more interesting, even aesthetically, than would have arisen from any mere clearance of the board with new setting of the pieces. - The town planning method starts in the opposite way; it first seeks to unravel the old city's labyrinth and discern how this has grown up, though this, like all organic growths, may at first seem confused to our modern eyes, so long trained to a kind of order, which is but mechanical order; a higher form of order, that of life in development, gradually becomes discerned. This is, in fact, the method of all the evolutionary sciences, their study of all things as developments from simple beginnings." (Town Planning, Kapurthala, pages 3-4).

"Every section of the following report has been prepared in courses of detailed and usually repeated survey and study upon the/

the ground more than in the office. The latter of the observations made in the field, the modifications suggested, or the fresh schemes devised, have been set down on plans and tested to scale, criticised, and this from many points of view and consequently improved or altered. Thereafter they have been tested in the field again and with further good result and improvements and economies in detail, before final preparation of sketches for the draftsmen in the office. - With a clearly coloured survey the labyrinth becomes seen as a sort of chess-board, still elaborate, no doubt, but upon which the various alternative moves may be patiently worked out." (Lucknow, Introduction, columns 1 and 2).

"The survey and the proposed lay-out are, unfortunately, both confused on one sheet, hence before entering into any criticism of these in detail, I venture to lay down, as a general principle of clearness, that an original survey should always be kept untouched as it comes from the surveyor's hands, this being his formal deposition and record of the facts as he found them upon the ground. It should never be used, as in this and other cases, as so much drawing paper for a proposed lay-out scheme. This principle should be strictly maintained and this just as clearly as is our accepted habit of keeping our books with the receipts and payments, <sup>on</sup> separate, opposite pages, otherwise mistakes almost inevitably arise and these are superposed, both are blurred and confused with the difficulty of understanding either the survey or the proposed scheme." (Lahore, pag 3-4).

"For obtaining any real grasp of a town, of its geography and its history, of its qualities and its defects, there is no method which can compare from that of studying it as a gradual growth, as a historically expanding and complicating development and so of understanding its qualities and defects, its mingled pulsations of progress and of deterioration. This method too has a notable advantage in freshening interest and renewing observation among the town residents themselves, for these are generally more familiar with its everyday aspect than with its history and are apt to think of that as something past and done with, as put away in records, instead of as the momentum and the inertia resulting from the past as the heredity also." (Balrampur, page 35).

"The matter, as seems constantly forgotten, is one of real places and better plans for them. After a couple of days' labour upon these and some subsequent reflection and revisal, I am compelled to say that not only much of this correspondence, with the enormous amount of labour at both ends which it expresses, might have been saved, but also years of delays with anxiety to the people before eviction and overcrowding and the deterioration afterwards, bad results not only to homes and families but to the general business and prosperity of the town. No sharper instance can be given of the costly evils which the orderly procedure of town planning, happily everywhere incipient, may henceforth avoid, as its conservative and its constructive science become realised and kept/

kept in view together. - Busy men may and do say that they have no time for such preliminaries, but they will find these preliminaries to be essential moves of the game as they have long been failing successfully to play. Let them at any rate, look at the ordinary plan of the town as it stands and read what it conveys - its clues will nonetheless, before long, help him to thread his way through his planless maze, bringing order into that confusion of insufficiently related details, which at present weighs down his business into overwork and himself into drudgery." (Town Planning in Coimbatore, pages 71-72).

"For such studies of town development Dacca, as even its rough maps show, affords a fascinating field and the preparation of the relief model of the city of Dacca (say by the Geographical Department of the University) will disclose its history far more intimately than can its records and traditions. Those in the interests of this line of research, mainly geographic, the engineer and the sanitarian, need it above all, indeed, without this geographic survey of cities and the complementary social survey also, they cannot escape from their present stage of well-intentioned experiments, each costly and inadequate, when all is done. The town planning movement is on this side, a revolt of the peasant and the gardener as on the other, of the citizens and these united by the geographer from their domination by the engineer. Only when the mechanical energies of the engineer are brought into line with all other aspects of the city and these re-united in the service of life, can we change from blundering giants into helpful Hercules, and then with sanitarian labours indeed and with economy and well-being together, health and beauty as well, does this criticism appear lacking in definiteness. More precisely then, it results from any comparative study of town plans and is a main feature of the Cities and Town Planning Exhibition, that it demonstrates for city after city and alike in Europe and in India, that from the thousands of millions, the lakhs and crores there or here, expended on city engineering, draining and other effects of sanitation, far better results could have been and are now being achieved, wherever town study and town planning are first newly taken into consideration." (Report to Dacca Municipality, pages 3-4).

#### ii) Survey - The Components

The adequacy of the statistical base:-

"The treatment of population as statistics lacks fullness and clearness and upon the rates of increase suggested by past census returns, are based the estimate of acreage desired for future extension, but as will be, there seems, statements do not clearly correspond. It lies with the compilers of the report to give their statistics with greater clearness and I venture to ask, graphic expression, yet when this is done we have not here the sufficient basis for an estimate of Cawnpore's future. For that a serious economic business enquiry is needed as notably in correspondence with the Industries Commission and with a view/

view to post-war conditions. These enquiries are most important and to leave these out and to depend merely on old census returns, even if more clearly presented and reasoned, renders the forecasts and estimates of population and resultant acreage required of little value or guidance, in fact, in my judgement, totally inadequate for the purpose." (Cawnpore, page 2).

#### An eye for topography:-

"I now come to the question of planning out the needed dwellings and other elements of Kanchrapara town, but on the outset since my plan, though out upon the field and only elaborated in the office, has a very different and much less regular formal aspect than the office designed plans of this, or indeed any other railway town. I must make clear its principles of order and regularity and justify it beyond the apparent regularity which it abandons. Alike, from the very principle and purpose of general railway construction, as well as that of office work, with board and ruling instruments, the engineer thinks and draws in terms of the line and this as straight as may be, as level also. But the town planner, while naturally also desiring his road to be as direct, his gradients as moderate, his streets as regular and orderly as may be has, notwithstanding, essentially to think not in lines upon the earth's surface but in terms of its plains, its varied relief." (Report on the Model Colony at Kanchrapara, page 4).

"As an example of this further study we may now note the three Nullas which unite south of Juni Indore. These may, in the past have had a defensive value, may thus account for the apparent non-existence of a rampart in this quarter. Beyond the Nulla and between its component streams are settlements of Balais, and Mangs and these and not merely the large Mohammedan graveyard on their east, have mainly prevented and still prevent the southward expansion of Juni Indore. Similarly, the Chamar Mohalla on the main road south-east has checked expansion of this direction and the signs of all congestion in Juni Indore are thus largely explained. When we come to the planning we shall obviously have to take note of this arrest of expansion and deal with its factors accordingly. So much for an example of the need of neglecting no details, whether of local topography of the humblest elements of the population." (Town Planning Towards City Development - The Report, the Durbar of Indore, part 1, page 4).

#### Structure, Morphology and History:-

"So much then for city survey towards town planning. Our large scale map of Kapurthala is thus the shrunken picture of the city we have to explore and next is the chess board on which we have to work out the needed moves of change. We begin then, by looking, not for the latest but the earliest Kapurthala, where and what was that. I freely confess at the very outset of this enquiry that I know nothing of the city's written records nor of its oral tradition, yet from these few days of/

of peregrination and map study, I venture to submit the following readings of its present labyrinth as a fairly gradual and progressive growth. This is open to the criticism of historians and annalists and I trust, with correction and improvement, in detail accordingly. - It needs, however, no written records to satisfy us that the city as we now see it must have arisen with the beginning of the old palace, but this not primarily as a palace, but as a castle from which, by successive extension of the palace has grown and with it the old town as well. The court which stands upon the highest point of palace and town alike, though now the third from the present entrance, is plainly the first which would arise. Indeed, it probably was not at first of its present area. Its north-west section seems to have been erected to begin with and its associated dwellings which spread outwards early and towards the east; castle and town, here as everywhere, would group up together. The original hill fort may at least, at times, have included the whole population, but soon the Raja's household and his garrison would suffice to fill the fort and the town would then grow up with the bazaar outside the castle gate. In this case, pretty plainly and for reasons most obviously as of shade, slope and safety, the little town's growth was to the northwards and it was separated from the castle by the military road, the present north castle street, as I may call it in western terms; as the original town seems to this day, indicated upon the map by the north and south lanes running from this street to another fairly parallel to it and this whole block is so nearly square as to suggest that it possibly too was grouped for the defence which its nearly continuous walls would supply. . . . . On the accompanying plan I, therefore, colour with a deep red tint, this town block and the proportion of the castle facing it, though probably this was a more gradual growth, as its present buildings are of much more recent date than the north-west walls may indicate, but I know not to what extent these may have been rebuilt. . . . . So far then, our general survey of the old town. What results have we obtained from this unconventional beginning, this enquiry into its historic development? The result is expressed in the accompanying plan which is tinted so as approximately to indicate the successive pulses of growth by which the first Kapurthala has grown into its present form. Of course, our deliniation of these as five distinct rings is necessarily too sharp. It is of the nature of a diagram rather than an exact recovery of past history, yet it will serve not only to arouse criticism, but furnish an outline for correction by those who know the city and its history better than I do. For the present, it serves also to bring vividly before the eye the conception of the city as a progressive yet periodic growth, for these rings recall those by which the age and annual growth are recorded in a tree. Into these rings of growth the alterations and improvements of the past have cut, often deeply, so must we once more. Still, our change will be/

be more economical and will achieve a better and more harmonious result than if we had come to work without acquiring this appreciation of the old city as an organic growth and one still living, in which the health of every part cannot but react throughout the whole, city health, city wealth and city improvement, these all progress best together. Finally, with this conception of the city's growth, this civil station is better itself to be understood, not as a separate and independent creation of a new generation, sharply breaking with its ancestral past and leaving this to decline and decay, but as a latest, largest and most vigorous ring of growth itself, best flourishing as in organic continuity and unity with the older whole which it extends, frames and completes. It is the defect of too many Indian cities at present to miss this unity, even to ignore it and thus both elements, the old and the new, deteriorate in their isolation from one another. May not this be the opportunity in Kapurthala to work out the vital correlation of the two?" (Kapurthala, pages 5-8).

"For the understanding of Broach, we have to start with its high old town, a long and narrow ridge parallel to the river Narbada, sloping steeply towards it on the south and towards a spreading modern town on west, north and east and upon an extensive clearance at its west end, presumably of the antique citadel, stand various public buildings with clock tower, school and hospital, all with commanding views of the city, river and plain. - No adequate map of the town as a whole exists. A single copy of a very poor tracing and this on a quite inadequately small scale, is apparently all that even the Municipality itself possesses. Everything seems done piecemeal upon the detached section of the large revenue map of the city, now a generation old and yet never brought up to date. These sectional plans cannot be intelligently identified upon the general map aforesaid. They are very puzzling to relate to each other and no-one as yet has taken the trouble to paste them together. No wonder then, that we find houses seemingly demolished almost at random, new streets being cut, not from one important centre to another in the ordinary way, but even from precipice towards precipice; in short, without due relation to main thoroughfares and hence, with no adequate gain to communications accordingly. To unite these fragmentary plans into larger ones, and to hang a completed city map upon the wall of the council chamber, is the sublime necessity for economy in detailed improvements and in general town planning alike and to bring the whole up to date is the second requirement, no less pressing." (Towns in Bombay Presidency, Broach, page 5).

#### Population and Social Area Analysis: -

"Before meeting the Chairman and officers of the Municipality for the discussion of their problem, we arranged to have a quiet morning for an independent, preliminary survey of the town, yet this not simply by motoring slowly and observantly, of course, to and fro through the town's network, that also is an instructive way of beginning, empiric though it be, for here two or three questions especially suggested themselves from the first, requiring two essential/.



essential points of view, report and of country; for this is a centre of export, that is a point where maritime and agricultural populations and activities meet and co-operate and this, as in most such mercantile communities, essentially under the domination of the former. Here then is the explanation of the value and attractiveness of this situation to the Dutch. - On account of the absence of a true port which Cocanada shares with nearly all the other Madras towns, the fishermen become lightermen and thus tend to attain normally to conditions of increased responsibility, importance and well-being. How far is this reflected and expressed in their housing and if little, why? To these questions, not that I am not so clearly formulated, we reach no sufficient clear replies. The next question, what of the Dutch, with their housing and town planning, is more easily answered by the inspection of the inner port, if we may so style the canal quays and the old town of Jagannathapuram with its formal and spacious lay-out, its few dignified old bungalows. Here again an antiquarian enquiry would be needed if later allowed, ranging from old house interiors, scraps of old furniture in bazaar or in home and again to all business offices and their traditions; if not here, then partly in old Indian archives and above all between official records and family traditions. - Beyond these academic viewpoints of history, general or local, these considered as a record of the dead, comes the vital questioning of history, that of elucidating the factors which explain the present situation and conditioning of the living. As the old Dutch influence has survived, even in New York, and in this in many ways, even from social leadership like that of old families to national leadership like Theodore Roosevelt, may we not expect to find something of it here in a quiet and comparatively little altered town, especially since the Dutch Company only relinquished its authority in the time of our grandfathers. What then will its qualities and its defects and how far have each of these interacted or combined with those of others, first of Indian fishermen and peasant and then with our own as their successors and ours again with the fishermen folk and peasant aforesaid. Our historic enquiries into records of fact have thus passed into new enquiries, even into the social psychology of the town in the present. - But for even the formulation of such questions we cannot wait, for we have still to see the agricultural village, the nearest that may be yet sufficiently outside the town and distant from it to escape urban modification. It thus shows us the simple and original social texture which no town can ever spin or weave, but which it so easily and commonly wears down and this to rags." (Report on Towns in the Madras Presidency, Cocanada, page 1).

"Place, work and people are thus scrutinised anew and these separately with the help of the geographer, the economist, the anthropologist and the historian too, who have long been in the field, each with his separate aspect, but these separate studies now here combine. Place admittedly determines and limits work, hence place work, geographical and economic, less accurately called economic geography; it also, so far, conditions people as place folk, as natives or as neighbours, but work also conditions the work place, fields in the country, workshop, factory, shop, office,/"

office, etc., or in the town; work too in its divisions of labour into occupations produces as many different kinds of work folk and these with their distinctive division again as directive and executive, masters and workmen, capitalist and labourers. The people also react on place; the folk place is the home and as these settle in their distinctive occupations we have there folk work, which has been so great a factor in the establishment of caste, a world phenomenon, though India affords its most crystallised example. These formally separate studies, geographical, economic and anthropological, are thus woven and with their history, into one, as a beginning of the comprehensive science of sociology and with its applications in particular places and cases as civics. This is but their simplest presentment, their introductory outline, yet enough here to indicate the needed comprehensiveness of every social survey. Of such surveys the census is a good beginning; its an early form and too much stereotyped by bureaucratic tradition upon its first beginnings. Our surveys, however, have only become increasingly historic as well as actual; they have to be psychological also. The other is compelled to observe and consider the whole community, the whole region and city we are enquiring into, as far as may be in terms of their deeper and inner life tradition. This inner life is at once emotional, intellectual and imaginative and in various forms with their corresponding expression in religion, education and art; these have come through history to be very variously mingled in every city. - A long separation between the two schools and methods of investigation, one insisting essentially on the material aspects and factors of every human society and the other upon its spiritual factors and their outcomes, thus gives place to a more intensive study of both sets of factors and these are found to be leads to complement the other. Only thus, with all these factors together, can we begin to understand the community and its various sections and as a whole. We are now learning to understand its distinctive groups and their customs, and laws, their morals and manners and thus to appreciate the various institutions which regulate these, which conduct its affairs, which guide its achievements and which thus, forever modifying or restraining its change by their controlling influence over people, work and place alike. It is now evident that the aspects and styles of city building, private as well as public, are thus determined by this whole preceding complex of factors and so are the various forms of the conduct of life. To know and appreciate each and all the vital elements in the distinctive social groupings which make up this complex social situation of our city and to strengthen these by such fresh adaptations as may be, is already desired by all men of goodwill, but it is the task of social science to survey these more clearly and thus prepare the way towards a fuller co-operation of these vital elements and as constructive factors towards what ends, the furtherance and enhancement of all that is best in the life of the community and its members, now seen no longer/

longer as mere struggling individuals of past economic theory, but as socians of an advancing society, citizens of no mean city." (Patalia, 22-23).

#### Beginnings of City Survey: -

"After first grasping by repeated perambulations, the general topography of the city, we endeavoured to prepare graphics of its population density; but as the statistics available referred mainly to wards rather than to smaller and more natural areas, these graphics are necessarily imperfect and even misleading at many points. We plead for the gradual correlation, upon a large map, of the condition and density of population in all its actual definite localities, its traditional civic units, irrespective of ward boundaries. The scale of colour which we have adopted and which we apply as far as may be and recommend for all cities, is the convenient one of the spectrum using red always for the lowest figures and increasing through orange, yellow, green to blue and purple for increasing numbers. This method of colouration also brings out a great deal of the real wellbeing of the population, though by no means entirely so. A thinly populated area may be poor or rich, yet each would be coloured red; it is possible, however, to distinguish these two areas by dotting the richer areas, or surrounding them with red line. The next intermediary, or orange area, may be similarly distinguished, for rich and poor and similarly the yellow one. The green area may be reserved for mostly poor, but still decently housed population, or the blue may be reserved for congested areas and the purple for areas very congested, in each case wealth and poverty being distinguished by dotting, as far as may be. The mode of localising the real distribution of population upon a map without ward boundaries will be found far more helpful to definite city improvement, that can be any average in the wards. It is, of course, more difficult to apply this method of abandonment of ward averages to death rates, etc., where these are recorded ward by ward, but it is not impossible to make some approximation to the actual localities which would, in any case, be better than the ward average. The location of occupation similarly deserves mapping in detail and yet it yields interesting results with guidance against possible undue shifting of industries yet also suggestions for these when desirable or necessary. Another map should be devoted to the location of Hindu, Mohammedan and Christian communities, definitely using a characteristic green for the Moslem, a yellow for Hindu and red for Christian, with deeper tones of the same colours upon their sacred buildings, graveyards, etc. Upon this topography, this population and grouping of occupations, another map follows, that of values in different areas, from lowest in red to highest in purple, or if need be, some yet deeper tone, conveniently shaded or continuously black, for the very highest. The variations of these are peculiarly striking in Nagpur and they have much helped us in understanding the city and its requirements and have been suggestive of modes of treating them, for it cannot be too clearly understood/

understood that the main problem of the town planner is to increase the valuation of the city and this especially by devising how to bring up areas of low value nearer to higher ones. Thus, the operation and changes he suggests tend to pay for themselves, maybe several or even many times over and we hope that something of this may before very long, be found to be the case in Nagpur. Yet, before entering upon the detailed planning of the town a very thorough study should be given to its every disadvantage and of these, in India especially, the primary disadvantage is the heavy death rate. This death rate requires to be noted as usual, i.e., upon the coloured scheme and this not only for given years, but for averages throughout decades." (Nagpur, 1-2).

"Nor do the requirements of such a survey end here. Dacca has peculiarly natural divisions to which the wards should be corrected. As a broad suggestion of this, I have indicated on the accompanying sketch map these divisions. These tolerably natural divisions should each become the subject of close and thorough survey, even house by house upon the large-scale plans. The amount of labour is, after all, not so great - it arouses interest as it proceeds and this will be found to deepen as its results appear. Hence each line of city survey goes further year by year until, for instance, the health officer has his card catalogue record of houses, kept as clearly as the **Casier Sanitaire** of his colleague in Paris. Nay even by and by more fully. Every patient in the hospital has nowadays his temperature chart and before long every house in every city will be having its sanitary level similarly geographically inscribed and the reading of this hygeometer will increasingly affect the value of the dwelling and even the status of its inhabitants in the opinion of their neighbours. By and by it will be demanded by purchaser or mortgagee as naturally as he now assures himself of the title. Long before this domestic stage is fully reached, indeed almost from the outset of the survey, these local maps and their general and comparative hygeometry may be made the basis of local improvement and the next of healthy rivalry in these. The prevalent apathy of which, in each city, the town planner hears and sees so much, is in this way successfully stirred, at least enough to arouse and invigorate a small minority and this in town planning as in other social matters, may be sufficient to popularise and to carry out whatever they resolutely enough will. Is it feared that such localised survey and improvement may obscure the main interests of the town? On the contrary, the main interest - thereby more and more appear, thus the access to railway stations, to markets, schools, courts, etc., to kahle or to river and so on, become better realised as systems upon which the parts depend, like leaves upon their stem - similarly, as regards hygiene and so on. In a word the civil survey harmonises local with general improvement and thus arouses and strengthens civic spirit." (Dacca, pages 5-6).

Survey/

## Survey, the Presentation:-

"The presentation should be comparative. It is important, however, to realise that this, despite the length of the preceding report, that the variety of town planning topics it discusses, the main question for Cocanada, as with general town plan and designed with special reference to its essential reason of existence and possibilities of development as a port and commercial city, has not been entered upon. For attempting this a mere flying visit, such as the present, does not suffice. The problem is, however, ripe for treatment and should be tackled and this before the approaching railway developments which the recent purchases of land indicate, have taken form. No source of city deterioration during the past two generations has been more serious than railway planning, without relation to other aspects of the cities concerned. One is well aware while writing thus of the superior attitude with which its Utopian hopes are still too commonly received and this in east and west alike, that the answer to this superior attitude in the western mind is often a simple one. Its cause is the pessimism and cinicism and trivialism which have followed the laps of the great waves of hope which cannot drive the history of the nineteenth century. - Sociology and the psychology of the mental depression of India cannot be entered upon here. Enough is the following definite and threefold practical reply be given to anyone, Indian or European alike, who thinks these hopes of our town planning movement unpractical and Utopian, viz: that a substantial city uplift is (a) definitely realisable in health and wealth and in happiness, by method such as are here advocated and broadly grouped as town planning and (b) is even now in many cities approaching realisation. While to the critic the writer may seem fervoured with hope, though he knows his temperature to be but normal, the preceding historical diagnosis has brought us to the proposition (c) that it is the critic who is suffering from depression and chill, in fact, from a real and contagious form of neurosthenia; it is he who has fallen below that normal temperature of human life and energy which is characterised by hope and purpose, purpose of worthy civic endeavours increasingly skillful and hope of a scientific faith in their proportionate success. The second reply is afforded by comparison with other cities; what still seems Utopian in the backward town, say the making of the garden suburb, mingled repair and rebuilding of a poor and insanitary neighbourhood, the repaired monument, the renewed and beautified tank and so on, are even now, each and all, being realised in many towns elsewhere and if a definite instance be asked for, let any sceptic in Nagpur come on a short visit to Lucknow, for there he will see each and all of these renewals and more in operation and this after a disaster, the destruction last year, of twenty thousand houses by flood and rain-burst fully comparable to a modern bombardment, for this disaster has/

has roused the best feelings amongst the citizens and their municipal and governmental rulers alike, consequently, has released in them, their natural constructive energies, their vigorous directive powers, hitherto inhibited by the current depression. In every city then and not least in Nagpur, such energies are lying latent but waiting to leap out into effective action at the call of civic need." (Nagpur, pages 5-6).

#### The Range of Maps:-

"Adequate town planning should be preceded by a city survey similar to those exhibited and insisted on in recent Cities and Town Planning Exhibition at Calcutta, and which is its best service to the initiating amongst Indian cities. The sheets of such a survey, as completed, should be hung on the walls of the council chamber and the offices of the Municipal Secretary and Engineer, the Public Health Officer, the Medical School and Hospital. A duplicate should be provided for the Commissioner, Collector, etc., and for the Municipal Department of Central Government. Of such survey plans, the following are specially desirable:-

1. General topography, showing roads, streets and lanes, variation in levels, kahls with their ramifications, tanks, swamps, etc.
2. (a) Areas occupied by government, e.g., offices, courts, jails, police barracks and schools;  
(b) areas occupied by the municipality, e.g., offices, markets, conservancy, depots, etc.;;  
(c) areas occupied by education buildings and mission premises, etc.;
3. (a) Characteristic Moslem and Hindu quarters, with their respective mosques and temples, with intermediate  
(b) mixed populations;  
(c) low caste, mehtars, etc.
4. Wellbeing and overcrowding of wards and minor quarters.
5. (a) Degrees of sanitation or insanitation, determined by above; population of wells, cattle keeping, etc;  
(b) conservancy, e.g., privies accessible and inaccessible;  
(c) unhealthy industries.
6. Water supply, central and throughout the city.
7. Drainage, the actual be proposed, including successive alternatives.
8. Death rates, with an analysis of these, each in its own map, e.g., infant mortality, tuberculosis, dirt disease, enteric, etc., malaria, plague if any, etc.
9. Police, with indication of offences.
10. Open spaces, boulevards, playgrounds and gardens, parks, etc., wasteland.
11. Average local values, low to high." (Dacca, page 5).

Plan/

Plan should be Concerned with Specific Items:-

"For clarity's sake it is necessary that only one subject be dealt with in each plan. Thus, occupations and their localisation may be made intelligible, and diseases again have their own survey and of this one sheet for tuberculosis, embodying the return of the last three years, kindly prepared by Dr. Arora and labelled by me, is shown as a convenient example. By help of such plans the public health committee will thus naturally acquire much more precise ideas of the health of its constituents than is possible at present and also diffuse its knowledge more successfully. In connection with health, the urgent and pressing need of open spaces in crowded quarters as suggested on another plan, is strikingly justified. Another plan begins to indicate the religious topography of Lahore, with its temples, mosques, tombs and processional ways." (Lahore, page 3).

Plan should be supported by Models:-

"An enquiry may here be made of possible suggestiveness. At the British Association Meeting in Liverpool, in 1896, there was exhibited a working model of Mersey Basin and its sand banks. In this, the sandbanks were actually shown in process of being modelled by waters in their various states of tide and flood and this with startling faithfulness to the charge exhibited above the model. If this can be done for the Mersey, may not a similar, though larger model be constructed, even for the Bengal River system or for experimental study of its local variations? Would not this throw fresh light on all the problems of the regional geography and be invaluable not only to students, but to practical investigators of its requirements. - Minor models to various scales, as of Dacca and its kahls, or the river area as far as Narayanganj inclusive, may doubtless, at first, be easier of accomplishment and these would have their obvious local uses." (Dacca, page 1-2, also suggested for Colombo, Town Planning in Colombo, pages 23-26)

Photographs add to the Data Bank:-

"Even the beginnings of the city survey will recommend themselves to every member of Council who can find a little time to consider them. No doubt the carrying of each plan into fuller detail involves labour, but not necessarily any great expense. Given the capable town planning officer, he will gradually utilise suggestions and help from all sources and thus, in two or three years, the council will be in possession of a body of clear and easily digested knowledge of its city, which is at present beyond the reach of even the most experienced inhabitant. The photographic survey now begun should also be kept in progress." (Lucknow, P. 3)

Results of Survey:-

a) Technique,

"With this extending survey, this ever clear vision and understanding of the city, the Extension Committee and their town planner will gradually form a more and more competent estimate of the city's opening future, economic and general. With this the planner/

planner works his way through trial and error towards adequacy, lucidity and economy of design. He thus progresses with sketches and drafts beyond number, analogous too, though from the first less rude than that which has been above so severely animadverted upon, towards a town planning scheme proper." (Cawnpore, page 12).

"Town planning methods start by trying to unravel the city's labyrinth and discern how this has grown up. This organic growth may at first seem confused to our modern eyes. - The superposing of maps allows for a general comprehension of the actual and possible environment. We may see the possibilities of improving the general agriculture, from which its resources are drawn, or developing its neighbourhood, not so much in terms of extended streets as of garden villages, with their higher possibilities and civilisation values, than those of peasant villages and, thirdly, of developing these yet further by means of industry, which has everywhere higher civilisation values still, that of fruit growing." (Note on Udaipur, page 3).

"In no capital cities of my acquaintance save perhaps Berlin and Dublin and these, of course, for different reasons, is the area of barracks and military ground proportionately so extensive as in Indore and no more striking illustration can thus be given of the persistence in any city of its historic traditions, with their qualities and defects. - A second consequence of military cantonment in a city already mentioned is that, while the strictly military area can be regular, indeed is usually strictly and monotonously so, the surrounding buildings of the civilian population are neither adequately planned nor regulated by the military authority nor by the municipal one, but such areas without order readily pass into neglect and dirt, or into congestion and more dirt and consequently encourage and suffer from an undue share of diseases and with further depression and poverty accordingly. Thirdly, without any special imputation on Indore, it is common to all garrison towns that the expansion of the respectable civil population into barracks neighbourhoods is incongenial; hence, the congestion of the main city has been and is thus maintained and here in Indore conspicuously so. From the standpoint of the health and planning of every garrison city, therefore, the removal of barracks to a suitable country site is thus of great advantage, since then and only then, the arrested growth of the main city can be healthily resumed and its suburban extension can be proceeded with. Thus, moreover, the military department can in some measure be compensated, at any rate materially aided as regards the expense of the removal, by the sale of the land and buildings they vacate for civilian uses. But it is not from the civil standpoint that such a removal has to be mainly considered; it is the military interest which is always the predominant voice." (Town Planning Towards City Development, part I, page 11).

"As/



"As an instance of this in detail, let us take an example from what many Jubbulpore citizens and visitors alike must think of one of the difficulties and blemishes of the town, the vast and irregular expanses of basalt rocks, as notably east of Heanumantal, yet here and there already, not only nature with her trees, but man with his temples and his humblest homes alike, has made with these rocks scenes of beauty, even of rare and curious picturesqueness. A further development of such features, upon this at present neglected and comparatively valueless area, would give them new values, at once economic, healthy and beautiful, probably even fertile, for basalt rocks yield valuable elements to soil and small gardens are thus possible. The intense radiation from the rocks would be abated by the vegetation between and the district thus become more habitable and fertile; hence here, park and village may go together and with mutual advantage." (Jubbulpore, page 9).

"We have thus imagined possible suburban developments arising from dredging, reclamation and poldering, to meet the north and north-east requirements for Colombo, for some considerable time to come, but the needs of expansion of central Colombo are, of course, far more urgent and these alike for business and for housing. It is impossible to plan with any certainty, until the future harbour development is decided, whether to be on a wet dock or no and hence, the city has a very strong interest in pressing for an early decision on this subject whichever it may be. Still something may be done in the meanwhile; let us consider the possible improvement to the San Sebastian Canal which has been adjusted between the engineers of the lake development scheme and of the city and which although recently postponed, may nonetheless be looked for as a necessary development as soon as circumstances allow. An accompanying railway line here seems possible and would surely be of advantage..... I am safe in here proposing the poldering to which heights as may be necessary, of the adjacent low lying areas at present unoccupied. These present a considerable total acreage on the south side of the Canal towards a railway and the Maligawatta, a district of curious outline projecting as a peninsula into the lower swampy and flooded areas around.... We can only make a diagram, but this is simple enough, for surely it is along the raised margin of this widened canal that we should seek to group as many as possible of the stores of Colombo. And here, instead of simply offering these to the highest bidder, I would seek to give tempting inducement of moderate terms to outlying stores which at present are not upon any waterways and especially to those whose removal will give a space for housing upon their present sites, instead of deteriorating values in their neighbourhood, like the various plumbago works south of the race course and others." (Town Planning in Colombo, page 30).

#### Projections and Predictions:-

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"The aim in view must be not of providing necessary additional business areas for the growing city, witness wet dock and canal improvements and still more of providing space for dwellings for the population which in the opening generation or thereby may not improbably double itself, thus taking the first reclamation above mentioned, that of the Crow Island area. Here are eighty acres within a mile and half at the northern extremity of the harbour. Taking this simply as a housing area and only at the British Town Planning limit of 50 persons per acre, here is a housing accommodation for 4,000 persons and though it is desirable that their rents be not too high and hence that land values be kept moderate, we have here a substantial and calculable return to set off again for the cost of undertaking which will, moreover, pay the city indirect in other ways, even if the reclamation budget did not balance. Again, on the 146 acres of low lying land at the northern end of the town (Kadarana and Pasbeta) with say 120 acres available for housing, we have room for 6,000. Next, taking the low-lying land of Mattakkuliya, with 127 acres, say 100 acres for housing, we have room for 5,000 persons. In all then, about 15,000 persons may be housed around this northern end of the town and these at furthest not more than two miles from the harbour, while even the remotest point of Kadarana is only about a mile and a half from the present end of the Grand Pass Tramway. The extension of communications through this northern area will also be practicable, though, of course, the supply of communications must run in advance of the population so as to tempt them thither. There is a great advantage of motor buses over railways and trams; still, 15,000 is but a beginning in this direction, but with the dredging away of the north sand bank of Lansiyawatta, another 50 acres may be added to the Crow Island reclamation, affording houses for 2,500 more. This may, however, be too remote for consideration in the present forecast. Assuming the wet dock have been made and to occupy about the 165 acres allotted to it, in my rough sketch plan the surrounding 135 acres or so would readily be accompanied with railways, roads, stores and offices without dwellings, for this makes a total of some 300 acres cut out from the very area on which, were it otherwise improved, population would readily expand. Moreover, we have seen that if this wet dock be decided upon, we must leave not only space for a great canal basin on the east side of the Grand Pass Road, but leave space for its possible deepening and extension some day into a second wet dock, while the three canals to the south of this, all shown widened into lake dimensions upon the accompanying extension plan, will then easily afford the requisite canal and basin accommodation; but all this, however good for shipping and business, is so much deduction from housing on the Colombo side of the river, while invigorating a much larger population in quest of homes. Extensions on the right bank of the river, so far as high ground allows, is becoming fairly populated and not only along all its three nearer roads, but along their branches. Still, there is nothing to prevent a big dredger pretty/

pretty rapidly raising sites where necessary, on low land, even with only half a mile of pipe delivery from the suction dredger at the mouth, or in the lower river instead of mile and even mile and a half which Mr. Prouse informs me it claims. We can soon effect the needful rising of low-lying land around the river loop to Peliyagoda and Kelaniya station neighbourhood, but here we need enlarging acreage, for we shall by and by have to accommodate a large population far beyond the 15,000 indicated in the three first improvements of north Colombo. We may fairly anticipate that the opening generation may have three times that number more to provide for, of say 50,000. Our forecast of reclamations is no doubt becoming alarming, yet with all this, a small dredger may have to work its way up the canalised river to Ragama, raising the area between this and Hunupitiya. The three mile length of this green riceland would afford space for long lanes of garden villages on each bank of its widening waters." (Town Planning in Colombo, page 31).

"As above said, it is an error to suppose that city growth is something automatic, to be forecast in terms of a curve prepared from past censuses. Given the strategic point of the geography and business of these provinces, i.e., of the upper Ganges Plain, chosen by John Company's shrewd business eye, given next an economic and geographical survey, again up to date, but now extending from India throughout the world, Cawnpore touches or can touch, given also a modernisation of equipment, a disentangling of its bungled communications and adequate housing of its people in conditions of health and happiness and so on, and above all, given the corresponding development of agriculture and rural activities, also happily beginning, the efficiency and consequently the wealth of this rarely situated city must needs far exceed anything indicated by the progress of its past or yet imagined in the stagnation or depression manifest in its present. Our problem then, is to see Cawnpore as a most important agricultural and manufacturing centre between the oceans, as the veritable Chicago of the Ganges Plain and to plan its development as far as may be, with such boldness and comprehensiveness as that of Mr. Burnham's well known scheme prepared for the Chicago City Club. In this large scale handling of Cawnpore, the congestion of the old city and its extension alike would be accomplished, not at present conceived by the mere increase of taxation, aided by doles from government, and thus essentially at the expense of agricultural interests, but by the better mobilisation and application of regional and civic resources and activities of agriculture and industry, of manufactures, transport and commerce. The town planning of Cawnpore thus demands not only a geographic and economic survey, but a geotechnic mastery to correspond." (Cawnpore, pages 13-14).

"So far we have been considering the improvement of the old town and its residential suburb, but no town planner can leave this city without some consideration of that larger future which plainly/

plainly awaits it so soon as the revival and development of its damaged and too long arrested port can be proceeded. The geographical and economic importance of the situation need not here be descanted on, but simply taken as known, and the engineering adequacy and competent execution of the port design will here be assumed. - On town planning lines, however, these two great interests are seen as but two amongst others. The adjustment of railways, roads and warehouses, to docks, just as offices of them all by the architect is considered more and more carefully so as to economise space, time and energy and thus money accordingly, to all concerned. The enormous volume and expense, obstruction and delay through the cartage involved by old fashioned planlessness is accordingly reduced, largely even abolished. Each factory quarter is designed with direct and ample railway facilities from the very first and its gradual or considerable expansion is provided for. We may now trace the alternative methods of developing Vizagapatnam, the palace traditional way and its town planning alternative; that the constructive work begin on the first assumption, the multitude of coolies are left to find such lodgings as they can in <sup>the</sup> already congested town which they further deteriorate accordingly and the second plan, decent, even if only temporary, housing accommodation will be provided from the very first. On the first or laissez-faire method, the existing railway system will more or less remain in the possession of its frontage at the wharf station and since this site is totally inadequate for the needs of this new expansion of labour and commerce, all sorts of patchwork additions will be made by successive engineers, each altering the work of his predecessors until the eastward expansion of the ever-crowded town is hopelessly blocked. Its ground values will thus rise and the foolish economists, orthodox or unorthodox often alike, will mistake this for a sign of prosperity, but this rises at the expense of economy and efficiency to all concerned and particularly to the housing of the people. Upon this narrow site there is already little enough room which business offices, warehouses, shops and workshops have all to multiply upon this space and increasing population have also to be lodged. Its congestion will become increasingly exaggerated with the usual resultant waste and inefficiency in commerce, the usual deterioration and disease amongst the people, which we know so well. Instead of letting all this happen and calling it natural with the futilitarian economist, let us briefly consider the possibilities of that adequate town plan which has never entered into his conceptions and thus never been so much as mentioned in his ponderous, yet mostly worthless, treatises. As a town plan of old Vizagapatnam reveals itself one studies as an historical development, so that of the new city may open out when viewed as a geographic one. For this purpose city view and plan may happily be seen as one by ascending the fine hill by the port entrance/

entrance and surveying the landscape it discloses. Here our Dutch predecessors must often have viewed the splendid field for their characteristic mastery of nature, which this vast extent of swamp and backwater discloses and have revolved their plans for redeeming the one and developing the other upon the lines which have built up modern Holland, with far less promising natural conditions. The actual realisation of such schemes was actually attempted by Bishop Tissot, though without success, as his remaining embankments and beyond these the goods lines of the railway show how comparatively easy this redemption of the marshes may be. Excavation of the new port and thereafter the continuous dredging of the harbour bar will afford a large supply of material for reclamation and raising of levels. Mr. Arbuthnot's suggestion of running the sandhill into this marsh may be hereto recalled, while the existence of the railway line also makes the further work of filling up easy. The Ross Hill, however, should not be touched. Its rock is too hard to make its quarrying profitable and its beauty for its true use of recreative and general outlook and, in fact, as the very first and finest of all the city's possible parks, will surely also protect it, as will the various sacred edifices further back. Assume then the new harbour dug and matter dredged and excavated deposits upon the swamp so completing the filling up the large portion between the goods and passenger railway lines and even sufficing as perhaps may for extending this make-up land west of the goods line also. The filling up scheme would, of course, be proceeded with gradually, for its areas, the space included by a line from Ross Hill Point north eastwards, will not be found excessive, so then to a hill bearing on a Roman Catholic chapel near the Hindu cremation ground; along the edge of this area a second outer railway line might run down to the edge of the new harbour. Between these two railway lines, the warehouse and the storage areas for timber, coal, etc. would find convenient place next to the docks. Further up, near the station, the factory quarters would conveniently be placed; space between the Visagapatnam passenger line and the goods line west of this should, however, be kept free from railways and from factories and warehouses alike, since this, assuming it properly raised to a healthy level, would form the artisan and labouring town. This should, of course, be designed upon adequately modern lines and from the first. The existing Visagapatnam passenger line might be continued to meet the other lines of the port near Ross Hill Point, with one or two passenger stops by the way, but the railway to the present wharf station would become practically disused and its space save indeed for a single emergency line or so, should be resumed, e.g., for dock management premises. The present cutting through the hill can be used with safety as a road, at any rate, after due attention. Should not the present dangerously crowded and congested fishermen's village at the present port be thinned out, if not largely removed to the north side of the hill?; the Mohammedan settlement near the old Collector's Office is described as very insanitary, but the filling up of the swamp and its channels should here afford excellent and spacious sites for new development as good as may be - returning to/

to the question of dwellings, it is probable that there will be a steady increase of demand for houses in old Visagapatnam, but as residential property and value, as well of its shopping streets, must go on rising, the wealthier classes would, of course, find waltair most congenial and as population increased, rail facilities would attract a suburban population northwards also. A modern maritime city, efficient commercially and industrially, and steadily prosperous at the outlet and inlet of a great and increasingly prosperous inland region, adequate housing for the people, with healthy and beautiful suburbs; here, in short, are the conditions of a good part even of Bombay and at its best, and though, of course, on a far smaller scale, still a real one and without the many evils with which past neglect, rather than natural difficulties, has crowded Bombay and all old sea ports." (Report on Visagapatnam Town, pages 11-12).

b) The Organic Attitude

"As<sup>a</sup> a general town planner, though I am, nor house builder or architect, save by exception, I must all the more insist on the proposition **that** village, town and city alike consist essentially and permanently, not of roads and streets, nor of water pipes and drains, but of the but of the homes which all these accessory developments exist to subserve." (Nagpur, page 8).

"In such ways that town planning, architecture and gardening have alike come to be dreaded by so many practical men and these in all classes, governing or governed, as **laying** outside ordinary needs and resources for the personal or civic. Happily, however, there is another school of planning, of building and of gardening. It enquires into and takes thought of the whole set of existing conditions, of the whole place as it **stands**, or rather as it has grown to be what it is, with recognition alike of its advantages and its **difficulties** and defects. It takes note and care as far as may be of work done and so it undoes as little as possible. It seeks to adapt itself to meet the wants and needs, the ideas and ideals of the place and the persons concerned, with the increasing well being of these and at all levels, from humblest to highest. City improvements of this type and on these lines are at once less expensive and more productive and they thus are doubly advantageous to the budget of the undertaking and to the enjoyment of all concerned - since place and people are inseparable as environment and organism and since the essential unit of the city is the home, let us consider what other different aspects which this must have to be satisfactory in all respects. Hence, with the dwellings, we must take its mistress woman and with them both, its central occupant, the child. A child should obviously be strong, be healthy, be mentally developed and be morally good and if all these be well, the child beauty normally results as the expression of all these qualities together, while its full maturity and part in life will also follow. So ~~too~~ with woman, so with man and so also with/

with the home. It must be stable and healthy to the satisfaction of engineer and of sanitarian and the conditions of mental and moral development are also needed. It must form as substantial an element of the city's wealth as may be and thus, as all these conditions are realised, its architecture and artistic character, its garden also developed accordingly, so too with the city and not otherwise." (Kapurthala, Page 3).

"Coming into Balrampur, as already said without disputing the possibilities of deep drains, electric pumps and other costly masterpieces of modern engineering, I venture after full study of the place and conditions to submit, the more economical, yet directed to a firm, more efficient and comprehensive treatment of its present difficulties as a flooding dampness and defective drainage and of public health also. It is now dealing with decongestion, improved housing and suburban extension as well; in short, the town is here viewed and treated as an organic whole and as with the living being, its ailment and its healthy growths are considered together and helped as far as may be." (Balrampur, page 3).

"As the physician must make a diagnosis of the patient's case before prescribing treatment, so with the planner for the city. He looks closely into the city as it is and enquires into how it has grown and suffered and as the physician associates the patient with his own cure, so must the planner appeal to the citizen - successful treatment must be general and constitutional, although every disease has many outcomes to relieve, health is a unity. Hence, the main concept always before the mind is the city itself, the city past, present and possible and thus, as a vast and complex life, the tree of which we and all our generation are but a season's leaves - yet which have to continue its growth and to bud for the next." (Town Planning Towards City Development, Introduction to Part I).

### c) Economic Understanding

#### 1. The Significance of Regional Relations.

"The main point one learns from even the first visit to Barra Bazar is that its big business lies substantially in the south and west and that the congestion of traffic demanding improvement is essentially in this area. In the northward area, its old residential character still essentially predominates. The present alignment with its extensive and fairly uniform widening throughout the northern area also though not so much required or desired by its present inhabitants has thus to be accounted for and this is presumably on the assumption that the present spreading of big business northwards is expected to continue and so must be provided for accordingly. There is, however, a distinct alternative to this present tendency of a direction of business growth as we shall see later and if this alternative be found preferable these proposed extensive northward changes will be seen as less urgent, indeed capable of/

of reduction with advantage to all concerned." (Barra Bazar Improvement, Introductory Summary).

"The increasing progress of transport in the generation ended by the recent war, has brought Colombo into the extraordinary and unexpected position of the third port of the Empire and the fifth in the world, so now with renewing and ever increasing shipping we have the most direct of incentives towards a spacious forecast of the city's future and since this progress is increasingly dependent not simply upon the prosperity and growth of Ceylon, but as regards shipping, still more upon the growth of imperial and even world communications upon one of its greatest routes, The extension of the harbour accommodation, whether in one way or another, is thus under consideration and the reaction of such increase upon the city cannot but be most important. Yet, as a municipality, Colombo has heavy liabilities and insufficient income and its Chairman's outspoken and detailed memorandum on this subject brings out the present difficulties, even embarrassment in unmistakable terms. Still, this state of municipal poverty does not express any lack of general prosperity in Colombo. It is largely, at least, a matter caused by the exceptionally low taxation as compared with other sister cities and of these what are left has future developments more promising. The task of town planning may thus here be reviewed as that of the development of a magnificent estate albeit one temporarily embarrassed. Large forecasts and ample preparations for the future are thus fully justified, even urgently necessary, and although in execution it will be necessary to exercise strict economy, it is expedient to select for early execution not necessarily the projects of the most immediate return, but as far as possible, those of basal advantage." (Town Planning in Colombo, Introduction).

"Starting again from the station, the value of this improvement has now become apparent. A new and attractive entrance to Thana is provided, avoiding the present poor approach by the bazaar of Station Road and giving an entirely different first impression of Thana to its visitors. This is a matter of capital importance for the development of Thana as a holiday and afternoon resort from Bombay." (Six Town in Bombay Presidency, Thana, page 4).

"As well as the situation of defence determine the location of the old city, what are now the conditions which may determine its future development. First, of course, its general situation and communications and these not only as capital of its state, but in its convenient relation to Dehli and other cities. The position is not one of any great promise for commerce and the resources of mining and manufacturing are not prominent. Hence, Alwar has remained comparatively untouched by the modern industrial movement; yet, has it not elements of possibility and promise for that fine range of industry which has long been struggling to win its footing and to establish its beginning and even its city's in the struggles of mechanical manufactures and competitive commerce which/



which are now working out their nemesis and transformation in Alwar." (Alwar, pages 4-5).

## 2. The Hierarchy and Function

"At present a market is put down anywhere that a convenient site can be found and so a fire station, a branch post office, a dispensary, a school or by and by, a branch library and reading room and so on. Colombo is still, however, spacious enough in many places to do better than this and some times at least, to provide some grouping to what thus may become something of a city centre for its neighbourhood. American cities are paying increased attention to this matter and often with excellent results besides architectural ones; for the whole district thus gains alike in material conveniences and values and so in self-respect and general esteem, better local and social feeling together." (Colombo, page 12).

"We now come to the Trust planning of Barra Bazar itself. Despite its unity of name and origin, it now exhibits as already mentioned, a marked internal contrast. Its old residential character still very largely survives and its business area, itself overcrowded in upper storeys and unhealthy accordingly, is still substantially concentrated into its southern and western portions. For many years past, however, this business area has been spreading northwards and eastwards, so that the general impression prevails that this process cannot but continue and must be provided for in these directions accordingly, whether by the present Trust alignment plan or otherwise. It also was and for some time continued to be, my first impression, but further consideration has forced me towards a thorough alteration of this view, that will be made clear later. Still, its general prevalence and also the well known difficulty of altering the lines on which industries and business locate themselves throughout the city quarters and extend in these, compel a study of the alternative possibilities of planning towards meeting the present expansion of big business, both northwards and eastwards. - As regards betterment, a large creation of new frontage values along the new street on both sides which this measure provides is obviously promising, indeed certain in substantial measure, whereas the betterment anticipated from widening of old shopping or business streets is a more speculative matter and is not so certain to be maintained in the long run as may at first sight appear. The material advantages are also obvious, both by the clearing away of some of the most insanitary and dilapidated property and by the encouragement to rebuilding along both sides of a new thoroughfare, or at least satisfactory repair." (Barra Bazar, pages 6-7).

"Trade must be near main lines of communication. It thrives best in a street of its own, for the passing of communications interrupts buying and selling and inconveniences them. The traders seek to encroach, the communications need widening, hence this street has possibly been widened. The meeting and parting of the ways at north of Wala Bazar, the fine buildings and the present thronging activity all testify to the importance of this quarter.

- Beyond/

- Beyond this **centre**, the streets to west and east have been alike narrowed by the steady encroachment of trade stalls - into these links of growth the alterations and improvements of the past have cut, often deeply." (Kapurthala, pages 6-8).

"We have now come to a new region, one doubtless seeming out of the way to many good people in Balrampur, but an important situation for the future; Indeed, already one of the main modern centres of the town, as the modern centre is increasingly determined for every quarter of a town by junction of its main thoroughfares with that to and from the railway station. At the main crossing here is the best of positions for the general post office. Moreover, we have here the collegiate school and the hospital; on the way to the main maidan and to the wedding hall, to the new palace, the manager's house, the guest house, as well as the west road and its country villages all start from this point; unfortunately here, as so common in all cities during the merely engineering period of town planning, the railway crossing, not far off, interferes with easy circulation and with effective design. Moreover, while the main public roads have been given ample width, their main crossing or junction place has been left to the accidental shape given by convergent road lines and thus lacks unity and dignity, convenience and even safety in crossing it." (Balrampur, 18-19).

"When one goes through the old streets, one sees this - the planners of Cotton and Batala and Banstala Streets knew perfectly well the requirements of their situation, though their breadth has turned out insufficient for a traffic so vast beyond what they could anticipate and whoever will take the trouble personally to compare the daily activities of the north and south streets east of Darmahatta Street, with those east and west, can see the contrast, that of the many small shops and foot passengers in the north-south line, with the far bigger business of others. Is it answered - try those new north-south streets and see if they do not develop similarly also; but to this there are two answers, first, that speculative town experimentation is far too costly a way of dispensing with sufficient observation of the city and with comparison with others, and can but result in costly and mistaken planning. The second answer is, let us rather begin with such observation and comparison and plan accordingly. This now brings us to fresh alternatives of new and distinct lines of the solution of the planning of Barra Bazar..... The localisation and grouping of business interests into different quarters, gives its familiar character to Indian and other old cities, but this is often supposed an old world survival in a modern world of go-as-you-please. Yet this view is not really the modern one. It is itself a survival of that confusion introduced by the mechanical revolution and the railway age, with their upsetting of the old order of industry and by the inability of would-be economists in the world of intensified individual struggle and/

and competition to discern much less plan any adequate organisation to replace that which it supercedes. My own reasons, indeed, are partly already given, but a main one may now be more clearly affirmed. It is that the great pulse of the port city's business, the bridge city also, here as everywhere, and indeed, peculiarly, since there is only one great bridge, as in Old London, and now for a far lesser city, has its main pulsations across the city and not only in a minor degree, along it, parallel to the river. Not, of course, that north and south traffic is negligible, but Strand Road, Clive and Darmahatta Streets especially when widened, will remain its main arteries on the west side of Barra Bazar as is Chitpore Road on the other. This extensive and expensive north and south system proposed on plan 2, on a scale comparable to that of the east and west thoroughfares, is thus excessive and its origin appears to lie more in the drawing office routine than in city survey." (Barra Bazar, pages 11-13).

### 3. The Economics of Activity - Internal and External

"It is of the essence of recent planning that we seek to avoid another of the mistakes which has so largely vitiated even the better work of the past, namely, the confusion of roads of communication, great thoroughfares in the literal sense with shopping streets. The former are primarily for vehicles and these days ever more and more numerous, swift and dangerous accordingly and for direct pedestrians also, who are seeking to get to their destination of business or home as speedily as may be. Such roads must, therefore, be spacious<sup>and</sup> as far as possible, avenued; but trade, and especially in small wares, seeks and needs narrower thoroughfares. The best shopping streets, as not only the chowk of Lucknow but the analogous streets of European cities, are those in which the goods for sale can be bought nearest their possible purchaser's eyes and this from both sides of the street and not merely from one only and also in which the purchaser can move most easily from side to side undisturbed by vehicles. The locations of the small retail corn market, the vegetable market and that of small bazaar shops in narrower twenty-foot streets, laid out behind the central star of rows will thus be understood. The larger blocks and wider frontages of this central circle and of the main street running direct from north to south bridge, will thus be left for larger trade, though mainly also for the best class of dwellings." (Balrampur, page 32).

"The suggestion has arisen that this (a fine large property, already state property) may be reconstructed as a market and its space is certainly of suitable extent; in fact, I can find no other so good in the old city, yet the extreme easterly position of it makes its prospects as a market very small. Vegetables and fruit are bulky and their sale should not be at so great a distance from the centre of the town. Small vegetable dealers elsewhere would kill this new market by their better situated competition. Looking back/

back then, towards the centre of the city for a more suitable location for a vegetable market I am, of course, first tempted by the proposed new Temple Square, which this would help to pay for; but still, this is far too east for the purpose. Kasserain Bazar and its neighbouring streets are already congested enough. This trade is unsuitable for the smaller bazaar square I have suggested, south of the Kotha Khana and east of the Judge's House. The most nearly central location and the one easily accessible by a variety of roads, is that south of Bazazan Bazar, so I have provisionally marked this 'vegetable market'. Returning now to the spacious site first considered suitable for a vegetable market, we must ask, is there any other form of trade which might be located here. Experience of all cities shows that habits and centres cannot easily be shifted to new sites and I am not aware of any prospects of new industries either. I therefore fail to make any business suggestion." (Kapurthala, page 13).

"What of the present type of accommodation of big business in Barra Bazar? That of the courtyard and surrounding area used for godown purposes, with offices also on ground floor or upstairs sometimes, and with dwelling spaces above this thus restricted and overcrowded and unhealthy accordingly. Is this so perfect as likely to survive? If not, should it be planned for indefinite continuance in the future? The people here have grown accustomed to it. Is it really in any way efficient and economical? I submit that it is the very reverse and have not discovered any arguments beyond use and want and present necessity for its continuance. The actual amount of godown space which is afforded, even round a large courtyard, is surprisingly small when the actual room space is measured, while the inconvenience and disproportionate labour involved by this whole method is too obvious to need exposure in detail. This imperfect system, this rough adaptation of domestic buildings to storage use, compels a congestion of the dwellings - furthermore, these courtyards readily become dirty, like the streets, while dust is constantly being raised. In such conditions it is no wonder that people lose interest, even for necessary repairs. It is thus a clear planning problem to find some way out of this difficulty. Can we not devise some better type of business accommodation than this present makeshift one? Let us no longer perpetuate this much less extend it, but rather consider how it may be superceded and this with efficiency, economy and advantage to business and to housing alike. Its first principle, however, is plain, that of compact and extensive warehousing occupying the site area as fully as may be possible, yet with due respect to municipal regulations. The whole available space is here shown as built over, in blocks about fifty foot wide, leaving only the necessary accesses with light, air and working space between them. The interior of each warehouse includes the metal columns necessary at distances to bear the superstructure and these admit of partitioning of the warehouse space between them as may be desired./

desired. The resulting space will be seen at a glance to be very much more compact than in the present courtyard rooms and in measurement computation the gain is even more than at first sight may be expected. If necessary, offices and shops may occupy the frontage, but where business presses and as it develops, we may assume the office raised above the warehouse. To reduce the fatigue and inconvenience of climbing an ordinary stair, a long slope or low ramp is also practical each, if need be, serving a pair of warehouses. Upon the fireproof warehouse roof then, we may place offices and even shops and these, if need be, with small stores or godowns behind them; if desired it will be easy to have the truck door opening into the godown floor by means of which a bale can be picked up from the warehouse below - this office level may also be connected as desired, by foot-bridges over the intervening twenty-five foot lanes, but of course, not over the street. In this way we now have two business storeys, warehouse below and office above - with high pierced windows, with suitable glass and especially with whitewashed walls inside and outside alike, a warehouse fifty foot broad can be worked during the ordinary hours without artificial light and this especially well if one of the recent makes of prismatic ridged glass can be employed in the windows, as these direct ample light, even much further than this distance - the proximity of business premises and dwellings, so largely favoured by the Barra Bazar merchants, thus remains largely practicable but now with both in improved forms and without their present serious disadvantage. Yet, since warehouse and office accommodation are now rendered so much more compact, it becomes plain that only a proportion of merchants and their dependents thus can be rehoused above these anew, but these have their existing houses, while they continue to use their courtyards on a level as at present and take no part in this new warehouse scheme; for a time, no doubt, many, but several forces will soon be felt as pressing them to accept this change. First, the business advantage of efficiency, time and trouble and therefore, saving money, presented by the new warehouse blocks which cannot but be cheaper since so much more compact and thus advantageous to their competitors who take advantage of it. Secondly, the reflection in that their courtyard and ground floor accommodation can be used more remuneratively. These may sometimes, in the larger cases, be adapted as shop squares, sometimes utilised for servants and workers, or let out to others. Besides all these obvious monetary advantages, yet far from negligible, is the internal domestic opinion, how peculiarly unfavourable to the health of women and children is the present system, as a matter of public health statistics to which Barra Bazar people are not so indifferent, as some think. Again, in domestic comfort and well-being to each household adapting itself to the proposed change, the obvious and the very earliest - a question may be asked, how would such clearance of godowns affect the value of property? The answer is obvious, must/

must not properties be thus appreciated by return to normal domestic use and by the removal of the business which at present so gravely diminishes the housing space, health and thus earning power accordingly. The space gained by the introduction of this warehouse system with liberation of courtyard floors of old houses accordingly will, if it becomes extensively adopted as may be, from the above reasons, anticipated, restore accommodation to Barra Bazar by nearly as many rooms as our proposed moderate clearances destroy." (Barra Bazar, pages 13-15).

"The extreme sharp, right angles on Saadatganj Road, has been suggested for improvements by the formation of a small square with shops and two trees at the turning. This is simply done by clearing one site at the corner, which will leave room for better shops if desired. This method of forming small squares at road junctions is well worth consideration at other points as occasion arise. It is worth noting that the cost of the space thus obtained is not so serious as it may seem at first sight since the frontage for shops remains as large as before and is of increased value from the enlarged space in front of it..... The most of this road, continuing southwards, can be very easily and cheaply executed; and I, therefore, unhesitatingly recommend this and submit a comprehensive plan accordingly. Amongst these many improvements of general accessibility which all enhance values throughout their neighbourhood and replace migration from it by further building, I consider this a very reasonable and promising one." (Lucknow, columns 24,25).

"Arguments of economy and of sanitation also, are strongly in favour of piercing new thoroughfares when possible, rather than setting back old ones, but in the plan under criticism, new thoroughfares are mainly pierced to connect new widenings, with the exception of the great north thoroughfare already referred to and that of the new northward street from Harrison Road, parallel to Chitpur Road. Under these circumstances, it is necessary here to consider the alternative method, that of investigating how far the necessary improved communications of Barra Bazar may be provided as new thoroughfares cut through blocks of mostly inferior value and at less cost accordingly. As regards betterment, the large creation of new frontage values along the new streets on both sides, which this method provides, is obviously promising; indeed, certain in substantial measure, whereas the betterment anticipated from widening of old shopping or business streets is a more speculative matter and is not so certain to be maintained in the long run as it may at first sight appear." (Barra Bazar, pages 6-7).

"The whole policy of dealing with the shops seems in this neighbourhood, to me, to have been insufficiently considered. To convert the small shops of an ordinary bazaar into new and costly ones involves levying a permanent increase of prices upon the purchasing community and is thus a step in the direction not of increasing/

increasing civic wealth, but the very opposite. A tacit recognition of the needs of the small shopkeeper has been given by the municipality in laying out its long rows of smallest possible shops on the road between the two parks. This effectively spoils the aspect of the new thoroughfare and conceals both parts while, at the same time, it must be admitted that their removal, with adequate provision elsewhere, would inflict great hardship upon poor and industrious people, as well as upon the income of the municipality. I venture, also respectfully, to criticise the policy of letting these shops through contractors, instead of directly to the people who use them. Here again, is an unnecessary profit to individuals with disadvantages to shopkeeper, the public, or both, which the better municipal economy would obviate." (Town Planning, Lucknow, columns 42, 43).

"Returning to the present market neighbourhood we ask, what will be the effect of removing the market on the shops and property around? Will these be deteriorated, or will they be improved? Though this is not our prime concern, it is one which cannot fairly be neglected, since the best town planning seeks to minimise injury to an old neighbourhood through the improvement of a new one - for not only the roads and accesses alike for market folk and for their customers have to be carefully studied, but even more the requirements and habits of both parties concerned. For lack of clearly realising these, such municipal schemes for removal markets have too often miscarried alike in Indian cities and in European ones. The essential question in planning a market must always be, can we be sure of taking the public with us?" (Six Towns in Bombay Presidency, Broach, page 9).

#### 4. The Planning Unit

The Indian Planning Reports show Geddes to be consistent in an attempt to define the ideal framework within which planning should operate. Geddes's repetitive emphasis upon the inter-relationships of place, work and folk and its expression in a spacial hierarchy, prompted him to place great stress upon the inter-relationships between the parts of planning - the minutae being regarded always as part of a general process of organic inter-relationships. Geddes frequently appears to be seeking for the optimum size for any planning operation. A 'catchment area' - a notional optimum size, may be viewed in a number of differing and complementary manners - topographically, economically and socially. The most frequently stressed topographical unit is the valley, as a primary unit affecting flood control and irrigation. The/

The principal social and economic unit is the city and its region. There is yet another important facet of the catchment area conception and this relates to the span of control. Geddes appears to be seeking for not only a spacial entity, but also a natural framework for the organisation of social and economic relations:-

a unit of administration within which regional plan, or a developing sense of regionalism may be harnessed towards overall improvement of the environment. The city region thus becomes for Geddes the seed bed of regional activity and one capable of organisation by the planner. The span of control appears to be derived from Geddes's idea of the optimum level spatially in which the essential qualities of leadership and control may be exercised in order to promote successful physical social and economic planning.

The most cogent statement relating to the ideal region is given by Geddes in the Indore Report and here is reproduced in full.

Town Planning Towards City Development, part II: Section 7, City, State and Capital.

"The Town Planning Movement, with all its progress, as yet in England and elsewhere, lacks contact and co-operation with the rural world around it, for even its garden villages are as yet mere suburbs of their towns and have not agricultural productivity and seldom much genuing touch. Conversely, the admirable Irish Agricultural Movement works as yet amongst the farms and villages and too much leaves the provincial towns in their decay and the two great cities of Ireland to their complemental defects and their corresponding estrangement. Tagore's criticism at the opening of his Sadhana is indeed unanswerable, but in the west, nature and man have come to be viewed apart; for in the city life, man naturally directs the concentrated light of his mental vision upon his own life and works and this creates an artificial dissociation between himself and the universal nature within whose bosom he lies. Yet it was not always thus; the Greek city was at first but the cultural centre of the rural life of the city state and the Roman civitas, despite the excessive provincialism of Rome, was not the mere municipal area to which we nowadays restrict the name, but included the rural region as well as its town, the pagus as well as the municipium. Another term, long of similar comprehensiveness, was Dioces, which survives in ecclesiastical use to this day, but was/



was not originally thus narrowed. Our returning concept of the region, with our pleas for regional survey, and along with this for regional service, are thus but a renewal of the past. Civics is not a new science and art but the recovery of the life and thought which created our civilisation, so early are the origins and even the achievements of what we now call town planning and city design. With this reunion of country and town their activities are seen as normally in harmony; we again think of these together as city region, each a definite geographical area and as no two regions are alike, but all differ in their conditions, a corresponding measure of decentralisation to these is becoming locally felt necessary, yet this is not readily granted to them. Though the west is now full of discussion of peace through the League of Nations, **too many dream**, as Berliners have done, of a predominant world state, often even with a single, central metropolis, naturally enough desire this to be their own. As things at present stand, the ever increasing hunger and desire of each great capital and in its modern over-growth more than ever, are not easily kept within bounds, for these great cities cannot but seek to concentrate to themselves population and food, power and pleasure and too commonly with diminishingly adequate return to the vast areas they subordinate and exploit, even exhaust. These provinces and their cities and towns increasingly feel impoverished and dissatisfied and hence the worldwide rise of movements towards decentralisation. In these, the long depressed regions and cities are vaguely seeking to renew their old freedom and completeness of life and thus a tension has long been arising between them and their metropolis. The recent collapse and break up of Russia and the current decay of Petrograd, the advancing ruin of Vienna and the desperation of Berlin, are thus not simply accidents of this war, they are indices of this vaster social change as the war has accelerated into or towards catastrophes. In Britain, with its saving element of real if slow adaptiveness, the same decentralising spirit is plainly manifesting itself and this in direction still lately maintained as impracticable. Above all, those who know France, albeit so long the most strongly centralised of countries to and by her capital, will confirm that even in Paris itself, there long has been appearing, and now more than ever, the geographical outlook, the regional spirit, the clear purpose and detailed resolve of decentralisation and this with French clearness, purposes not only to revivify her greater cities of commerce and culture, but to recultivate and repopulate her most declining provinces, to develop anew her smallest valleys and towns and give even to the poorest villager, less desire to leave his simple home for the great city. Towards all this, not only social thought and scientific work are tending, but the actual measures are maturing in many quarters, measures political, administrative and even financial. And that all this is necessary even for future self defence, who will deny? For who dare be assured that this war is the last of these types of barbarian invasion which have flowed and ebbed against Mediterranean civilisations through the history of three thousand years. Greek civilisation, that on which our western civilisation is essentially founded, /

founded, and which all our best advances of science and arts, in literature and ideas, have been and are again, renewals, as of civics most of all, was essentially of city states in many ways, then like that of the great regions of India, in fact, like Indore and her neighbours, of Central India and Rajputana. The spread of Roman roads led to the conquest and development of the old city states and exhausted all regions into the metropolitan maw. Yet, when these roads were broken down, regions and cities in the Middle Ages widely returned to separate or interdependent life, and this varied and fruitful. And the wars and in the past century, railways and telegraphs, etc., have recentralised the great powers of Europe, essentially around their seven Romes, now at war, three against four; yet now the motor and the aeroplane, wireless telegraphy and more, are again preparing to decentralise in their turn and beyond all such material agencies there are finer forces at work, both new and old, scientific and spiritual. In their escape from over-centralisation, its explanation, not only of the survival of small countries, but of their relative superiorities before the war, and this whether judged in roughest summary by the highest value of their securities upon the stock exchanges and those of the great powers, or on higher levels by their status in civilisation and culture and their higher proportion of contribution to these, for with all Germany's eminence in science, the Scandinavian countries and Holland have been proportionately yet more fertile in discovery, while Belgian literature was outshining even that of France and still the long social and political eminence of Switzerland and her accepted European leadership in true internationalism; even the relatively backward little Portugal has generally kept in advance of Spain. And although Scotland is scarcely a seventh part of England's teeming population, has she not counted both in thought and action for more than that alike in her great partner's eyes and in the world's? When all is written and read of the history of England, there still stands highest one who never was master of more than half its area, Alfred, alone called the Great, since unique as hero and statesman, scholar and civiliser. Now if these things be so and the future be not so plainly all for centralisation to metropolis as Rome or Mogul Delhi believed in their day, or as Berlin has been trying to prove in our, the future of India brightens and this peculiarly for city states like Indore. The fuller one's familiarity with the great capitals, whether of west or east, the more must the student of cities turn with new hope to the small ones, great enriched, grand though may be the cities whose population is now reckoned by millions, their best achievements date from smaller days. Moreover, there are now only too many scientific grounds, biological and medical, psychological and moral and practical grounds as well, for renewing today that estimate of the fateful deterioration of such agglomerations, which comes down to us from the past, whether voiced by impassioned patriots and prophets, or by cool satirists and sober historians. Civilisation alike in its highest movements and achievements and on its comparatively permanent levels, has flourished best in smaller aggregates and despite the megalomania of every megalopolis, the deep and manifold depression of every minor city accordingly, /

accordingly, - it tends to do so still, and so may again more fully. For in the small city man is still within easy reach of nature and so many have its sanity and health in fuller measure than in greater cities is possible; and yet, more his children who thus escape the deterioration inevitable to townlings. Biologically speaking, in short, the future survival, like the past, is less insecure for the smaller hives than for the great and culturally also - even metropolitans will indeed grant advantages to individual and family life and culture in provincial cities, but they urge the economic, political and social attractions and opportunities of the great city. But few realise these; that most fail, and so they sacrifice their smaller home careers for the mirage of greater. But some attain. Yes, but too seldom to any great measure of effective usefulness when all is done. The growing and well nigh world wide criticism of great centralised administrations for vast areas ultimately comes down to this, that administrators are but human and given this diversified world of country and town, human understanding and sympathies, powers and time do not and cannot cope with the affairs and needs of more than a very moderate area of its population - groupings, and even then with only a fraction of their life problems and tasks. Local consciousness and its desire of self-determination are now increasingly awakened with education. This, as we have seen, is turning from its past memorisings of details and abstracts apart from present life, to the real needs, duties and opportunities of life around us in the concrete. Hence, the survey and service of our own region and city begins to reassert its fundamental place. Thus men are beginning again to see and learn that efficiency in their local affairs and panchayats is in itself a worthy ambition and even that it is the truest of preparation for wider responsibilities beyond. Most generally stated, it is the rulers of the small states who have often accomplished more for their lands and cities and even for general civilisation as well, than have the great.....And returning to our own day, in the west and east alike, do not the smallest states increasingly take initiatives in advance of the greater; indeed, must this not necessarily be so, for comparatively heterogeneous groups of regions and cities and their peoples cannot readily be moulded into a single model, or safely made to progress much faster than their less advanced members are ready for; or than their hostile partners agree..... True, small cities and states have seldom been exempt from the defects and evils of greater ones and as preceding chapters show, I have not erred on the side of reserve or flattery in speaking faithfully of those of Indore, yet these evils can seldom go quite so far and even when they do become as bad, or worse, as here in Indore with plague, malaria and other diseases, the remedies are far more easily and thoroughly applicable than in greater cities and the results may be more speedily and encouragingly manifest also.... Do I seem to insist overmuch upon town planning and to be exaggerating one specialism to the exclusion of others? But consider what as city development this means. To enlarge our ordinary everyday view of our city with its many activities, let us lay its first plan upon the table, /

table, for here we survey its growth through past generations and through the help of this potent spell, we may recall, evoke, revisualise their past and up to the present, now seen more deeply and more fully than before. But as day by day, and month by month, we study this present, the possible future also, bit by bit, correspondingly appears, here cleaned and repaired, there cleaned and opened, there planted in gardens, there renewed or, for the first time built. In these ways our last plan thus, at length, evolves, with its careful conservation, yet its many developments. Around this city area further extensions and suburbs arise and beyond these, the new industrial town and the whole of fullest housing, gardening, sanitation, etc., hitherto yet realisable within reasonable time and current resources and open to further improvement as it expands and prosperity grows. Beyond this again, comes the wider suburban area of Greater Indore, and this now partly rural, so here our essential task ends with this forecast of the expansion of the municipal Indore. Yet that regional and rural interests are not to be forgotten is here indicated by the notes on villages in appendix and these plainly might be expanded as they doubtless may be by the surveys and planning of the future, until the whole state is thus developed and enriched..... Such civic studies, moreover, raise all social questions and not simply the material ones of housing, gardening, farming, engineering, etc., fundamental though they be. In these pages we have seen how industries and arts, health and education, even government, morals and religion, are all inter-related and how the present treatment of all these as dis-specialisms needs to be conspecialised and unified anew, orchestrated as it were. The prevalent mechanocentric philosophy thus becomes replaced by the biocentric, which sees all activities, social or personal, in terms of life and its evolution and thus aids its rise to better things and checks its fall towards worse. Thus then, we reach the verge of politics, though not in the abstractions and generalities of its current discussion, but now in the concrete particulars of science with its applications and this verbalises less but realises more. To this realism politics and politicians must soon alike come; just as all our hopes and arguments about the war, after all, depend on its definite regional campaigns, as those are thought out and fought out, so the campaigns of peace no less depend on its reconstructive and constructive efforts, city by city, region by region - summary then, the conclusion of the description of these plans may here be repeated; for generalising of the whole scheme, the essential conceptions of this report will thus become clear, that of continuity with the city's past, with conservation of its products and results, yet with removal or at least abatement of many of its evils, further, the active renewal of city development in all its main aspects, industrial, hygienic, agricultural and horticultural, economic, etc., on the material side and on the other, educational and cultural, so that even the aesthetic and idealistic values and inspirations of the past reappear upon our modern spiral. The city will thus be seen as increasing its possibilities as an effective and worthy metropolis, the active and educative centre of its city's state and surrounding region and an increasing influence beyond.

## 5. The Practice of Planning

Geddes's Indian Reports exhibit a consistent body of data relating to the practice of planning. Uppermost in his mind is the consideration that sound planning practice should realise a prior fundamental theory of planning. It is possible to analyse the complexity of Geddes's thought and pinpoint a number of basic indices or assumptions which are common to the forty-six studies under review. It appears that Patrick Geddes's basic objectives relate to an essential fitness of the planning organism. To achieve this basic health, the individual organism, the town, or region, must be approached through practice in such a way as to arrange the various component parts in accordance with a number of postulates. These are derived from an understanding, by the planner, of the inter-linkages between place and work and folk or, alternatively, organism, functioning effectively and successfully, within an environmental context. It is thus that one individual component of planning practice forms part of a carefully designed critical and all-embracing system of planning. It also follows that Geddes's suppositions regarding the practice of planning produce not only a complete check list for the planner to follow, but also may produce spacially a complete planning system. The application of Geddesian methodology allows for the intermeshing of the component parts of the town within the urban network, of towns within the region and the region within the national context.

### a) The Health of the Organism

Geddes contends that it is the duty of citizen and planner alike to aid the evolution of the family unit. The real wealth of the community, he believes, is not one primarily related to the formation of capital equipment, however important this may be, but is to be found in the improvement of the environment in which people live and work and in an adequate provision of the basic necessities relating to the home, garden and work places. For Geddes, the basic health of mind and body brings its own economic by-product, whereas unsound health partially negates any/

any advance in capital investment. "Bad planning", he notes, "can multiply the people, but not the joy." (Cawnpore Expansion Committee, page 14).

#### General Health Problems of Cities -

"Yet of the great art of medicine with its innumerable specialisms and even in sanitation and public health, they are no longer merely individual applications of the general and social purpose. This generalising spirit has not yet been sufficiently cultivated, much less adequately applied, yet it is the urgent need of cities, even of this city, that it should be so. How can some progress be made in this? Diseases are many and each involves its special enquiries - yet while diseases are many, health is one, unity of sound mind in sound body. How is this unit to be obtained? Are we simply to go on as mainly at present, providing as many remedies as there are diseases and now drugging, now innoculating each other against them all, or may there not be some more general way? Until lately no school of art, or school of architecture had introduced a department of City Design, but now this is becoming generally understood as the dominant because synthetic and directive one; but as yet our schools of medicine are still practically destitute of the needful department for co-ordinating their specialisms. What is this? Surely one concerned with the study of life in health, thence could not but rapidly follow a better application of the laws of health and these alike to prevention as well as to disease; for health is no more mystery or Utopia. As biologists know and as the finer civilisations both the simple and the complex, have at various times magnificently shown, health is a resultant, a good habit of the good life, that is, of normal and full reaction with adequate environment. But such adaptation, which is, or has, become normal to flowers and to tree, to insect, bird and beast, is harder to attain for man and this more and more as his social grouping has enlarged and complexified, especially during the Industrial Age, from rural village to crowded city. Here the ant and bees, with their older and simpler civilisation and cities, have a better health standard than our, yet in our human cities examples are never wholly wanting of the highest human perfection of health, vigour and beauty and these for both sexes and for every phase of their life, from infancy to age. Let medicine and public health then more fully study, more rationally explain, these fine types of health, and not merely struggle in detail, or even in mass, with the various lapses from health which at present so much more abound." (Town Planning Towards City Development, pages 16-17).

Geddes's attack on the problem of health in the organism is mounted on a number of fronts - both environmental and social. A number of these points will be examined later in the context of Geddes's housing policy and his search for improved environmental design. It appears basic to Geddes's thesis that the planner needs no/

no especial training in recognising the fundamental evil which can arise from ill health and from the positive advantages which can accrue from the converse. He notes, for example,

"One does not need a thermometer, a microscope to diagnose malaria and phthisis; one sees both in these damp floored, low roofed hovels with their walls falling out and their hatch falling in. The lapse of proper house pride, so natural to women, so normal too, to men, is again an unmistakable index, not of mere poverty as most think, but of that neurasthenic depression, so widely characteristic of depressed neighbourhoods which is at once a consequence and cause of poverty and of specific diseases as well." (Town Planning in Balrampur, page 39).

And, as he notes in his report on the model colony at Kanchrapara, (page 6) -

"To announce the doctrine of the advantage of high wages, though one of which the American employer is convinced and to which many British employers are coming, may, no doubt, be premature in India and is certainly unnecessary here, but everyone who realises that oats is better vital fuel for the horse than straw, may also realise the value of well fed workers and thus, although the demands of labour for higher money wages are hard to grant, and very often cannot be granted, there is everywhere the general desire for the workmen of as good real wages as may be, that is, of good food and good home essentially."

"Plague is no mysterious dispensation of malignant powers. It is a normal nemesis of the untidy slum, it is the product of the uncleanly victory of the rat over the housewife. This, of course, is not through her fault, but of our masculine inefficiency as working citizens, businessmen, city rulers and state controllers; from child apprentice and workman, to shopkeeper and barman and from these to financier and millionaire, city councillor and chancellor, we men are hypnotised by money and have lost the sight of economics, the real functioning of life, in real and energetic health, creating real and material wealth. Real wealth can only be created in life efficient environment; it is, therefore, primarily bound up with an advancing development of homes and gardens and secondly, with due increase of all that they should contain for the maintenance and development of their inhabitants. Ailments of rheumatic order are partly caused by damp floors, and partly by unsatisfactory nutrition. Pathologists have long been investigating the clinical results of these two causes, but we, as town planners, can remove both; we can avoid dampness by arranging for drier houses, placed on more adequate sites, as well as built on plinths and we can provide for better nutrition by the creation of nearby fruit and vegetable gardens. Many diseases of the alimentary system are mainly caused either by the insufficient diet of the poor or by the over-elaborate of the rich; both can be remedied by the wholesale and domestic growing of fruit and vegetables. Besides increasingly superceding drug medicines by fresh air, pure water/

water and sunlight, town planning aims at a vastly greater production of food. In the garden city, waste matter which is only impurity and dirt while out of its rightful place, will find its natural outlet in the soil, followed by its natural transformation into renewed fertility. Only by the execution of such positive and vitalised town planning as this can the prevalent diseases of town life be adequately cured." (Town Planning Towards City Development, Part I, page 16).

Patrick Geddes is well aware that improvement of the organism required careful treatment in that the cumulative effects of planning innovation can be extensive and affect a whole range of phenomena which in turn can introduce a new series of planning difficulties. It is necessary for the planner to isolate the essence of the problem and by judicious action create the conditions in which the more specialised technician of health may operate more effectively. In his report to the Municipal Council of Lahore (page 18) he noted, for instance, that -

"Here again is one of the surveys handed me for treatment; this time, without any lay-out plan. I learned from the Health Report that this village, despite its high ground, its small area, its healthy open surroundings, has a death rate exceeding the average of the old city and this by more than one third and getting on towards a half. Thirty-four per cent is bad enough, but forty-eight to fifty-two per thousand! Here is a real puzzle to be explained, as well as a problem to be treated; surely also one which has been too long delayed of treatment. Were this enormous death rate effected by crime, even in the proportion of one per thousand, it would be at once dealt with. Why allow an excess of sixteen or eighteen per thousand and from causes far more easily detectable and preventable? We enter by a good main street, and we soon come out upon a large open market place, with trees and green fields below. The village has thus its good points, but the lanes, these are a labyrinth and each stands blindly without any thorough ventilation. They are thus, in fact, not merely the earth middens, but the air cesspools of high and close built houses and these largely pardahs. Were it one's problem to devise for a health exhibition, a model of how to make home unhealthy and also with unhealthy houses, a similarly inverted model town quarter as well, we need no designing. It would be enough to copy this. What is to be done? - ~~demolish~~, but that has been for too long the sanitary war cry of town councils; in fact, far more than the generation past and a whole series of terms such as relief of congestion, opening up, etc., have arisen accordingly. But these pleasing terms only disguise the fact that if the people are overcrowded, and too few houses and rooms for their numbers, we do not cure this by demolishing any of these, at most we push the congestion a little further out of sight and there it heaps up worse than ever behind our new clearances. Hence, /



Hence, in fact, a serious factor is the present overcrowding of cities, yet this is not realised and for two distinct reasons; partly, because we easily forget what we shut out of sight behind nice, new, wide streets, but still more because this artificial increase of congestion increases house values and land values to the profit of owners and still more to that of speculators. But this rise of values involves (a) the further detriment of the congested classes and (b) the general pressure of such artificially raised land values upon the city as a whole. Drainage is at present the more frequent panacea and cure-all in northern India, as demolition still in the south, and I make no doubt that the large engineering profession and its yet larger allied interests are quite sincere in their belief in the efficiency of this costliest of all known remedies, as the essential and sovereign one for almost all our sanitary evils. More urgent here in this village standing high upon its ancient mound, is the provision of an increased water supply, with washing out of courts and flushing of drains, with whitewashing also, but above all the need is of fresh air and drainage of the too stagnant air of these close courts and houses, in which the women and children are passing their depressed lives, ready for any and every infection which may come their way. Yet here stands a grave and real difficulty: we cannot get air without taking down some houses, yet we cannot take down houses, because housing accommodation is too small for the population already; hence, I presume, it is that after ordering the survey of the village the council has not proceeded to action. On the accompanying plan, however, I submit a practical suggestion; note the ground lying below the market place, practically out of sight and ordinary reach by any of the other large roads surrounding this village, and hence not in demand nor of building value at present, that a portion of this ground be acquired and treated, partly as a small park and playground with trees upon its sloping bank to north and south and partly as sites, as here shown and of fair size. Now let these be definitely ordered to the people in the crowded and insanitary portion of the village, a feu may be taken up; the terms should be settled upon a moderate valuation, essentially cost price plus expenses of the new site against a reasonably generous, but not excessive, valuation of the old house, the owner to retain and remove his material and the city to keep the vacant site, but not at present to build or sell. Even a few migrations would reduce congestion in the real sense and in the right way and year or so later, others would be tempted to follow the example. More well-to-do people might also be induced to remove and take up open sites on their houses, but the slight repairs might mostly be preserved and used to tempt out poorer people from their slum dwellings which might then be demolished. With such a supply of house sites available, the sanitary inspectors may become more strict and the evils of dirt be thus brought before the community. Some person of standing and earnest towards improvement may now work wonders through the/

the persistent exercise of his personal influence and persuasion; thus, in a year or two, a diminished death rate would reward his efforts and replace the present too calmly accepted figures and the sanitary education of the village would then proceed and this more and more rapidly. The immediate essential lies, however, in the arousal of a more awakened health conscience in ourselves, the prosperous and directing classes. Hence, I repeat my initial question and in slightly ampler terms. Is it not curious, even marvellous, that while a single increased death by violence can fill the press and set the whole machinery of police, magistracy and law in operation, this all but annual score per thousand of extra deaths by slow poisoning, and these in the open civil station, yet compared with old Lahore, one of the most ill ventilated of the world's cities, should as yet have awakened no activity at all corresponding to the obvious need; yet, what plan of all those before us could be more simple, more easy and even more inexpensive of execution?"

Inseparably linked to the notion of health is Geddes's conception of the requirement for zoning throughout the whole settlement area. It appears that Geddes does not see the practice of zoning as a blunt instrument to be used indiscriminately, but as a tool to improve efficiency. As previously noted for the Barra Bazar improvement, Geddes retains an admixture of commercial and residential uses in the central area of Calcutta. His decision was derived from a study of the specific requirement here of place and work and folk. In other towns, however, notably Lucknow, Patalia and Jubbulpore, he is firm in advocating a contrary policy -

"The timely provision of open spaces, with this of sanitation generally, yet this on the economic lines of the conservative surgery we practise and advocate and not of those of the sweeping demolitions, which have been, and still are, too common in other cities, is thus the first recommendation. With this goes naturally the planning out of the future areas of extension with (a) the industrial areas economically adjusted to main communications by railway and road and (b) its corresponding areas for dwellings kept distinct from these and laid out, not upon the execrable bylaw plans imported from the standardised slums of western industrial cities, but upon the far more efficient lines of the garden villages, which have now happily begun to replace them round the western hives of industry. We cannot too clearly express our protest against all survivals of such types of planning, now happily rendered obsolete in England since the Town Planning Act of 1910, but which has cooly lines, sweepers lines, even police/

police lines and, of course, largely industrial lines also, are still being erected in Indian cities, in this respect belated; of course, with the best intentions, but good intentions are not enough and ignorance is no excuse. The careful design of the future railway, manufacturing, industrial and commercial quarters with their various types and scales of dwellings on village lines should now be undertaken." (Jubbulpore, pages 9-10).

The careful arrangement of the various urban land uses promote not only efficiency, but are the contributory factor to health.

"Here too, we have passed from the previous residential quarter into an industrial one, a labyrinth of kacha, coconut fibre sheds, with people working at their heaps of fibre blocking the lanes, all grievously in each other's way and with perpetual loss of time, temper and money all around accordingly. Little replanning would make the area far more efficient for its industry, yet it would at once, begin to pay the community to go to some expense for this." (Six Towns in the Bombay Presidency, Broach, page 6).

Additionally,

"Situations so advantageously arranged are now being quickly utilised by new industrial enterprises and are being also actively taken up by existing ones, which are removing from other parts of the city and diminishing its present crowded, inconvenience accordingly, while the higher prices obtained for the central land and buildings they leave enable them to obtain far larger, as well as better space in these new situations previously neglected. The advantages of saving cartage, portage, etc., and time with them, are also obvious, though far too little realised as yet in India." (Town Planning in Lucknow, column 96).

#### b) Planning for Circulation - Transportation.

A crucial process in planning practice is the linking together of various land uses through an efficient transportation network. For Patrick Geddes, a road, railway, or lane are the arteries and veins of the body and must be so designed to promote efficiency in the organism. Transportation planning, however, is also an extension of health planning; a carefully designed network of routes is one which can promote community development; a badly designed system is one which may disrupt an organic unit, community, /

community or town, into sectors - misshapen and ill-functioning.

Roads must be designed for specific needs -

"Town planners are now emerging from that confusion of the early industrial and railway age, which thinks that streets have at once to meet the needs of communications and commerce and of residence and public life as well and which is thus apt to press at the first two, together or by turns, to the neglect and often to the grievous damage of the other. We now see, as did the old planners, whose work the industrial and railway age has too readily destroyed, that while main communications, of course, require ample and even spacious thoroughfares, the most prosperous and active bazars are those which are not too broad, indeed even narrow; for this is far more favourable to the survey and search of the purchasers and her or his easy crossing from side to side, which doubles the effectiveness of the bargaining quest." (Jubbulpore, page 2 ).

Land Use Planning and Transportation must be conceived as part of the same process -

"Development is happily easy and practicable for the central area of the whole city - why is this so? Of course, because of the abandonment of this central area to the brick makers. Their removal to a suitable and no inconveniently distant site has already been decided for them by the Corporation. This is a primary improvement. The draft layout of this area may accordingly be proceeded with, of course, brought into conjunction with the development of the two main thoroughfares lying north and south of this area, each leading westwards towards the railway and the craddock market quarter and especially of the northern of these. Without disturbance of present interest, this central area, with its east and west thoroughfares, will provide for the requirement of the generation to come without danger of undue congestion." (Town Planning in Nagpur, page 4).

New Roads, Wherever Possible, should be placed in derelict areas -

"The present lanes and narrow streets admit of some improvement, thus a new line may and should be cut from Victoria Street down to Nakhaz Road, so as the buildings required are at present valueless." (Lucknow, page 12).

and

"As to the desired new motor thoroughfares here, instead of either widening the old bazar and streets, as is disasterously proposed in Poona, or by piercing a new street through the old and close laid quarters, as formerly in Paris, etc., or now here a possible new boulevard route, broad even too magnificent, may be made along the lines afforded by some modification of the present fortifications on each side of the city. Both/

Both these boulevards are realisable at a mere fraction of the expense required for piercing this single new thoroughfare, since now destroying hardly any existing buildings at all, only which need to be removed on health grounds." (Town Planning in Alwar City, page 37).

Transport is for public service, should not injure community structure -

"Railways are now viewed as for the public service and no longer as superior powers, uncontrollable even by government - it may not be unreasonable to hope that this whole subject of bringing material order into the railway network, with sense of civic responsibility and fuller co-operation accordingly, may be actively entered upon." (Cawnpore, page 6).

"From Aberdeen to Moscow, from New York to San Francisco, the above criticisms have to be made of railway planning. This more or less everywhere recalls, repeats, exaggerates, the careless progress of the caravan and even the devastation of its conquests and the improvement has begun, it still seeks too much hastily to exploit for immediate profit, rather than wisely develop for progress. Yet this first elemental phase of railway history, that of route extension and immediate aggrandisement, inconsiderate of land injury, the village damage and the town spoiling, which its unskilled planning has almost everywhere inflicted upon its passage and during its expansion, is now happily coming to an end. From the higher elements which have also, throughout history come to the front amid all extensions and conquests of the caravan years, in fact, their statesmanlike social and even moral qualities are increasingly appearing amongst their modern representatives; even a more enlightened self interest begins to realise the past mischiefs done and to regret them and this again, the step is inevitable, to be ready to meet the communities which have been and are suffering from their inroads and to consider how far better planning may even now mitigate the damage done and this with economy and mutual advantage to all parties concerned." (Bezwada, page 33-34).

### Roads and Safety

"But it is of the essence of recent planning, that we seek to avoid another of the mistakes which has so largely vitiated even a better work of the past, namely the confusion of roads and communications, great thoroughfares in the literal sense, with shopping streets; the former are primarily for vehicles, in these days ever more and more numerous, swift and dangerous accordingly and for direct pedestrians also, who are seeking to get to their destinations of business or home as speedily as may be. Such roads must, therefore, be spacious and as far as possible, availed. But trade, and especially in small wares, seeks and needs narrower thoroughfares - but also one in which the purchaser can move most easily from side to side, undisturbed by vehicles." (Balrampur, page 32).

"The/

"The principle of the road system of this new quarter, is to provide a new central road, sufficient to serve the internal needs of the large community and so lighten the extra traffic of the main thoroughfares as far as may be, without competing with it in size, in construction or . The minor roads, not thoroughfares, are, of course, an adaptation from familiar garden village methods in Europe and should here be especially attractive in view of that rooted and reasonable nature of Indian life, to desire to live amongst one's caste fellows and kindred and especially to group Hindus and Moslems in definite quarters." (Kanchrapara, page 8).

"Roads and streets are for houses, not houses for roads." (Broach, page 5).

### c) Planning for Work

The three primary principles which Geddes appears to enunciate with regard to industrial location are derived from his view of a regional economic synthesis in which the efficient use of industrial space is linked to the provision of minimum standards of working conditions for people. Geddes's perspicacity is clearly evident in his desire to utilise regional resources to the full and to use all existing labour skills in industrial promotion. The prime necessity is to select some industry or venture which can act as a multiplier. - A multiplier should be effective in both the industrial and commercial fields, but also should be one which can have repercussions in other activities. He notes, for instance, when discussing the problems of Colombo, that -

"Large forecasts and ample preparations for the future are thus fully justified, even urgently necessary and although in execution it will be necessary to exercise strict economy, it is expedient to select for early execution, not necessarily the projects of most immediate return, but as far as possible, those of basal advantage." (Town Planning in Colombo, Introduction).

He sees it essential to capitalise on the traditional regional skills, which, after industrial retraining, can help to promote modern industrial growth.

"Few, though as yet, may be such garden cities, they have been justifying their existence and in many ways, from the small old university cities of Scotland, England and the continent to the best modern hives of industrial skill and these again on many levels, from Lord Lever's comparatively simple soap making at Port Sunlight to the microscopes and binoculars of/

of Jena. Now is it now amongst these renewing garden cities that Alwar's future may lie? Not, of course, amongst the great manufacture of this first example, but rather in ways comparable to the skilled manufactures of the second. The marvellous armoury of Alwar is full of the masterpieces of local swordsmiths' craft, which surpass those of Sheffield and Ferrara and rival those of Damascus, Toledo and Japan. Though this industry may have died out, and its last mistri have been ruined, the potentiality of such subtle brains and skillful fingers must still be here and if so, may it not be re-awakened and applied to modern needs of skill and art with science?" (Town Planning in Alwar City, pages 7-8).

In Geddes's report on Patalia, State and City, he is at some pains to stress the significance of a relationship between agricultural practices and industrial growth.

"The growing of medicinal plants", he notes, "for which there is a constant and substantial demand, may readily lead to the development of productive industries of pharmacy."

"It is possible", he goes on, "that there are possibilities in manure and a scarcity of manure and bone. Nothing", he wrote, "is more regrettable to the rural eye than the current waste of bones. It is surprising that there is as yet no bone crushing mill in the whole Punjab. Here there is a real opportunity and for each of the two favourably situated railway towns of this state, Bhatinda and Rajpura, with their wide accessibility alike for the collection of the material and for despatch of the results through the State and beyond - the existing nitre industry may similarly, with advantage, be associated with this. The preparation of various compound chemical manures can thus be aided and with due adaptation to the requirements of particular soil in which the modern chemist is skilled. The nitre industry thus provides him with the raw materials for nitric acid and nitrates generally."

It is crucial, Geddes believes, to realise the potential of regional resources. It is also important to streamline the internal working of firms, a factor which has been previously commented upon with regard to use of space in the Barra Bazar improvement in Calcutta. However, basic to Geddes's theme, is the contention that the basic resource for industrial growth lies with the people.

"It cannot now be too emphatically pressed that the development and improvement of city, a region or a state, proceeds essentially with those of its people and thus of the rising generation - where is the best land in any site or locality? The true answer is not merely that of the geologist and chemist, it is where you find/

find the best farmers and so for all highest occupations, arts and sciences, the natural and local advantages are but small in comparison with the quality of their men."

In this manner, Geddes thus links industrial planning with the total question of the provision of minimum standards of health and hygiene. A cogent and terse development of Geddes's thesis is perhaps best illustrated with a reference to Part I of the Report to the Durbar of Indore, entitled Industries and New Industrial Town. The thesis here developed by Geddes rests on three primary bases. The initial contention is that Indore industrially promises to be dominated primarily by cotton as it is situated in the cotton growing region and because economically a town is first of all the market of its surrounding hinterland. Elsewhere, however, the development of significant industry based on the fibre has produced results detrimental to the population in general -

"Again, how has cotton been so peculiarly productive as regards economic theory and so influential in corresponding political action? Witness the Manchester School, at once the mainstay of free trade and the backbone of liberal politics, Yet also, how did cotton in this same Lancashire become so peculiarly associated with the depression of labour, of man, woman and child alike, to a degree unprecedented in industrial history? With this depression of the labourers and their family life and of their health and life expectation correspondingly, came that of home and village, of city and town. Popular intelligence and education were alike lowered and the general civilisation and culture with them; such are some of the evils from which Lancashire has so long suffered and England with it, and from which indeed, despite a century of Factory Acts and increasing legions of Factory Inspectors, it too much still suffers."

The second base thus arises from the possible evils of the first. It is necessary, believes Geddes, that considerable attention must be paid to basic considerations such as the hygienic condition of labour, working hours, housing and a proper adequate standard of health and comfort. To develop the social and civic organisations involved to the standard of efficiency required, is a keynote of Geddes's study. Planning of the industrial town is a task which requires the fullest co-operation between workers and employers, the municipality and the State. The planning of Indore, /



Indore, Gedde's notes, is thus -

"A matter far more than its present planner; it concerns the whole city, not simply capital and labour, but every capitalist, every labourer too, for only in the measure of their effective co-operation and this not merely towards dividends and wages, but towards general well-being, can any planning meet with real and enduring success. Wise and vigilant municipal government and state government also, must do their parts, but the main task will remain for that effective citizenship which these can but seek to support, to encourage and inspire. It is, of course, not in the temperament of the town planner necessarily a hopeful one, to predict evil, yet it is his duty not only to guard against those which careful planning may exclude, but to add warnings as regard those which lie beyond his power. - Is it not the problem not merely to plan at the outset but so to direct and lead, so to organise and administer thereafter, that the possible troubles may be minimised?"

The third base upon which Geddes develops his thesis is that the industrial base structure must not be too narrow. Regional opportunities of the Indore region offer the possibilities for more diversified industrial growth. - Cotton is not the only possible industry and Geddes argues that since climate and soil are both suitable for the growth of mulberry, a silk industry should be put upon the footing it deserves and so provision is accordingly made for mulberry plantations and for the necessary education of the population towards the development of a craft industry. This would have, he sees, "an essential merit of offering employment for female workers".

"May not", he notes, "a more strategic appeal for this essentially domestic industry be made to the less conservative townfolk and this through the women rather than the men, for silk is specially a woman's industry - town households, though containing a great number of women who might readily and profitably rear silkworms, have not mulberry trees and though some might be planted, there would not be enough to yield leaves for the many rearers throughout the season. Yet this difficulty can also speedily be got over; let us establish extending mulberry plantations/

plantations on suitable land - let our little mulberry and silk company be from the first on co-operative lines as well as in touch with the skilled example and direction of the existing silk school. - Some women will do this at home but experience shows that this may <sup>be</sup> still better done in small workshops for the purpose. In any case, this labour is lighter and more attractive to women than most. Export of silk at this stage is, of course, easy but the silk loom may also re-establish, the Indian silk weaver restored. Women may again come in with silk embroidery."

Industrial planning then is one component of a wider objective, not only providing for place an economic future but one full of possibilities for domestic well-being and health and for civic betterment in general.

d) Planning for Place and Folk - Environment for Living

The most voluminous material in the Geddes Indian Planning Reports relates to the practice he advocates regarding housing policy, the creation of adequate environmental standards both spacially and visually and a needed integration between urban housing rehabilitation and overspill. Geddes's pre-occupation with the health and welfare of people brings him to place a considerable emphasis upon the human scale in planning. Planning is clearly seen by Patrick Geddes as promoting improvement in the human situation. In consequence, considerable emphasis is placed upon a review of the needs of the individual and the needs of the family as the basic organism. This aspect of Geddes's work may be divided into a number of distinct facets amongst which are the isolation of a series of propositions regarding housing policy in general, the means to finance housing for all classes of people, the creation of a varied and lively visual environment, the linking together of home and work place and the confirmation of community units, either within the existing urban framework, or in the new extensions to the urban mesh. Basic to Geddes's view of housing is a supposition that housing is a right of both rich and poor and that equally high standards should be provided for all classes of the community.

He/

He notes, for instance,

"It is only those of the upper and middle class occupations who have had the time and the means for such journeys (to suburbs) or even the physical energy after the day's work and who find recreation in this change from their sedentary life. Even if we merely view the labourers as our machines and with that clearness of American efficiency management, which is still unconsidered in India, the extra and unproductive time and toil, let alone expense of a suburban journey to and from work, morning and evening, is a too serious deduction from the labourer's daily and yearly total productive power. The jost, who ever saw a postman taking a walk, is in itself enough to illuminate for us the necessary location of housing for all muscular labourers and to show that if it and they are to be made efficient, their houses must be near their work, but by no means necessarily ours, which may quite well be located at a reasonable suburban distance. Further, I feel it my duty to submit that this artificially increased house famine is already in a grave situation and that this more fraught with evils and danger than appear to be realised even by representatives of public bodies and authorities, for these evils and dangers are of every kind, not merely to health and sanitation, but to the people's standards of comfort; in more modern terms, that family budget on which health and productive capacity depend and which thus, through its more or less adequate consumption, determines the volume of business in the necessaries of life and so its legitimate profits accordingly and as it is this class of business which preponderates in Barra Bazar, its prosperity, therefore, ultimately depends upon that of the people who are the main customers of its trade in the elemental necessities of food, clothing, etc. - With all this thoughtless sowing of unrest by the older types of city improvement, the modern planning movement has been and is now increasingly struggling to supply the antidote, viz., that of preparing the rehousing of the people before their dishousing and this in adequate if still modest conditions, i.e., those in which healthy and happy family life is reasonably possible. It is thus the most truly conservative of all the social agencies towards the abatement of unrest, which are as yet in operation in any country; yet, despite the obvious fact of this movement being primarily of constructive and social purpose, although in the second place, financially sound throughout, it is, as yet, neglected too much by the superior and would be conservative classes. This is apparently due to the prevalent confusion of their minds and purposes by too strictly specialised financial outlooks and forecasts and this, though generally untainted by any personal interests; conversely, this reconstructive character of the Town Planning Movement has also led to its repudiation/

repudiation by the growing radical socialistic or yet more extreme revolutionary tempo, since this recognises and disapproves its influence towards resettlement on practical and constructive lines and with the abatement of unrest accordingly." (Barra Bazar, pages 33-34).

Geddes is frequently at great pains to stress that a positive housing policy is, in fact, economic and that when the total costs and benefits are analysed, then this will be fully realised. He notes, for example, that

"The utilitarian and his engineer are still wont and this quite ignorantly and so far innocently, to reply that they are restricted by the necessary economy of sites, buildings, roads and so on, and thus cannot afford these charming vagaries and aestheticism of the garden village planner. But this, though honestly enough believed in, as traditions and myths everywhere are, is the most mistaken of traditions and the most absurd of myths. For actual comparison of the old standard plans and their modern repetitions all over India and not absent from Ceylon, with those which we planners now produce and offer, show that we require far less roads, often only about half of the old length and thus with not only vast economy of money, but spaces for homes. It is, in fact, largely by saving useless roads that we get our gardens and build new homes, less expensive also. Here the writings and plans, the calculations and figures, the realised work also of Raymond Unwin, of garden city and village fame, are classic and should be mastered for they clearly and convincingly demonstrate how not only the health and beauty of village planning, but its economy and efficiency are, as a matter of fact, all on our side, these survivals of utilitarian mythology notwithstanding." (Colombo, page 10).

Geddes has a firm belief that it is essential to develop a positive housing policy in order to remove the basic evils of slum conditions and over crowding; evils which manifest themselves both environmentally, through the deterioration of property and the incidence of diseases of numerous kinds, but also mentally, through the lack of confidence by people. A short term approach to housing, Geddes maintains, is equally as detrimental as no attempt to create reasonable, healthy housing standards. Thus a carefully prepared housing programme based upon long term objectives, is required.

"We now go to the Kempatti Colony, where a moderate number of new houses have actually been built, all on plots 60 x 30. The house plan itself is a fairly good one of the usual type/

type and although the room is inclined to be too small there is habitable space for a working family. Unfortunately, however, the first new house as we enter, contains not only its owner and his family, but has rooms to sub-let to no less than three other tenants, so here we have new overcrowding at the very outset. This state of things is no doubt very discouraging to the ardent sanitary reformer and he falls back readily for a simple and self-satisfying explanation upon the inherent perversity of these people, manifested in a positive desire, even a preference, for overcrowding and in a determination to maintain it, in spite of all his efforts. Another too simple explanation is in his covetness, his squalid acceptance of slum conditions himself, if only he may get rent from people a little poorer and so on. Such explanations enable our reformers lightly to pass over the tremendous demolitions of past years, yet what else could possibly have happened than what we see?

(a) The crowding of evicted families into the neighbouring slums, still old yet undemolished and also (b) that such are lucky enough to find even a single room to let in a new house should take it and even outbid each other for it. The members of municipality and government look closely into these facts of wasted improvement and of depressed life, as we are doing here. The present policy of sanitary clearance before rebuilding cannot be maintained; This policy is a universal one, I know it from my youth in Edinburgh, in Paris and a score of other cities, just as more recently and too thoroughly here in India; everywhere we begin to recognise the fatal and calamitous consequence of such would be sanitary efforts. We are told that regulations exist to prevent overcrowding, but people disobey them. Of course they do, but regulations can in practice, be enforced while there are too few houses to go to. Illicit sub-letting is always easy and who can blame it? After all, people must have some kind of cover over their heads. A further regulation often, is that only one third or even half of the building sites is to be occupied, but this also may be impracticable unless sites are correspondingly enlarged." (Coimbatore, pages 73-74).

Geddes sees two aspects to the housing problem and the attack on housing conditions must come with these in mind. In order to introduce basic standards of amenity in existing property, it is necessary to be selective of demolition. The housing problem as he sees it in India is extensive and therefore, wholesale clearances would only transfer the problem of overcrowding into other parts of cities. The necessary planning corollary is the promotion of a rehousing policy. This Geddes regards as taking two basic forms, a careful planning of extensions to the existing urban/

urban area garden suburbs and/or the creation of independent overspill centres and new towns.

"A new suburb with good houses for the most part, more or less like those of Wari, is plainly required and its construction would give a new start and life to this western quarter of the city and more space in the old town, making bettered housing, abated congestion and other improvements far more possible. Moreover, if new families are to come in as naturally happens with every university town and provincial capital, where else can they go; what other place is there to attract them?" (Dacca, page 18).

"There is another objection to the new site offered to these workers on plan some distance on the railway line southwards, apart from the added distance to be traversed by them, two or four times daily in all weathers; namely that of all possible directions and sites for the much needed expansion of the present old city; this is one of the most obvious and accessible. The municipal council, when in due course consulted, approved the surrender of this area from their own extension requirement, to that of merely housing those evicted for bungalows. If so, I cannot think the mass of their constituents can or will approve of them, since with the appropriation of this expansion area, the congestion and the land values of the city, already so serious, must receive a further and very considerable turn of the screw. Has the expansion committee adequately considered these points and if so, do they see them as a further pressure towards the speedier population of their expansion areas to be acquired south of the railways. This method of coercion is surely too uncivic to be suspected as of their conscious design. Nevertheless, such pressure could not but arise and with augmentation of house famine and all its consequences accordingly. Such methods, though compatible with the state of civic anarchy and competitive struggle which were dominant during the pre-war period, are no part of legitimate town planning. Finally now, there is the wiping out of villages and the wholesale expulsion of their citizens, whether this be excused on grounds of sanitation, really inability of sanitation, or as in this case, admittedly in the interest of the forty-five or more bungalows. I shall never forget the impression which was made on my mind when inspecting, one day in the autumn of 1914, villages under just such sweeping demolition and for the provision of bungalows, as here in a great Indian city from which one expected a better example and how this impression was intensified by the astonishment of my young assistant, fresh from Europe. True removal will not here be unduly hurried, compensation will be given and new sites also provided, but these apart from their defect in increased distance from work, are inevitably taken from the limited space already urgently required for the relief of the over-congested city and thus, must intensify its evils yet further and in ways which extension south of railways will not adequately abate. Even if my affirmation be disproved of the improvement and sanitation of these/

these villages where they stand as easy and economical, I thus cannot regard their proposed removal as of civic advantage, but rather as an induced stretching of the sound principle of compulsory acquirement for public purposes beyond its intended or normal limits, since with disadvantage to the great majority of interests and population concerned." (Cawnpore, page 8).

This comment made to the Cawnpore Expansion Committee, shows that Geddes sees the municipality as playing a crucial role in the provision of housing. However, difficulties are clearly envisaged - given an adequate level of compensation to be paid to dispossessed owners of property, Geddes realises that people will not easily move to new quarters. He clearly sees that some element of coercion is undesirable and prefers to use either the possibilities which already exist and which, in themselves, will promote a movement of people, or alternately, create a satisfactory environment which, in itself, will be attractive and conducive to dispersal. One clear answer to this problem is to be the linking together of new homes and good environment and a reduction of journeys to work to a minimum. Basically Geddes is looking for a comprehensive and self-contained suburban development.

"We are shown a fine civic estate, actual and contemplated; on the west are two hundred acres already purchased all the way up to the agricultural and forest colleges and thus more than time to be thinking of planning these acres. Their layout must soon begin and the wrong way or the right; a garden is henceforth only to be the privilege of councillors and officials of wealthy vakils and merchants. Surely some of these who realise what pleasure they have in their gardens must feel increasingly willing to assure something of the same to their poorer fellow citizens? Indeed, the joy, the health and the proportional economic return of the garden are all the far greater for the man who makes and tends it with his own hands than for him who has one or a dozen gardeners. In some way then, all that the heart of garden village planner can desire can, before long, be realised in Coimbatore and the people thus gradually persuaded out to the suburbs and for their good instead of being driven out for their evil. We ask of one of the thorayars, why don't you go to the north side of the town, see what fine sites? "Yes", he answers, "but I cannot live on air." Could he not at any rate, partly live upon a garden and might not that change/

change his and others' attitude to this whole extension scheme? We then ask various municipal officials and businessmen whom we meet, "Won't you remove to that fine new neighbourhood" and they say, no. With a little further questioning we discover that each of them lives within half-a-mile, indeed generally less, from his ordinary working place and that he thinks a whole mile and still more, a whole extra mile, far too fatiguing for daily life, far too great a strain, especially for the return for the midday meal in the heat of the tropical summer. Here, in fact, is the main difficulty of Indian city designing which, in my experience, is usually overlooked by the vehicle using classes, Indian and European alike who, of course, think nothing of a mile or so; and even forgotten by architects and engineers, but if poorer people are to be settled in these suburbs, working centres and bazar centres will also have to be planned for them near where they are to live. At present are not the municipalities planning too much as if their city were like London, with numberless middle-class people able and willing to come up by train, tram or motorbus to their shops and offices, but such transit has to be very cheap before working people can use it and in India walking must long remain the only mode of transit for the working man. It is said that many labourers walk far to their fields or to town; I know it, but that is a not inconsiderable element in their poverty through reduced working powers. Yet I find it has been proposed to remove Mohammedan slaughterers from their slaughter-houses and from their mosques alike; I find Pallas and Parayas also proposed to be removed more than a mile away from their work and I am not surprised that they refuse to go. Similarly, I find that not only coolies are to be taken away from their work, but cultivators from their fields and gardens, servants from near their masters' homes, traders from their shops and so on; but this is not town planning, beyond a very moderate distance it becomes town spoiling. The problem, I admit, is a most difficult one and it is at any rate a good sign that the weavers, whose work goes on within their homes, have first been looked after though their housing still be poor, but for other<sup>and</sup> less sedentary trades and occupations, the problem is a very difficult one and it requires time and thought, indeed prolonged study with collaboration and criticism from every section of the community affected." (Coimbatore, pages 76-77).

Elsewhere Geddes pinpoints an additional dimension to this problem. He is at great pains frequently to stress that changes/



that changes in economic and commercial activities and the introduction of new transportation possibilities, are likely to encourage an extension of the urban form in predictable direction. He sees these trends as offering positive advantages which may be harnessed.

"Quite independently of any suggestion of mine and, in fact, during several years past, as part of the far-seeing and constructive policy of the present management, there has arisen the project of a new large suburban extension upon one of those few portions of high lying and flood free land which are only too rare in and around Balrampur and which are proportionately valuable for housing accordingly - we may reach it also from Station Road by the road which connects with the southern bridge. This road itself, though partly through low lying land, affords various sites high enough for bungalows, etc., and others which may be raised without undue expense. In this way the expansion of the town towards the railway station, which is inevitable in all cities, is being provided for on two independent yet converging lines, those of the Chowk and Girls School Road, as well as of the Station Road. Hence, this proposed new suburb, instead of being out of the way as some Balrampur residents may at first think, will really and before many years, be seen as a central feature of the growing town. Under these circumstances its careful design is peculiarly important." (Balrampur, pages 30-31).

Geddes, however, follows this comment by illuminating an aspect of this process. He foresees that a radical redistribution of population within a city and from a city to suburban extension, can only be accomplished if the population itself is drawn tightly into the planning process by being made aware of the need for such changes. He notes in the Balrampur Report that -

"It is, moreover, of the very essence of town planning movement that it no longer removes congestion without providing plans for equivalent, indeed more than equivalent, housing elsewhere and so takes the people with its improvements, instead of arousing their natural dissatisfaction and passive resistance as was too commonly the case on the older method; one too much of dis-housing rather than housing."

#### (i) The Provision of Housing

"Yet general town planner though I am, and not housebuilder or architect, save by exception, I must all the more insist on the proposition that village, town and city alike consist essentially and permanently, not of roads and streets, /

streets, not of water pipes and drains, but of the homes which all these accessory developments exist to subserve." (Nagpur, page 8).

Of fundamental importance to Patrick Geddes is the survey of existing conditions and the classification of buildings according to quality. An adequate survey, he believes, is essential before any estimation may be made of the scale of the housing problem within a town.;

"I find much to be done in pukka kutcha and ruinous or fallen down; for the four classes of property which it is essential for the city and the locality alike to keep clear record of, have never been noted on the survey at all. This we have roughly to do on the ground accordingly since, before suggesting any changes one must know the nature of any property to be interfered with and plan along the lines of least resistance, financially speaking. Building, however, turns out to be going on irregularly and as the new streets are not clearly marked and the ground and the new buildings are not marked on the plan, much time is spent on identification. Instruction should be given to the surveyor (a) to keep the plans up to date (b) to keep streets which are laid out on plan clearly marked on the ground also. As before said, many buildings are first class and some even palatial and many more of simpler character are good, even excellent. Some are even worth photographing and exhibiting and this both from the proposed town planning exhibition and as permanently accessible to all comers as an example to others. But as we proceed we find others now indicated in purple on the accompanying plan, which are much less satisfactory and of these some which call to be photographed for exactly opposite reasons, as warnings and examples of what to avoid". (Lahore, pages 11-12).

Perhaps the most cogent statement in all the Indian Reports relating to Geddes's basic housing policy is to be found in the Report on City Development, Part I, pages 65-78. Although this section is concerned primarily with garden suburb development in Indore, the principles enunciated are mirrored in other reports. These are that -

1. It is the responsibility of the Planning Authority or Municipality to plan roads, water, sanitation and community facilities.
2. Houses wherever possible should be detached and be provided with their own garden area. Each house should have access to a municipal garden.
3. Houses should be leased on a permanent basis to occupants at moderate ground rents.

4./

4. As far as possible, housing layout should be landscaped and the building type itself should not present a monotonous facade.
5. Wherever possible, community grouping should be developed in housing areas.
6. Houses should be provided with minimum standard for health - at least, for instance, 700 cubic feet for each person in sleeping accommodation and a minimum of kitchen and two rooms, together with verandahs.
7. Housing finance should be provided through direct mortgage schemes or co-operative housing schemes. In this, both the municipality and the private or state bank is the source of finance.

(11) The Characteristics of Garden Cities and Suburbs.

Patrick Geddes regards garden city development as playing a crucial role in the revitalisation of the life of the citizen. This is achieved in a number of ways:- through the creation of conditions for healthy living, through a reduction in the scale of the immediate environment, and by combining in the new development, the advantages of both town and country.

"While the by-law planning has thought exclusively in terms of streets and lanes, this modern garden village planning, as its name implies, stands not only for the supply of gardens, but also for the renewal of village life. Even in European cities, but more obviously in Indian ones, the townfolk are really still very largely villagers. In the street or the lane they aren't really at home; their true place and above all that of the children, as of the elders too, is in the village square. For this social life, both of old and young, such squares and open spaces, each with its well, its shaded trees, one or more and its little platform and shrine, by and by its temple and this often a beautiful one, make up village centres which are second to none I know of in the world, whether of east or west. To plan then with this village life, within the town fully in view is the best way to diminish that deterioration of the villager in town, which is a main root cause of the decline and degeneration of cities everywhere, as this is perhaps the oldest difficulty alike of moralist and the physician, of governing and spiritual powers generally. An increasingly important leader in the struggle against tuberculosis, and this in England and India alike, Dr. Muthu, has of late specially insisted on this view that this and kindred diseases are not merely to be explained by - this or that germ any more/

more than are vices or crimes by this or that particular temptation, but all such evils alike are associated with the decay of social life from its old rural standards and with the weakening of the individual accordingly in all respects in physique and in character and in resisting power of both. Hence, our new suburb while traversed by its main road as a modern motor avenue and surrounded by contour roads as well, is yet in the main a succession of village groups and each with its own centre. From one to another of these it will be seen in plan that one may thread one's way ~~up~~ one side of the suburb and down the other without going through the intervening streets but merely crossing them as needed. Accommodation in the main body of the suburb is shown for houses of first, second and third class and these in proportions as near as may be, but capable of enlargement or diminution as may be required." (Balrampur, pages 33-34).

"Yet this is no mere suburb of bungalows and gardens that we have already in the London environs, in British Indian Civil Stations or in West Bombay, nor yet as any mere village of market gardeners, though these may stand high in productivity. The garden city is not understood till we see it as a city at once of productivity and of intelligence, both nurtured in surroundings of beauty and health and so with growing prosperity and happiness and these at once spiritual and social, educative and productive." (Alwar, pages 6-7).

Whilst Geddes clearly envisages the garden suburb as being mainly composed of bungalow type development, he does not automatically rule out high densities. It has been noted for Barra Bazar improvement, for instance, that Geddes accepts some high density development in the centre of the urban area and the retention of living accommodation above commercial and office premises. Indeed, Geddes retains multi-storey forms in many of his recommendations for central parts of towns. However, Geddes appears to have major objections to high buildings for residential purposes. On the one hand, he sees that they are uneconomical to build and on the other, that they may be inimical to health. Accordingly, the majority of his designs for garden towns or garden villages exclude the high density block.

"Everyone/

"Everyone knows of the American skyscrapers and of the elevators, lifts, which render them possible. These are mainly in New York, i.e., Manhattan Island, as great a port and business and much narrower area than Bombay and are for all office purposes. To some extent they have been introduced in the corresponding port and business area of Chicago and other cities and their glittering return in land values has led to their more moderate adaptation to hotels and blocks of flats; but these for the very well to do only, since no ordinary rentals can bear the added cost of elevators. This higher return in land values has more or less influenced high building all over the old world as far as regulations allow, but it is less known that these high buildings no longer pay since their expense for strong construction has turned out to be too great and their thick walls, elevator space, etc., have made their rooms too small for their high rentals. The injury to the surrounding property and communications and other disadvantages are also felt - In Barra Bazar there are already a good many four storey tenements, some of five and even six on Harrison Road, while five have been proposed in various and sometimes with or less of a six. From outside high tenements look well; turn them into the old city where the very high tenements were first invented and proportionately most built, Old Edinburgh. Its tenement houses, mostly one room, went up to fourteen storeys a century ago and some up to nine or ten are still surviving; of course, all with no elevators. I have myself, built workingmen's dwellings up to five storeys and even a block of flats six storeys high, less than thirty years ago and I still occupy its fifth level; but one day, now twenty years ago or more, while enjoying my open air and wide view, I was sharply pulled up by a colleague, an extra-mural professor and consultant in gynaecology and also an eminent hospital physician. -"You are thinking like a man". -"How else should I think?" -"If you know anything of my business you would learn to think like a woman, try it. Imagine yourself with only a woman's strength, not more than half a man's for climbing stairs and now with your food basket on one arm, your baby on the other and another babe **growing within**. Now tell me, how many stairs would you like to climb?" He went on, "Let me tell you from my life long practice all through this city that you will find above the third storey a definite strata of ill health despite the purer air and even for young children as well as women. They first go up and then downstairs freely and get strained accordingly, then they stay at home to avoid stairs and so get out of health for want of exercise and in other ways. So I have them on my hands accordingly and how a working family gets on with a delicate mother you can try to think out at your leisure." Here was for me a fresh light on our high built city and also on the medical eminence of its university, with its intensity evoked/

evoked by the surrounding evils. Not a little through such medical protest and its influence, the Edinburgh Corporation, which had already successively lowered its building limit to six storeys, then five, reduced it to four and now of recent years it has reduced it again to three storeys, above which height no tenement house or flats are now constructed. In designing the warehouse and office premises of two storeys and with two storeys of dwellings above these, I am thus guilty of exceeding this health limit. I so far excuse myself on the grounds of site famine and urgent need, that Indian women do less outdoor marketing, etc., that they have here open-air balconies and also a courtyard for the lower inhabited storey and access to the roof above for the higher one, while the sloping ramp for ground to the first floor of offices will also be of substantial mitigation to the fatigue of climbing so many stairs. As women in India mostly go out early or in the evenings, public use of the ramp during business hours will not seriously disturb them; if necessary, however, the staircase may be continued to the ground. I trust, however, that the dangerous last straw which breaks the camel's back, that of a fifth storey and stair, may soon be distinctly prohibited by municipal regulation." (Barra Bazar Improvement, pages 31-32).

Geddes's schemes, however, appear to carry elements of town into country in that whilst high blocks are not advocated, densities throughout an area are relatively high. Suburban schemes for Indore, for instance, range from eight to sixteen houses per acre. For the model colony at Kanchrapara, the density is up to 24 houses per acre. This particular report merits some study in that it was specially commissioned by the Eastern Bengal Railway and the procedure for establishing the new development is carefully documented by Geddes. Two major points emerge in this study. The development of a new unit could be made economic in that the increase of land valuations which will result may be ploughed back into the municipality. Geddes notes, for instance -

"The first return is, of course, in the bettered town with a healthier and wealthier community and the direction of this upon the railway company it practically undividedly serves. The ordinary difficulties of civic book-keeping are thus here exceptionally got over, but a definite business account must also be kept of the rising outlays and of the degrees to which the value of sites thus created are to what at present can only be agricultural value and surely not very great at that, may recoup these outlays in/

in the course of very few years." (Page 9).

The second consideration relates to the situation of the colony as a self-contained unit. Geddes lists the facilities which must accompany the housing development and these include a complete provision of facilities for shopping (markets and co-operative stores) and a complete range of social facilities (recreational, swimming baths, tennis courts, school, churches, hospitals, dispensaries). Housing densities in the development range from four to twenty-four to the acre and allow for a complete cross section of needs. Patrick Geddes is at great pains to stress the importance of the development of community life. It has been noted that he sees these new developments as being in essence a tightly created village community within an urban penumbra. The new garden village should contain a complete social cross section though Geddes appears to realise the difficulty of bringing about a mixture of people into one area. He accepts varying kinds of residential accommodation, but it appears that his ultimate hope is to bring about a gradual blurring of social barriers.

"I have carefully considered the suggestion of endeavouring to segregate the whole body of workers west of the line and so reserving the area to eastwards for senior and junior European staffs and for Naihati subordinates - to separate this extension of worker dwellings from the area occupied by European subordinates and that indicated for the Naihati group, a long double avenue of flowering or shade trees, preferably the former inside the latter, as shown on the plan; Naihati plots are here reduced to quarter of an acre instead of the acre, which experience shows to be too large for busy men like the European subordinates hard-by." (Kanchrapara, page 11).

At Balrampur, Geddes is clearly hoping for some reduction of visible class differences.

"Accommodation in the main body of the suburb is shown for houses of first, second and third class and these in proportions as near as may be, but capable of enlargement or diminution as may be required. These, it is intended, should all be pukka upon the main road and as far as may be out east kutch-pukka throughout the minor ones. Yet a good kutch/

kutchha house may, in special cases, be permitted in the minor streets and squares, alike for their own merit which may be quite real ones and in view of the fact that in an improving quarter a man develops a healthy ambition to better his home and so may turn kutchha into pukka as his savings or his credit may allow." (Balrampur, page 34).

At Cawnpore, on the other hand, Geddes comes down firmly against class segregation.

"The recommendation of the report is defined upon the architect's plan by colouring their substantial area for this purpose west of that for Gwaltoli and other workmen proposed for eviction. But while I can understand and support the segregation of the hide trade for its odour, or of the criminal tribe for its reclamation, I fail wholly to discern any corresponding convincing reason, or indeed any reason at all, for separating clerks, either as a class or as a neighbourhood. By all means let their housing be considered like other people's, but this without segregation, for the resulting detriment to the general community of removing from it a large proportion of citizens of good quality, or relatively high education and of peculiarly regular habits, is surely too obvious to need any detailed argument. I think I am safe in saying that wherever a good and accessible planning scheme is prepared and carried out on reasonable terms, clerks are not behind other people in taking advantage of it. Their education peculiarly fits them for organising co-operation and the comparative regularity of their positions also interests capital in their housing. Where better than Cawnpore, would the admirable Co-operative Tenants Limited find its beginnings in India?" (Cawnpore Expansion Committee, page 9).

Above all, however, Geddes stresses a basic requirement for the development of any new community - that it has a possibility for continuing growth. Thus a land allocation is provided for the community, not only to expand spacially, but to absorb the second generation.

"Let us see them with this principle in respecting the Indian family and home and providing for the growth of both together. The sons marry and bring home their wives and have children, of whom a proportion may someday ask to be housed in turn, cannot these be brought into our altering and developing plan? If so, we shall have made a step towards arresting that direct combination of Indian family overcrowding with European slum planning, which is now too frequently beginning in Indian cities. Towards realising and designing what/



what is needed, a convenient illustration primarily for the European reader, but quite intelligible to the Indian, may be taken from the planning and allotment of graves in a cemetery. Only for paupers, or in time of pestilence or war, are the graves kept close and side by side. In ordinary conditions, after a grave has been allotted for the family of A, at least the next place is kept vacant in view of its reasonably probable requirement by and by for another member, similarly for B, C, D and so on, so that the family associations are respected, while the cemetery, planned as it was, for the needs of more than one generation, fills up in the end just as rapidly, but more satisfactorily than of the stricter arrangement of regular rows. Surely only the dullest of planners would seek strictly to maintain the pauper and pestilence method as regularity, or think this family method mere irregularity, yet this is what plans like the present do for the living." (Cocanada, page 9).

(iii) Rehabilitation in Towns - Conservative Surgery

The technique of conservative surgery or selective clearance is a crucial stage in the process of environmental planning. It is a feature of planning which calls for a considerable degree of maturity by the planner.

"The writer's experience has compelled wider and deeper surveys, more cautious yet more thorough diagnoses and thus treatment more comprehensive, yet also more moderate, even gentler than is customary applied. Thus the older heroic operations still so frequent in wouldbe civic surgery, are here replaced by surgery more antiseptic in detail and also conservative. The beginner soon amputates a damaged limb, but with more experience he applies himself to mend and restore it to usefulness. With this latter type of surgery goes a more developed nursing back to health. In this good environment strengthens the body, and mental vigour of hope and courage is revived also." (Town Planning in Patalia, Preface).

The techniques advocated by Geddes do not relate simply to preservation but are positive tools of planning and appear to have a number of clearly defined objectives.

The Retention of a Heritage - "As this study of the locality proceeds, one is encouraged by the results alike for sanitation and for beauty and this not only of pictorial effect, but even of architectural ones as our photographs show. As these delapidated and depressed old quarters re-open/

re-open to one another, the old village life with its admirable combination of private simplicity with sacred magnificence will be seen to be only awaiting renewal, and this with completeness and realised even in its best days, for even in the beautiful old cities of Britain and the continent, we have rarely such a wealth either of open spaces or of antique shrines, so were that this little Mohalla, or others like it in Oxford, York or Edinburgh, it would be a pride of its city and explored by every tourist - it is the duty of the planner often to say hard things and to shame a town into its own improvement if he can, but here happily is an example of the complementary and far more pleasing duty, that of re-awakening the old communal pride in all a town inherits of best and fairest." (Balrampur, pages 41-42).

The Removal of Non-essentials - "The desirable improvement of this quarter from the town planning point of view will be considered later. Suffice it here, in the present connection, to call attention to its somewhat overcrowded and in parts insanitary character. It is not necessary, however, to make any sweeping clearances, a little conservative surgery is all that is required, i.e., the thinning out of a few houses of least value to improve the rest. Without either harshness or costly compensation the existence of an adjacent improvement scheme affords the opportunity of replacement and of a new and better start not too far away. The houses are on too low sites as is evident where they slope down to cultivated but yearly flooded land, immediately to the southward. Their removal may give an opportunity for raising these sites to the level of safety and so providing for their re-occupancy in this desirable convenient quarter." (Kanchrapara, page 9).

Creation of Standards of Amenity - "Returning once more to the densely crowded centre of the old town, what further improvements are necessary? The best line has already been agreed upon and surveyed, that running north and south, nearly mid-way between Brahmin Street and Bazar Street. I have not, of course, had time to study this and other proposed improvements of this quarter in detail but in general terms I concur with the view expressed in projects pointed out to me. The only further suggestion I need make is that an old congested quarter like this may be helped more effectively, a) by -taking out an occasional building so as to yield an internal air space, tree space or garden court or, b) by widening here and there into small square or rectangle than by the far costlier process of widening uniformly throughout. Such little squares may, with advantage, open here and there to form the present bazar network in which there/

there is evidently a shop famine, as is evidenced by the rise of rents of recent years, which far exceeds that of normal progress and is a hardship to shopkeepers and their public, with doubtful desirable gain even to the proprietors. - It may be described as a main object of recent good town planning and housing so to plan and build that the local sentiment or even conservatism of the Indian home and its quarter, which has also been characteristic of European cities in their best days, may increasingly be recovered and maintained." (Bazwada, pages 30-31).

Successful Rehabilitation - "Have we not here the simple psychology of that solid and sullen resistance for city improvements of all kinds, which are the despair of the progressives of every municipality and which they too easily ascribe to the ignorance, the obstinate prejudices and to the inherent conservatism of their constituents instead of to their own unskillful management of them. Now each city has its own qualities as well as defects, its opportunities as well as its difficulties and we venture to suggest that here in Barroda, with its relatively little decayed poles, we have a city particularly well situated for an experiment in city improvement, which might deal successfully with both the above mentioned municipal difficulties at once and thus bring the community and its public services into an altogether healthier relation. Our proposal then, is to initiate an active policy of improvement amongst the poles. - Instead of suggesting drastic operation of any kind, we have simply followed the existing narrow streets and lanes and gone into each and all of the small open spaces and irregular squares which occur here and there upon their course or ending. We have noted dilapidations, ruins of vacant sites or gardens and have noted the best houses also and attempted to judge approximately the line of least resistance to a process of gentle and gradual improvement. This should be initiated from both ends of the scale; the removal of the worst defects of a lane or court thus co-inciding, as far as possible, with the repair or redecoration when necessary, of the better houses and both processes thus encouraging intermediate owners and occupiers to take part. The occasional ruins and the accumulation of rubbish of various kinds which are so frequent and these not only upon derelict sites, but in private courts, etc., should be thoroughly cleared away yet always, as far as possible, with the goodwill of their owners. This may often be obtained by paying the trifling price of a couple of annas or so per load which can be afforded for it in addition to the expense of cartage, in view of the usefulness of most of it in filling up holes or making little terraces at the small garden spaces. These simple and obvious improvements set in progress, the visits of the Sanitary Inspector would be more welcome and his labours rapidly lightened. - With the removal/

of the many evils each separately small perhaps yet cumulatively great, the spirit of the community would rise; that of children and women first and of men before long accordingly and the whole mass of municipal activities thus come to be viewed in a more appreciative light. The colour washing and painting already so fully pled for would also be more readily entered on by proprietors, by tenants also." (Baroda, Section 16-18).

"But how is such domestic improvement to be assured? One conceivable way is that a general design be prepared for the treatment of this street front. This may be done as usual in either of two ways, either without reference to the old town and its historic styles, or with this. The styles are varied according to the taste of house owners; one man wishes an open balcony, another a closed and projecting one, or a third cares for neither but desires say, a projecting and decorated oriole window and the next again makes all severely plain; one loves the painted plaster house fronts, of which some are still surviving both in the city and the palace; another will only have plain whitewash and a third yellow or red. Here then, in Kapathala, just as in my own home city of Edinburgh, and more or less everywhere else between, we have the contrast of the two main styles possible to humanity, on the one side regular and formal, on the other individual and free. In the new towns everywhere it is the formal which predominates but in the old towns the latter and I am strongly of the opinion that for old Kapathala this freedom should be retained. The street front opposite the fine courthouse though it be, will look all the better for certain freedom and even rivalry between houses. The courthouse too will look all the better and bigger from its contrast with them all. No doubt in this way and with the current deterioration of architecture to be found here as elsewhere, there may be failures or vulgarities, yet here the danger is far less than in the bigger cities where the paper educated are more common and the skilled old mistri are now more rare." (Kapathala, page 17).

"No town planner can escape a certain amount of destruction of existing buildings and we do this when need be as definitely as a cook breaks eggs for an omlette or as a surgeon draws blood in his operation; but our skill, like the cook's or the surgeon's, lies in destroying and losing as little as is absolutely necessary, for worse than unnecessary broken eggs or even than spilt blood, are destroyed homes, even destroyed gardens. By careful acts/

acts we can renew these homes and gardens." (Alwar, page 40).

Conservative Surgery May Link Up Open Space - "Existing open spaces afford the right starting point, each with its well and temple; around these usually only the fallen down houses have been selected, but these mostly for permanent clearance and extension of the open space and with the planting of trees accordingly, at once improving this and protecting it against future encroachments. These open spaces are so numerous and the intervening distances so small that they can often be linked together by small further changes of the same kind and again, mainly at the expense of ruined or dilapidated dwellings or sometimes edges of compounds. (Balrampur, page 41).

Conservative Surgery is Economic - "Now for criticism of this lay out plan in detail. On study of this and still more after repeated and careful study of the ground, both alone and accompanied by members of the relevant staff, I observe with astonishment that the proposed scheme is of the most sweeping and drastic kind. Each and every one of the whole buildings upon the site is proposed to be swept away by this layout, save only the post office; even two temples, five mosques, two dahrmsalas, not to speak of tombs without number and the valuable shops of <sup>the</sup> bazar, are unhesitatingly abolished; all the dwellings, pukka, kutcha pukka and kutcha indifferently and with these all existing roads and lanes are swept away; even the horse bazar, though one of the immemorial trade centres of Lahore. There is thus little wonder that I feel completely staggered before such a scheme and cannot even guess the enormous compensation which would be involved before beginning this layout, even were it conceivable that all three historic faiths thus outraged gratuitously, were to consent to their effacement. It is thus well that this scheme has never been proceeded with since its elaboration and its discussion years ago by the council but surely, as already said, without either its members or its staff having realised what it contained, still less what its execution would involve beyond even its prodigality of outlays. - Sanitarians and engineers and those who accept their plans also in their honest but mistaken conviction that they are practical men, strict utilitarians, good economists, careful planners and so on, have thus been long making the most profuse and wasteful expenditures of both land and money for their aesthetic ideal, that of perfect regularity. In sheer waste of land and in squandered cost of useless, innumerable and dreary streets, they have spent more than ever did all the priests, rulers and artists of/

of the past for temples and gardens and palaces, while the unnecessary upkeep of such a mileage of useless street must also rival in modern cities the expenditure upon the latter in ancient ones. It can't be too clearly affirmed that we town planners of a later school who are careful to make streets a) only when they are really needed and b) in the directions required, while the practical men, the real utilitarians and the economists, both of the city's purse and those of the citizens, at the little variations and widenings we make, where opportunity affords us for the planting or preservation of trees and the like, are spending but a fraction of what we save upon our predecessors' waste. Thus, not only health and enjoyment for the inhabitants, their sickness rate and death rate, their vice rates and crime rates, thereupon every known case, each falls and each surprisingly below the city's previous averages or even best. All these again, with manifold economy and utilities of the community, in short the greater social return of every kind." (Lahore, pages 9 and 14-15).

(iv) The Visual Environment

Geddes's Indian Planning Reports shed illumination on one of his primary preoccupations in planning: the quality of the visual environment. Geddes considers that a lively and stimulating visual environment can produce beneficial results. These may be derived partly from visual enjoyment of the environment, but primarily through the stimulation of the mind. In his work in India he deliberately advocates the creation of environments which possess a variety of visual impression and some degree of quality.

"The human eye demands a variety of interest. No perfectly straight and uniform alignment, however regular and dignified, can continuously give pleasure for mile on end, or even for more than a few hundred yards  $\frac{1}{4}$ . It is best, therefore, frankly to accept this condition and to transform this boulevard by giving it the effect of a chain of successive public places each with character, proportions and planting, somewhat varied from those before and after." (Lucknow, column 7).

"And further, no traveller can deny to Alwar a place amongst the world's romantic cities and with minor work through and around the city, or other views from its environs, as notably the panoramas of morning and evening from the new palace, this mental picture gallery/

gallery grows even richer." (Alwar, pages 2-3).

Diversity and quality are seen by Geddes as an essential component in the revitalisation of place and folk. As he notes in the Preface to the Patalia Report -

"Good environment strengthens the body and mental vigour of hope and courage is revived also. Mind helps to heal body no less than body mind, but also for the body politic, the community, from home group to village and town, even to city region and state. The improving environment is but the need of beginning of the renursing of damaged place, diminished work, depressed and discouraged folk back to efficiency and activity."

- "Such re-organised science, even such organising art, are but means of the community's re-education in the fullest sense."

Geddes envisages that a quality environment may be produced in a number of ways, many of these inexpensive. He hints of an application of the techniques of conservative surgery. By the exercise of a judicious renovation and rehabilitation, Geddes is able to bring about an overall visual improvement by emphasising the focal points within the town, introducing a diversity of urban facades and street furniture by varying street widths. Illustrations of this process are numerous. - In Lucknow for instance,

"The Tehsin Ki Musjid is a beautiful building but concealed by a squalid entrance, yet the gateway is well worth repairing with its curious old bastion-like projection on the southward side; this I suggest repeating on the north side of the gate to accommodate respectively the occupants of the present broken-down bamboo shelters, etc. These two bastions would become better rent earning properties to the mosque and when the whole entrance is repaired and colour washed, both the gateway and the mosque would recover their old distinction as one of the finest and most characteristic features of the street. I do not interfere with the shops which shelter under the wall of the mosque enclosure, until we come to its final bastion. This should be cleared and repaired, a tree planted behind it and one or two of its shops re-instated. I have not entered the sacred enclosure, but if one or more small groups of palms can be planted within, there seems ample room for them, the effect will be pleasing from every point of view." (Lucknow, page 18).

"The/

"The large rubbish heap on this vacant land and the disused graveyard with the scattered tombs look unpromising enough, but the former may at once be seen to yield first a further collection heap for all the rubbish that the neighbourhood can be induced to part with and next a terrace planted height for seats, outlook and fountain; the lower ground itself, on two levels, is to be put in order, but otherwise preserved; is planted out for grass space, flower garden and shrubberies. Thus, from the whole present scene of confused irregularity, there thus evolves an orderly yet fresh design and all with very little expense." (page 46).

In Patalia Geddes lays the emphasis on two features; the development of the palace and the re-emphasis of its former splendour, and a considerable community effort in the white-washing and colour-washing of the various parts of the town. He notes, for example -

"Of all the cleaning and brightening of Patalia City for the recent visit of the Prince of Wales, the extensive white-washing and colouring along the main line of streets has been the most conspicuous and enduring and the most encouraging and hopeful towards the present thorough-going scheme of city improvement, for this sudden and dramatic change of scene cannot have but caught the public eye and it is gratifying to find the example being already followed throughout the city, here and there and by small houses as well as large. These are too few for adequate examples to their neighbourhoods, which are, moreover, a little demoralised in this matter by the fact that the recent washing was done wholesale and in haste and thus at state expense. No state or municipality, however paternal, can be expected to wash up for all its citizens, but now is the time for public announcement that it is now the turn of the citizens to wash up for themselves and for the credit of the city and the state also and as an example to the provincial towns as well. - I submit the suggestion that it be publicly announced that the recent white-washing is intended as an example to the city generally but that it can be done by the citizens at their own expense, as improving their own property and even in material value; but also too, that to encourage anyone who may feel this moderate expense a difficulty, the municipality will provide the loan of brushes, ladders, etc., without charge and will also see to the supply of white-wash and colour-wash to the householder's desire, of good quality and at cost price. - There are some and even amongst sanitarians, who say of such proposals, all this is but superficial, more substantial improvements are needed so let us do them first. But from life-long experience of city improvements and these largely in slum quarters of which Patalia has happily no idea, I can testify that no stimulus to general repair and improvement is so widely and rapidly efficacious as this broadside discharge against/



against dirt and of its depressed gloom. So, by all means, let this new wave of white-wash not be general in particular streets, nor even lanes, unless where all so desire. Much better let that bright house tell its own tale and persuade its neighbours by showing them their disadvantage. A woman and children's appreciation of even a single bright house in their neighbourhood, will often bring around the same change of their own homes in the next year or that following." (Patalia, pages 45-46).

An additional facet of this process relates to Geddes's view of the overall plan of a town. He appears to be seeking to emphasise specific characteristics of community, of morphology or design. Their erosion by the insertion of alien elements is undesirable.

"But aesthetic results are also here desired and would readily be realised by good town planning. As a single but conspicuous example, I take the city palace of which it is naturally and rightly desired to enhance the dignity and improve the access, but I should do comparatively inexpensively and yet effectively by connecting it with the city garden and boulevard system which can be created upon the lines of the old fortifications and this while conserving their monumental gates and their most characteristic bastions, for only moderate clearance is required to connect these fortification boulevards with the palace and this both on east and west. A new suburb is desired between the present northward outgrowth of the city and the railway lines and to the layout of this new suburb upon rectangular lines there need be no difficulty or objection, especially in view of the pleasing contrast thus provided between the old town and the new one, which is conspicuously presented in India by the contrast of Jaipur with Amber and, of course, more or less in other cities without number as notably in Europe by my own home city of Edinburgh, with its old town and new on opposite sides of its central valley. But in all these cities, public and expert opinion now co-incide in recognising that the various attempts which have been made from time to time to alter or mingle these types of towns, whether by regularising the old city, or by reaction to romanticise the new one, have been unsuccessful and are now practically abandoned, for while the picturesque style and the formal are each beautiful in their ways, their combination is impossible and their mixture is incongruous; just as eastern robes and western garments cannot be harmonised into a single coat, much though it is to be said for the advantages and suitability of each in their own way." (Alwar, pages 21-24).

Techniques of conservative surgery have one unifying and common component - the creation of open space. The Indian Reports show many examples of the creation of formal landscaped gardens/

gardens and informal public open space. Geddes appears keenly perceptive of the need for a master plan relating to the provision of a minimum open space standard throughout a town, but one also linking town to features of topographic significance and to the countryside. The considerable stress he places in his view of housing policy on the need to create garden suburbs and new towns is only one item in his notion of overall regional open space planning. Every opportunity appears to be grasped to utilise the advantages of site, especially when a town is situated near a river. He notes for Calcutta, that the Improvement Trust has been reluctant to plan for areas outside its immediate control, but that an opportunity does arise for the utilisation of the river site for recreational purposes -

"For obvious reasons I do not here venture upon the question though lately again raised alike by the Corporation and by the Improvement Trust, as to the desirability of the construction of the riverside promenade connecting the bathing ghats. This has been met by the natural reluctance of the Port Trust to become committed to any scheme which might interfere with its immediate scope and the presumable growth and expansion of river traffic, yet in many other port cities and those on the continent of Europe especially, this apparent clash of interest has been successfully reconciled and this not merely through the past. - I do not know of any skilled planner either in Europe or in America who would here despair even now at producing a plan in which much of these public requirements alike of religious custom and of public recreation and health, would still be preserved, yet with this the working and prospective requirements of the port and their efficiency, consequent economic return improves substantially also." (Barra Bazar, page 35).

In Patalia Geddes has in mind the linkage of open space with thoroughfares to create a system of inter-connections which eventually would allow for easy passage by pedestrian along attractive walk-ways from the centre to the periphery of the town.

"Hitherto in all cities, more or less, their parks and public gardens have been and as yet usually remain, quite dis-sociated and are thus but like oases in the city, otherwise a desert, since it is absence of vegetation which characterises this. But now the American planners are designing and their municipalities are actively carrying out that most admirable of city improvements which they have termed parkways. These are not mere ordinary avenues/

avenues or boulevards but definite connections between park and park and these not simply avenued in the usual way, but also utilising every available vacant space, for small gardens or even for clump planting of decorative shrubs with patches of flowers and even planting a tree, however independent of the formal avenue line, wherever an opportunity arises. In this way the effect of the public park or garden is continued outside its gates and through its course to the next park, so that well nigh every point of view along the way there is at least a glimpse of verdure or colour, an attractive call to follow its course further and towards the park at either end. Attractive drives as well as walks are thus created and as this kind of improvement can most easily be carried out through quarters thinly populated and of inferior value and aspect, they are carried out more cheaply and often quite without the costly demolitions which might be required in more expensive and built up quarters. Thus too, the whole neighbourhoods which they traverse become improved and rise in value so that this class of improvement pays; again these inferior neighbourhoods, were formerly a barrier against city development around them but, thanks to this new and attractive thoroughfare, they also develop again with substantial increase of good building and increased values to the town. - I now propose to show, we shall thus have a new and even more beautiful park-way system traversing the city in two directions - thus a parkway through Patalia from end to end and well nigh across, of course, with appreciation of city values accordingly."

By this method Geddes brings the open space into the town and enhances visual environment. The city boundary, however, does not become an arbitrary divide between country and town. In the Geddesian conception the city region in itself contains a system of inter-connected open spaces. The insistence on this need is forcefully stated in the study of Greater Colombo, for Geddes sees a possibility for fashioning "the garden city of the East" (Colombo and its adjacent suburbs) "preserving the rural spirit instead of elsewhere too often, destroying it." (Colombo, page 6).

(v) The Planner and the Citizen - The Quest for Participation

The end to which town planning theory and practice is directed is making "the city of the good life that in which all may share increasingly and in their growing capacity in all that is human". The most difficult task in planning, envisaged by Geddes, is to bring about a successful culmination of the planning process. This can only be realised through the involvement/

involvement of the citizen. The responsibility of the individual planner to promote this situation is paramount - correspondingly the techniques required are complex. The cogent statement of the overall objectives to be obtained is given in Geddes's report to the Durbar of Indore. The planner, Geddes argues, has the responsibility to isolate for action the priorities of any overall plan. The problem which may then arise relates to the quality of the individuals who compose the municipal authority. The municipality being composed of representatives of the population may itself limit a successful development plan through being ill informed or through becoming too bureaucratically detached from the mass of the people and their needs.

"At this stage it is too frequent for the planner to hand over a report to the municipality or government concerned who then deal with it or not as their daily pressure of work may permit, or select from it for execution such parts and points as may be most pressed for on various grounds. But his report is more likely to be of service if it includes such indications as he can offer as to the matters which appear most expedient and urgent, with suggestions towards their execution..... Town planning is like chess, a selection of definite moves amongst various possibilities and thus though the interested onlooker may often think of a different move for himself and may, of course, be right, he bears in mind also that this may very probably also be considered by the player he is criticising..... Having now some years' experience of the limitations of municipalities and of the risks which comprehensive schemes run from delay and other causes as also from piecemeal emendation by even the most wellmeaning body of town planning amateurs, representatives of a not fully instructed public, who may include individuals of abilities and energies not always disinterested - For while a municipality may too often blunder and bungle in detailed schemes, wasting lacs even many of them; a trust, with its more comprehensive schemes, its larger funds, its greater powers of lessened responsibility from effective criticism, may go even more seriously wrong on plans, in principles, or both and so may waste greater sums and inflict more serious evils upon a city than has any municipality yet. - Yet the strengthening of a municipality by its government has its dangers which I know of no city fully escaping; first that of increasingly centralised administration and official character with corresponding increasing detachment from public and popular feeling and consequently, before long, from public and popular needs and usefulness. This arrangement does not and cannot, nowadays, lead back/

back towards the patriarchal rule of old, but towards official rule in which rules replace rule and officialism paternalism." (Indore II, pages 102-104).

Geddes sees that a remedy may be found in a high level of civic idealism and the active participation and education of citizenship towards this end.

"The traditional nineteenth century ideal of success in life has been taking new forms, that of success no longer individual or merely of livelihood, however magnified, not in and through machinery and invention, nor authority, status and security, nor of monetary wealth or power, but now that of success in living and this necessarily collectively, even for a duration of living. There can be no security of health without public health, nor is success as regards quality of life merely to be measured in terms of the individual culture which cultivated minority in England or in India only too willingly retreats into its homes or colleges to enjoy. For it is becoming plain that even these individual ends cannot be adequately obtained, still less maintained and continued, save in relation to the cultural level of their city and this must ever be carried onwards and upwards if it be not correspondingly to fall.... So for us here in the city around us, viewed as developing towards the highest aims and these as concrete as town planning towards health and wellbeing can make them, as idealistic too and yet as definite as city design can make them towards the city of the good life; that in which all may share increasingly and in their growing capacity in all that is human. In the measure in which this concept becomes realised in any city, its citizens begin to participate in city development accordingly. Their real and active participation is required and so we must later discuss more fully the ways and means of acting and advancing this arousal of citizenship, without which we can have no fully developing city. From of old it has been the illusion of the spiritual man that his ideal city needed no realisation on earth and now the converse delusion of the temporally minded and would-be practical man has been having its day, that material improvements are alone necessary. But as we escape from this futile dualism we see life as at once psychic and organic and presenting these complementary aspects in unending alternation. We see that organism and environment are ever inter-acting and that citizen and city can only realise themselves as they progress together." (Indore II, pages 104-106).

Geddes goes on to place the responsibility for the promotion of this co-operation.

"Local knowledge and understanding are also essential; individual tact in dealing with the citizens and with their local and individual requirements. Social appeal and civic enthusiasm too/

too are needed to arouse neighbourhood after neighbourhood to participate in improvements instead of being indifferent to them, so that before long we may inspire the city as a whole. For this no small measure of moral influence and energy is required, yet not expressed by authority alone, ignoring apathy, overpowering opposition, but turning opponents into allies and even arousing indifference and indolence into health and hope..... We have for thirty years and more, been appealing to some of the most slum housed and correspondingly depressed, diseased and dying of city populations in the British Isles, that is in the whole modern industrial world and even where funds do not reach to rebuilding, we experimentally show that our cleansing and colour washing, our playground and garden making and tree planting produces more real and more enduring effect upon the people in ways sanitary and social, encouraging and in the best sense, educative than can any conventional petitioning or agitating, teaching and preaching left and applied; more even than can authority and administration with their tenfold greater expenditure, but with their sanitary or building work left ugly and untidy when done - more too can all our lecturing and writing, whether to masses or to classes. Here at length is something of the needed civic education and for all, not the book instruction too simply dispensed under that name, but the reality, that of life again interacting with environment and bettered environment with life and thus encouraging it to fuller effort. Individual education at school or college, in laboratory or library, is not one thing and local and civic improvement quite another. Only their dis-specialists can still think so. Everyone who has entered the great world laboratory of reconstruction, now so fully opening, soon learns that city betterment and education are again at one, for man ever as for the ants and bees. - To this united progress of citizenship and education together, there are no limits; industrial and commercial towns with their schools and colleges thus interact and will grow up and far more speedily into the university city and this with the citizen students and student citizens and with this the highest of Indian ideals, the sacred city, cannot but arise once more. Without such aims and efforts the best of planning can but remain on paper or fall away from its beginnings, but to co-ordinate all these into steady action, day by day and year by year, is the needed task of our city development office. To initiate such efforts, to encourage them, maintain them, accelerate and intensify them, here lies our task. This must be our main procedure, our essential agenda. All this needs organising and skill and these as definite as for the creation and conduct of an orchestra, for the production of a play and even more; like these too, and above all a sustained courage, with its contagious glow of feeling. Behind the cool propriety of the open shop, the steady counting house and the busy looms, the glowing furnace energies/

energises all. The city's progress is like a world-voyaging ship in which the engine room and its fires, the captain's chart room and the bridge, continuously work together, through storms or calms. Nothing short of such organisation and purpose, spirit and personality, comparable to that of war upon land and war with the elements by sea, will ever retrieve and develop any city. It is thus impossible that its development office can be conducted in that odd time of those already pre-occupied by the innumerable details of existing administration. To make the best use of the substantial annual budget required, a big staff is required, energetic, experienced and economical accordingly and with a vigorous and inspired head, responsible to the municipality and through this to the Ministry and keeping these in touch with the citizens." (Indore, II - pages 107-109).

Geddes envisages the role of the planner as a catalyst in a process of the development of society. The promotion of participation depends thus both on the skillful use of the tools of planning practice but additionally on the creation of a system of education.

#### The Mental Approach

It is Geddes's belief that the growth of the administrative machinery of government at all levels produces a wide gulf between the planner and the citizen. Essentially this factor of distances appears to arise from a loss of a common language of communication. The planner is concerned with a scientifically based discipline with its own terminology and methodology and this may induce a mental withdrawal into the confines of an intellectual discipline practised within an office. In this way, Geddes believes, planning can become an end in itself and divorced from the citizens. The consequence may well be that co-operative action between citizen and planner becomes a remote possibility. This problem may be resolved through a humanistic approach by the planner. The first priority is the development of a sympathetic attitude by the planner towards the public and the simplification of technical jargon into everyday speech. The planner must then communicate direct to the public through both his action as an individual working in the midst of a community and by discussing with people the planning/

planning issues which arise locally. The planner thus goes out to the people - he is no longer a remote figure - and a bridge is thereby formed. The second prerequisite arises from a sense of humility. Geddes considers that it must be part of every planner's approach to accept that his own knowledge and intellectual capacity is limited. Geddes is conscious of the basic common sense of the population at large and sees that here lies an untapped fund of experience and local awareness which must be harnessed. Thus, going out to the people in the Geddesian sense becomes a two-way process of communication and the creation of mutual confidence and respect.

"Modern municipal government has lost that human touch which is the strength of personal rule and influence. It does its work of cleaning and lighting of roads, mending, policing and the rest in as cold, impersonal and official way as its tax collecting and it is largely for this reason that the latter makes so much deeper impression upon the citizen's mind and communicates his distastefulness to the often excellent value which is given for the ratepayers' money and even to the loyal service by the members of the municipality as well as their officials of all ranks." (Town Planning in Baroda, column 15).

"Service in an office can be but literally official until by living interest in the city it becomes civic. What is the practical expression of this? Nearly every officer in the course of his studies makes some visits and inspections in the town, each ward member also. Let these individual visits now be supplemented, say every fortnight if possible, by a visit of officers of different departments, going together to this or that locality. They may also be called in by emergency or to advise with the ward member. Let the contribution of each of these specialists be concentrated on the place in question and thus all together. The lane will thus not only be mended or paved, but also cleansed and whitewashed, the world will be made pukka and in all respects as to cleaning and perhaps even cement lining with its wall edge built, its pulley supplied and so on; the people too stirred up for the good news will soon spread that something really helpful and pleasing to them is being done. They will soon be quite proud that their place is better than it was before and ahead of the neighbouring one whose dirt they will then see. Such definite and collective improvement at one point will arouse discontent with existing conditions in others not yet attended to and the more the better for the city's progress. It is feared that the people's demands may come to exceed the city's immediate power of fulfilment; nothing is more desirable. In/



In that case taxation will be met less grudgingly than at present, moreover public service and health, public generosity also may be elicited; the poor man's time and labour, the rich man's gift, the average man's better citizenship, the best man's generous and active service." (Town Planning in Lahore, page 43).

"The present situation which has accordingly been grappled with by this generation of town planners and their allies, is thus no longer that of planning solely for the governing classes and this from above by authority and administration alone and then too much by merely standardising their squalor by the exploded by-law methods of the former generation. It is increasingly that of taking <sup>the</sup> people with us, of interesting them directly in the improvement of their own homes and gardens, their general surroundings and this from every point of view, material and aesthetic, sanitary and educational, civic and religious. In process of this change in our point of view we are next learning and particularly in India, of the people whom we have found so difficult to move from our former point of view and have thought obstinate, or at least backward, fixed in what we called ignorance and prejudice accordingly, are not so backward after all but have also something to teach us and this of no small importance." (Town Planning in Balrampur, page 29).

#### The Tactics of Participation.

Given this point of contact, Geddes sees the furtherance of the process as falling into distinct categories, each directed towards the development of environmental knowledge and environmental consciousness. He is of the belief that the strategic objective is the creation of communal action in which the mass of citizens are involved. This is not easily attained and consequently Geddes envisages converging lines of action which may operate independently in time and also in space according to local circumstances. The objective, both short term and long term, is to draw upon the possibilities inherent in the individual, the group and the community. The tactical stage involves the education by the planner of the citizen through immediate involvement in the developmental process. Each experimental stage is to be mounted on a limited front and thereby well within the capacities of the individual citizen to comprehend. The operation of this process through conservative surgery/

surgery and rehabilitation has been discussed elsewhere. The accumulation of a discreet body of expertise achieved through the local development project, becomes then a cumulative heritage over a period of time. Geddes envisages the natural emergence of an educational process through which this heritage is built into institutions which interseect the existing political and educational framework. It develops from then to eventually optimising them. The long term objective for Geddes is thus the evolution of an institutional process through which the ideals of the planner and the citizen together may be harmonised and realised.

Planning must be beneficial and comprehensible -

"There is no wiser saying in the writing of John Stewart Mill, the classic economist, of the last generation, than his reminder that if we would improve the condition of the people the improvement must be upon a scale which they can fully observe and realise and not fittered away as those of municipalities largely are, petty changes here and there, piecemeal. In the latter case such improvements pass unnoticed and are neglected so that things are no better than before; the former case they are appreciated, the people rise to and with the occasion." (Balrampur, page 42).

"Parts of every town planning scheme of improvement though tending to the enhancement of property values, are not of direct cash return. These improvements as of street widening, park making and improving, provision of open spaces as play grounds and zenana gardens (an immense advantage to women and children who will soon use them) can only pay indirectly, though in this way they pay well as health returns soon show." (Patalia, page 92).

Environmental Understanding is Cumulative -

"I am often told that people will destroy your improvements or again, when I propose that a playground or garden or other open space be made amongst a number of other houses, people say the inmates of these will simply drop dirt into it. These gentlemen commonly assume that to themselves a quite superior knowledge of human nature, pinchingly indicate to or of me how much better they understand this in general than, of course, that of their own fellow citizens in particular, than can I. I asked them to take me to a bustee and they showed me its delapidation and confusion, with dirt lying everywhere and around, then triumphantly asked, "Do you not see how these people have simply no idea of hygiene?" I asked them next to/

to take me to an improved one, ie., one in which the municipality has lately completed demolition and made a twenty-foot by-law street crossing the old land and thus leading from the blank wall of the mansion on one side of the bustee to the blank wall on the other, in short, practically from nowhere to nowhere. The rubbish of the destroyed houses has been left lying on the vacated sites of the new street and on this the household rubbish is now being thrown; amongst this whole range of growing dirt hills there are children dirtying themselves at play; again all this triumphantly confirms an impression and so the invite may answer imagining the silence for good. But now the answer, all you have shown me but proves that you are still unaccustomed to such open air observation of place and people and still less to experiment. Try a little observation here, look into that little house and now this, is it not well swept, are not the pots brightly polished? Yes. Well that is the woman's little world, her home; the dirt outside is of our making. It is thoroughly manly; neither the municipality nor the landlord has thought of finishing their parts of the job as by seeing to the carting away of the demolished rubbish, or still better and more cheaply, to shaping it into a little terrace where the children can play or the folks sit. Then they should have made all clean and tidy by repairing and white-washing the little houses and by planting a couple of trees at each end of this ineffective street where no street was needed, but a level courtyard instead. In short, by giving the people a fair start, as real and complete improvement of their surroundings as far as might be, yet without appreciable percentage of addition to the present outlay, indeed economy, as for these kerbstones which only spoil the ground for play. When this is done and these improvements are put in charge of the people with daily municipal cleaning, just as for the well-to-do, then and only then, the experiment will be a fair one. I have made very many experiments of that kind and am not at all in the innocence you too hastily assumed. To do my critics justice, they sometimes seem willing to give such fair experiments a trial, why not, who will do it? I have had thirty years of varied experience of repair and preservation as well as sometimes demolition in the most lofty and narrowly crowded slum areas in the cities of the world and thus, incidently, of many dealings with proprietors and tenants, with municipal departments and committees, in fact, with all concerned; and, of course, with critics in the general community also and -similarly a long acquaintance with the other worst area in the west, old Dublin, not to mention more ordinary towns. In all the above classes those unacquainted with the constructive arts and even some who should/

should have known better, have found to judge of buildings by too superficial characters, so that dirty white-wash, broken plaster and bad smell are enough to evoke a cry for demolition and these only need but easy cleaning and brightening and economical repair. I have found too much of the same spirit amongst all classes in India, where constructive experience is still rarer amongst the educated and prosperous classes. But the people with whom we begin and who are commonly supposed to be so indifferent to their surroundings of dirt and misery, they on the contrary, come far more readily to understand and to appreciate such improvements and this very notably with the playgrounds and gardens which it was thought so peculiarly impracticable to introduce into their slums. I have now sufficient experience to have formed the same favourable impression of the people of the poorest quarters of Indian cities, in fact, even more so and of their children above all." (Barra Bazar, page 33).

#### Education by Precept -

"I have arranged for a few photographs of this area and of this house in its present bare ugliness especially. On a duplicate we sketch the needed balcony and then show the owner not only this sketch but several other good examples from simple to ornate, from which he may then make his own choice. Again and best of all, let us ascertain by help of the Art School and otherwise, the names of competent mistris, each capable of a good piece of original work on reasonable terms and thus find openings for their skill. I press the case of this particular house because we found that its present bare ugliness had infected the design of the neighbourhood opposite into imitation of it. Let us now give him something better to imitate." (Town Planning in Lucknow, column 37).

"Another point of importance before leaving this matter of potentially, if not actively, malarious pools, tanks and jheels and which applies also to the railway borrow pits, viz., that the larger these are the safer, and the smaller the more dangerous, Mr. Harnett will remember a vivid instance of the latter proposition, viz., that my malaria assistant, above mentioned, satisfied himself by taking many samples, of the absence of anopheles larva from the very suspicious looking pool at the south-east corner of the busti, which runs down to the low land immediately south-west of Kanchrapara Station. But in a puddle, no bigger than the seat of an easy chair, close beside this pool, but not continuous with it, the larva was swarming in hundreds. The explanation was simple, the pond was swarming with small fish, but these could not enter the puddle. On enquiry it was found that this puddle was made only a day or two before by a villager who had taken out mud for his domestic repairs. An explanation was given to/

to the crowd which our observations in the locality had attracted. They were shown the larva, told of the dangers thus unwittingly created at their doors and they seemed to understand and appreciate it. In such simple ways the whole of such a community as this could be educated." (Kanchrapara, page 3).

#### Publicity and Pressure -

"How is domestic improvement to be assured? One conceivable way is that a general design be prepared for the treatment of this street front. This may be done as usual in either of two ways, either without reference to the old town and its historic styles, or with this. But the styles are varied according to the taste of house owners. One man wishes an open balcony, another a closed and projecting one, while a third cares for neither but desires, say, a projecting and decorated oriel window and the next again makes all severely plain. One loves the painted plaster house fronts of which some are still surviving, both in the city and the palace; another will only have plain white-wash and a third yellow or red. Here then, in Capathala, just as in my own home city of Edinburgh and more or less everywhere else between, we have the contrasts of the two main styles possible to humanity, on the one side regular and formal, on the other individual and free. - However, to help both mistri and their employers here is a suggestion - that the photographs which have been prepared for this report and others which may be made or obtained, - form the basis of a little exhibition of housing and town planning in Capathala. These photographs will call attention to innumerable beauties of the city, both in general aspect and in detail, which are unnoticed or forgotten at present by their inhabitants; their owners too, their builders, when still living, will be agreeably surprised to find these things appreciated. Again with these, let there be additional exhibits of good domestic architecture and the street views from other cities of India, indeed also from cities beyond. In this way interest will be still further aroused; people will think more of the mistri and the mistris of themselves and the next crop of new buildings will show gratifying results." (Capathala, page 17).

"A nearer ~~example~~ and one less unfamiliar to Nagpur since that of the recent Citizen Town Planning Exhibition, is that of its two visits to Dublin. This is a regional capital in many ways comparable to Nagpur, not excluding the poverty of its working classes and their helpless depression accordingly. On its first visit in 1911 the Exhibition interested only small section of the community but neither corporation nor citizens, governing nor working classes as a whole, yet impulse enough was given to and by a strenuous minority/

minority to lead to the formation of a Civic Institute Limited and within less than three years after. To teach the public this time and as fully as might be, the Cities Exhibition was recalled as a nucleus of a civic exhibition, upon a far greater scale and occupying a vast range of old barrack and spreading into an adjacent part covering some ten acres in all and with a forty-fold greater expenditure and more, than three years before. This time Dublin was stirred. The neighbourhood selected for the exhibition was this time as deliberately chosen for its squalor as had been that of the first exhibition for its attractiveness. Hence a Neighbourhood Brightening Association arose and this largely amongst the slum people themselves. This not only transformed the whole aspect of the eleven surrounding streets in a very few weeks; the Corporation mended the streets and improved its cleaning and watering; friendly donors saw to the supply of flowering plants for such poor houses as were willing to undertake the charge of them and these were many. Help too was given with the removal of the rubbish heaps and with the levelling of fallen houses as temporary playgrounds, with the white-washing of the walls surrounding these and so on; but in the main, though no doubt because of this combined municipal aid and friendly encouragement, the people of the neighbourhood produced the essential transformations themselves and set about the cleaning and brightening of their homes inside as well as out. At the close, after not only half Dublin, but excursions from all Ireland, had come to see and despite the sudden eclipse of the exhibition and of public interest in it, as the main Dublin event of the season, through the outbreak of the War, the people of the eleven poor streets were nothing daunted. With some little help from the Civic Institute they took an old house as their Neighbourhood Betterment Club from which not only to continue their activities after the Exhibition had closed, but to extend them in time even to the eleven hundred streets of Greater Dublin. In connection with the same Exhibition, the standard of urban housing was notably raised; the largest of garden villages as yet designed in Europe and for the poorest labouring population, was planned out for an extensive corporation estate and in conditions usually reserved only for the prosperous. The scheme of a great cathedral was adopted by the Catholic authorities; an international town planning competition for Greater Dublin was announced with its prize from the Viceroy of Ireland. Yet all concerned, from the Viceroy and his Consort downwards, we agreed that the most encouraging result of the Exhibition was the renewal of citizenship and domestic uplift together and this in a class and in a neighbourhood at the lowest level of this poorest of western cities -

What/

What now is the definite application of this now to Nagpur? A plea to even a few of the many capable and adequate members of the Corporation to make up their mind to give the people a trial. They will soon gather a little group of capable constituents to help them, then they can soon give the practical tokens, perform the minor miracles of cleaning and brightening which are now all that are needed to set this as a popular movement upon its feet. This done, we need have little fear but that it will go marching on." (Town Planning in Nagpur, pages 7-8).

#### The Promotion of Civic Awards -

"Constructive ability has only lapsed in members of the literate classes in any country and survives diffused in all others. A little enquiry, a modest expenditure, a small material prize or two for the best houses and best of all, a generous recognition from the Chairman, from the collector and from other leading personages of the town, will rapidly set all this agoing and house pride again be re-established with all that means for sanitation and for common wealth." (Cocanada, page 3).

"Let peaceful life then learn from war, activities bestirred and evoked by the call to citizenship and rewarded by its simple yet genuine honours and by the approval of superiors as well as fellow citizens. May we ask then for the improving poles as civic units for their houses and householders and younger members as again units of these and for the various municipal services and servants also, some recognition such as they would value? Why not even some annual award, say from a flag to a fountain for the best kept pole, of a banner or a garland for the best kept house, the most pleasing garden, thus giving household and gardener his meed of praise; so for the various municipal services and at all their ranks and levels? No skilled physician and bacteriologist but knows that the humble sweeper is also a companion of that order of Pasteur and Lister to which it is his highest professional pride to belong. Finally, why not a gradation of awards; the simplest say, from the Improvement Trust and others of higher order from the Municipality as representing the city as a whole? Again, may not the Dewan, and even the most distinguished cases the Sovereign himself, award the garland to the leading locality or individual? The reaction upon city improvement would no longer be slow and far more sure." (Baroda, Section 23).

#### The Institutional Base -

The culmination of the Geddesian view of participation involves the foundation of the educational process of society.

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As such, Geddes advocates concern and action by planners in fields wider than those normally defined as falling within his province. He notes, for instance, in his Colombo Report, (page 39) -

"Town planning as city design and towards city development as applied sociology therefore, that is, as civics, has necessarily before it the co-operation of spiritual and temporal powers and with increasing leadership by the former instead of vice-versa, as at present. That we planners should be interested in manufacture and industries, commerce and transports and in health and recreation is evident to all and so parks, play-fields and gardens are recognised as within our province, no less than our business streets and stores and so is housing for all classes and with architecture and the arts as far as possible. Education too, is coming more and more within our planning, first for schools, but now increasingly also libraries, galleries, museums, colleges at times and nowadays even universities."

Geddes's thesis had been developed in full in the Indore Report which itself synthesises to one single statement - his master design.<sup>1</sup> The complex developed by Geddes comprises a series of institutions of an educational nature, libraries, museums, schools and centres of higher education. The fundamental message is that there is a needed application of learning and study to regional understanding. Central to this complex is an Outlook Tower, the focussing point for the translation of facts into acts.

"This university tower, may we now call it, is thus more than the simple geographic and cosmologic outlook over the country and the historical and aesthetic outlooks over the town with which we began. It becomes an outlook of rural development and of civic renewal; it is plainly a watch-tower of the growth of civilisation so why not increasingly, a lighthouse of its journeyings/

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1. Indore Report, part II, pages 11-45.



journeyings beyond the present streets and lanes into highroads still unsurveyed, even untrodden. Why not increasingly a power house renewing and intensifying all these reconstructive and new constructive energies alike of country and city through its intensification and clearing of the children's and students' and citizens' thought? - We descend now from the arcaded roof platform on which we have considered the aspects of city **environment**, first of the outlooks of the sciences, physical, organic and social, yet also social, organic and physical and then with deeper and wider outlooks also. We next need the large chamber immediately below and still with wide outlooks on all sides from its windows, as the indoor room with its summarised presentment of the city. An enlarged city map is painted over the floor, on which can be expressed and in vivid colours corresponding to that of the complete town plan (8½ft to 1 in.) which has been developed as the essential document to the present report, from the existing city survey sheets detailed to every house and of which the plans accompanying this report are reproduced. For ~~each child~~ to find its home in this plan will be a pleasurable puzzle and one extending beyond the first personal interest towards an understanding of his neighbourhood, that of his quarter and next to the city itself. On a large table should be also a relief model of the visible district up to the horizon hills, unless indeed, this can be kept in the open air, in which case it will be more appropriate to the centre of the platform above; indeed, a shelter may be constructed for it there and with enhancement to the effect of the tower. On this floor plan it is also easy to express by colouring, the main historical development of the city and this more fully than in my introductory chapters, while the developments accepted for the city will, of course, be introduced since suggestive of the opening future and thus helpful towards its speedier realisation. - Here, therefore, should meet the city and regional survey committees, which may now naturally and easily be formed and their survey will gain in value as it is carried on in co-operation, correspondence and exchange with those of other cities, even of the west. A bookcase with portfolios will thus be needed for the growing documents and graphics of this survey and of these periodic and temporary exhibitions may be made upon wall screens. - All these storeys and rooms of this tower and its overflowing are thus necessary for the understanding of Indore and of ourselves, of our place as it determined work and people and likewise for Indore's people, work and place, that is, its citizens' efficiency in dealing with this manifold web of world relations which despite all temporary strains and rending is ever weaving men closer and must yet make the whole world one." (Indore, pages 40-43).

Geddes's system weaves together a long continuing educational base with an immediate action orientated citizen participation. The immediate orientation relates to the involvement of the citizen/

citizen in the planning and redevelopment processes of the neighbourhood. This in turn, Geddes envisaged, creates a two-way feed back into the educational structure which gains momentum with the passage of time. The planner thus responsible initially for the promotion of the citizen involvement in planning, through an initial dialogue, is a crucial catalyst in the whole process which widens to embrace the politician.

"Beyond even social surgery there is hygiene, and beyond force there is thought and its diffusion as education. In no small measure we can educate from this city outlet the present confused dreaming of the future towards the sane and orderly preparation for it. This, if anything, is agreed to be the task of education, for its citizenship is nowadays a commonplace though not yet a reality. It is from the section of youth least contented with the present, most determined to advance upon it and this more or less in unrest, that revolutionaries are at present drawn, yet these are but so many strayed pioneers. The true police for them should thus have been their professors to open better horizons to each of these ardent young souls for his disappointment and embitterment. Let us educate such restless spirits in the main aspects of life, in appreciating the corresponding great departments of its activity and sharing in them too, industrial and aesthetic, hygienic and agricultural, educational, economic and social, yet also ethical with faith and effort in the possibility of these in their community, their city and its betterment around them. Such students are often already searching for all these and in what we have seen their true and vital order, re-religious and therefore, etho-economic. Let us re-educate them, then, in each and every one in ways etho-economic, psychorganic, and eu-technic, that is with soul directing body instead of body overpowering soul. In a word then, in this civic college of reconstruction lies the right treatment and cure of unrest. Is it not time to be giving it a trial?" (Indore II, page 37).

"Our problem is not in the people, it is in the inertia of thought and action - planner, politician and citizen seek differing avenues to Utopia. We must endeavour to create a synergy of effort before realising Utopia through Eutopia. The task of city development, our essential agenda, is to harmonise the idealism of civic statesmanship with that of the people and the ideals of the people with the statesman." (Gwalion, page 2).

### Conclusions

Geddes's Indian Reports, which have been examined above, clearly indicate a consistency of thought and methodology. It may be inferred that the primary component of his planning system/

system is the exercise of correlative thought with the objective of an improvement in the welfare of the individual citizen. Thus a broadly moralistic standpoint becomes combined with a highly precise scientific attitude. Geddes frequently insists upon the need to avoid the danger which may result from a limited mental horizon and framework of study and action. It is thus that in his reports he comes to examine a particular planning problem in a context far wider than that suggested by the problem per se. The house, for instance, is examined not within a street but within a neighbourhood; the shop within a central business district, the town within its region and the region within its country. The corrective factor of comprehensiveness is thus built in from the very beginning. The priorities given to action proposals are considered as steps leading to greater possibilities for environmental improvement. The isolation of a fact or a proposal is thus the beginning of a chain, not an end in itself. The same mental process emerges with regard to the needs of individual citizens. The implication of basic requirements in a biological sense is weighed finely against short and long term action proposals in an attempt to realise the optimum stages of individual and collective welfare at each level of the planning process. Geddes thus, is at great pains to stress discretion in the use of planning powers and indeed, this may be the real meaning and significance of the term, 'conservative surgery'. The culmination of Geddesian planning is found in an educational process, through which the planner educates and is in turn educated by the society he serves.

## Chapter II

The Middle East and Aden

At first sight Geddes's work in western Asia appears to be less significant than his extensive efforts in the Indian sub-continent. The geographical area is much more restricted and the number of urban reports confined to four primary studies, Tel Aviv, Jaffa, Haifa and Jerusalem, together with Geddes's report on Aden. Nevertheless, a close investigation of Geddes's work in this Arabian culture context is no less stimulating and no less interesting than his voluminous material prepared for the Indian cities.

His previous interest in this area has already been discussed in detail in respect of his pre-occupation with the Armenian refugee problem in Cyprus in the late 1890s. It was noted that this period of his activities gave him an insight into a number of the problems of rural development and especially of the perennial difficulty he saw for the Eastern Mediterranean, that of the provision of water supply. He next became drawn into this area in order to undertake specific consultancy reports for a number of the towns and eventually became involved in the preparation of the master plan for Jerusalem and the Jewish University in that city. His major work in the area spans a period of some five years and consequently there emerges, through this recurring interest in the area, a composite regional understanding of its major problems which becomes woven into an all-embracing regional plan.

Geddes appears to view western Asia as presenting two problems for the planner. Its geographical situation as a bridge between western and eastern world draws his interest into an examination of the problems of the region's external orientation with respect to maritime trade routes. He becomes concerned, therefore, /

therefore, to devise proposals which could capitalise on the trade which must necessarily flow into and through these regions, which in turn will influence the hierarchy of port facilities. The second consideration relates to the link between the developing ports and their hinterlands. In the case of Aden, the problem is exacerbated owing to the barren nature of that part of the Arabian peninsula whereas, for the Palestinian ports the hinterland offers greater possibilities which occur partly through the nature of the environment but also through political circumstances.

The Balfour Declaration of the time is accepted by Geddes as a clear indication of a growth potential and he sees that the development of a Jewish nation presents major problems for long term planning. In consequence, his planning reports for Palestine fall into a context of isolating overall regional growth tendencies. Thus proposals for individual settlements are fused into a comprehensive schemata linking ports and their hinterlands, urban and rural hierarchies of settlement with agrarian redevelopment schemes. Each of these components will be examined in this chapter in order to illustrate Geddes's regional methodology.

An indication of Geddes's approach to the problems of the region are given in the Report to the Government of Bombay on the possibilities inherent in the urban situation of Aden.<sup>1</sup> It is presented in some fifteen pages as an appraisal of site possibilities and founded on the assumption that due to its geographical situation Aden will continue as an important port of call for shipping/

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1. Town Planning in Aden, A Report to the Government of Bombay, 1917, Government Central Press, 1919.

shipping en route between the Mediterranean and the Indian sub-continent. The primary difficulty, as isolated by Geddes, relates to the necessity of drawing trade into the town from the sea lanes.

Patrick Geddes sees in Aden a classic example of a situation which apparently has all the disadvantages but one capable of advantageous modification. He notes, for instance, that -

"Visitors to Aden and who in the East has not passed this way, seem agreed in impressions and recollections generally unfavourable. Striking through the lofty and barren rocks are, with their sierra-like sublimity against the morning or evening sky, their desolation remains more strongly in the memory; the human groupings are easily taken in, the anchorage with its many steamers is fine, but the modern town is unattractive so that after the first brief visit to the famous tanks, the interest of Aden seems exhausted and the returning visitor not only does not land again, but often discourages his fellow travellers from repeating even his single experience. In this way has accumulated and spread a general opinion of Aden through the east and west alike which is highly prejudicial to its fame and to its interests accordingly."

This unattractiveness Geddes sees as a real economic problem. He takes considerable pains to calculate the loss to the town in tourist expenditure which this repellant aspect of the city promotes - approximately 8 rupees per person - in consequence, one of the major proposals is the possible multiplier effect which tourist investment could bring to the town. The second element in Geddes's proposals relates to the longer term development of Aden as a regional centre. He sees a duality of function for Aden which reflects its situation on the main sea routes and the fact that it is the only settlement of size in this area of the Arabian peninsula. Capitalisation upon these functional advantages can only be realised by a thorough appraisal of the development limitations followed by realistic proposals to overcome these threshold points.

"The question of water supply", Geddes notes, "is, of course, prominent in Aden of all places. In addition to the renewal and maintenance of the ancient tanks and the sale of distilled water and bringing in of the new supply from Sahikh Othman is now in progress and since the repair of the ancient tanks has justified itself, why not now a continuence of/  
of/

of the same principle at the other points where a considerable catchment area is available. In view of the increasing population and improving standards alike, one may venture to hope that to the extension of this old tank system into a considerable catchment area may be rewarding."

It is also of considerable importance, Geddes believes, that an additional threshold of disease be overcome through the development of research into the problems of malaria and the diseases brought by sand fly, the two factors inimical to successful public hygiene. Basic to both these suggestions - the utilisation of the catchment area possibilities for the hinterland of Aden and medical research - is the problem of cost. Consequently, to Patrick Geddes, it becomes clear that the long term future of the city is dependent essentially upon the increasing revenues which could become available through a basic replanning of the city itself. Therefore, in the programme for development, the first action stages relate essentially to the improvement of tourist facilities.

The Aden Port Trust has already proposed plans for designing a new esplanade and drive along the foreshore of the harbour and envisaged an enlarged administrative centre within spacious grounds, visible from the foreshore. Geddes adds to this basic proposal a recommendation for a more comprehensive treatment of the whole waterfront, partly to ensure adequate storage and wharf facilities, but additionally to remove the most apparent eyesore, a number of enormous coal heaps which reflect Aden's function as a bunkering centre. He comments that -

"Upon a rapid preliminary survey, as we have said, the bad points of Aden tend to overpower the good; from ship or pier the first impression to all minds so important, to many the persistent one, is as much spoiled as can be, for though there are here the essential elements which for thousands of years have made the beauty and glory of cities great and small, as throughout the whole Mediterranean, end to end, a noble bay enclosed by picturesque peaks and slopes and at their foot, not an unpleasing little town, yet here the whole effect is destroyed/

destroyed, indeed rendered squalid beyond discretion and to a degree unparalleled in the geography or history of such cities, by enormous coal heaps, sprawling over the whole central foreground and repeated at the eastern angle of the bay. This is a testimony, no doubt, to the importance of Aden as a coaling station, but it is an example also of the persistence of the rudest, wastefulness of the early coal age, for these gigantic dust heaps occupying the best sites of the town, blowing with every change of wind, down or back into the streets and into all goods and throats when not into the sea; the original explanation of ready convenience, but before present frontage of the town was built, makes no denial of its wastefulness to all concerned, but admits its mere survival from a too unthinking past - The replanning of this whole area will be advantaged to all interest concerned, private and public alike. This will appropriately arise with the coming in of oil fuel. Impending changes so important as these will involve further industrial development which will demand the fullest forecast, the best heads of the community can give, maritime and engineering, mercantile and industrial and these together."

In the light of technological changes which will bring in their wake a shift of emphasis from coal firing to oil firing, Geddes sees that the removal of coal heaps will be no detriment to the continuing significance of Aden as a port of call. Given the removal of this eyesore, Geddes sees that the inherent possibilities offered by the site and the town may be fully realised. He points to simple yet economic planning and a multiplier effect which can follow.

His answer to the problem of the squalid appearance of the town is simply to encourage self-help through the creation of an Improvement Association with a specific remit of embarking on a policy of whitewashing the town. This action, coupled with the creation of a shaded shopping arcade, an open air theatre and an Arab Craft and Cultural Centre, could provide the basis for complete tourist activity. The emphasis at all stages of the Report is on the work which can be done by people locally through mounting exhibitions of local arts and crafts. Another feature is the linking together of proposals for Aden and developments in its hinterland. One such proposal is the creation of an urban network of walkways which will lead to newly irrigated areas.

Geddes foresees that a number of his suggestions may be considered/



considered visionary, but stresses that it is a part of his duty to enunciate radical views in order to stimulate and inspire a more positive and evolutionary approach to planning. Nevertheless, the keynote of the Report is the stage by stage programming of improvements which may be begun on a moderate scale and with a minimum of expenditure and which, over time, may be extended. Indeed, the first stage of replanning is costed by Geddes and provides for a tourist investment of 291,500 rupees as compared with a present average of some 20,000 rupees.

"This difference", he notes, "spent annually within the town, is thus well worth some municipal outlay and some corresponding endeavour to obtain on the part of the trading community. The increased personal prosperity goes along with corresponding increase and well-being of the labouring community and both, of course, react favourably on the finances of all public bodies, the Port Trust, the Municipality and the Government in due respective measure. Hence, interest and sinking fund and outlays or improvements may thus be financed."

The Aden scheme thus, is an interesting commentary on Geddes's search for essential possibilities in an area, the isolation of thresholds and the programming out of objectives. At all stages the proposals, though innovatory, are economic. The basic consideration, as Geddes notes, is that the plan -

"must seek to express and enhance the essential life of the town and this at once in its local variety and complexity, its regional and racial characters, its general situation and world setting."

It was these objectives which preoccupied his mind in Palestine. The triangle formed by Tel Aviv, Jaffa, Haifa and Jerusalem became a region of considerable interest to Patrick Geddes. He was consulted by His Majesty's government and individual urban authorities on questions relating to the future prospects for the major urban settlements. Geddes, as was his wont, went further than any specific remit and in the process produced a series of plans and comments on the Palestine region as a whole.

Geddes saw the need, not for the individual planning of urban units, but for a total regional view relating to this section of South West Asia. The Balfour Declaration of 1917 introduced/

introduced a dimension into planning essentially different from that which had formerly existed in the Arab world; the distinct possibility of the creation of a Jewish state would lead to the growth of large numbers of Jewish immigrants, demands on the limited developed space in the area and the growth of communications and trade. In consequence, each individual planning report which Geddes produced rested upon an explicit correlative study through which Geddes isolates a series of growth points and possibilities and against which each individual urban plan should be fashioned. His urban reports thus become a consideration of the regional city as evolving. The essential urban problem thus becomes the isolation of special functions to be performed by the major components of this regional city. Complementary to urban growth is the revitalisation of the rural basis to be achieved through the process of intensification of agricultural development, together with the selection promotion of rural service centres or 'king villages'. The primary components of Geddes's planning thus, in Palestine, may be summarised as being the development of the primary rural base of activity, the promotion of hierarchical functions in urban settlements and the modification of existing morphological patterns in the urban structure to accommodate growth possibilities.

#### 1. The Rural Base

One of the most difficult tasks, Geddes foresees, is that of devising for Palestine schemes of development which will be acceptable to both Arab and Jew. The political background with its resultant emotional overtones, makes it difficult for plans to be publicised without being laid open to charges of partiality. Geddes is thus at great pains to stress that, in this instance, a careful appraisal and analysis of the situation and the proposals which result from it, must be made in a manner which is seen to be completely impartial. Harsh criticism of the existing situation may result from an analysis but that this is/

is necessary in order that the planning function per se may be isolated from the general political background. Geddes notes, for instance, that his previous awareness of the Middle Eastern problem, particularly in Cyprus, together with his detailed investigations on the ground in Palestine, have placed him in a position of being able to exercise objective and critical judgement of the situation.

"The writer, not previously acquainted with Palestine but prepared by long familiarity with various Mediterranean regions, some as far east as, for example, Cyprus, has spent part of 1919 and the greater half of 1920, in travelling and planning and this with an eye to regional development. He has been consulted for the designs of the Hebrew University at Jerusalem and of Jewish as well as other garden villages there and round several other towns and throughout the whole period of both visits he has been responsible to the successive governments of Palestine, military and civil and has accordingly been reporting to them on general city and town planning within which these Jewish schemes have only their limited areas amongst the rest, and just as the hygienist, whether at home in Europe or in India, or in Palestine, is in practice but little concerned with either the religion or the politics of the public which he is called to serve, so it is also with the town planner, essentially occupied as our hygienist and planner with general and community interests, a substantial impartiality is thus necessary and customary in their profession; indeed, without it their plans would be in all men's eyes and not simply in their own. Yet such general impartiality does not preclude active enquiry nor an all round critical attitude; it indeed compels these; Moslem, Christian and Jewish ways of living and working, in country and in town have all to be observed and each are found to present advantages and disadvantages, often unexpected ones. The task is not to plan or plead in favour of any race, any social or religious grouping, it is to search out the qualities and defects of each type in its housing, agriculture, etc., thence to combine such local lessons and warning with those of a more general experience and thus to plan for the benefit of each and all concerned."<sup>1</sup>

In order to absorb the likely increase in population, Geddes considers that the most fundamental of all reconstructive tasks is agriculture and that its main objective should be to "build again the old /

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1. Palestine in Renewal, The Contemporary Review, October 1921, page 476.

old waste places". He advocates a system of credit finance for the promotion of agricultural colonies. These units of settlement will, in their own right, act as multipliers in that the promotion of agricultural development will allow for the increase of regional income, an appreciation of land values and also allow for the utilisation of Arab labour. He clearly envisaged that these colonies would, in fact, be largely populated by Jewish immigrants for he isolates the capacity of the Jewish people to promote intensive agriculture.

"The area of Palestine available for reclamation and improvement is vastly greater than its present too scanty population can overtake. This affords for immigration accompanied by increasing prosperity to the existing inhabitants and that in more ways than from appreciating land values, for these values, as above pointed out, are in various ways heightened, hence with a view to allowing time for a more normal land market return. The Zionists seem turning increasingly towards more intensive development of such areas as they are required and also towards the waste government lands, which under an excellent old Turkish law are open, under reasonable conditions, to whoever is able and willing to reclaim or afforest them."

Geddes calls for very careful planning of the agricultural colonies. He has noted that a number of the settlements already developed have been planned in haste, that the pioneers far too quickly accepted a rigid chess-board plan in order to begin agricultural reclamation without delay. He believes that over a period of time this haste will produce difficulties in a growing settlement through the overbuilding of what could eventually become a central area focus.

"The agricultural pioneers are in haste to get to work and to establish/

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1. Palestine in Renewal, Ibid page 479.

establish their homes and they thus too readily accept the line of the road before them, or the conventional ruling of their land surveyor beside it, but such beginnings are permanent, moreover, they constitute in most cases a very nucleus and centre of their growing village and thus of their future town which is thus conditioned to an inferior level of convenience, economy and amenity and to this more or less impermanence. The importance of such planning to the development of new villages and even of the smallest settlements is thus obvious and urgent."<sup>1</sup>

The arrangement of these agricultural settlements, as seen by Geddes, is of some interest. Good site planning is regarded as being essential. The two primary internal components are adequate sanitation facilities and a communal meal service.

"A working group", he notes, "needs a care of sanitation, practical and military in its strictness and also meticulous in its details. Latrines must be established from the first. Existing kitchens are somewhat too primitive and thus less economical of their costly fuel than they might be, while too much of the food, no doubt often inevitably, comes out of this while vegetables and fruits seem rather deficient, even dried ones. As a Scot, I should like to see more of the porridge pot and of the soup pot also; for improving the supply of eggs, even poultry shed with wired-in hen runs adjacent to the cook's scullery and thus consume waste instead of leaving it to rats and mice, here in the East a possible source of danger. For temporary road camps, is it not possible to organise a travelling kitchen?"

The second element is a linking together of facilities for leisure with an educational process. Geddes finds a need for trained technical personnel but believes that the ideal system is for the university or polytechnic to provide training in agricultural practices within the colony. The colonies become field study centres.

"Although personally so largely concerned and not only in Jerusalem but throughout life with the planning and material equipment of higher education, I am even more fully clear that the true university is not a material edifice but a state of mind, an/

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1. Typescript - The Planning of Colonies - Note to the Zionist Commission, page 2.

an organisation of thinking at once of individuals and in community, so again technical education is not any poly-technicum building, useful though this may be, but the measure in which our work and our ideas and ideals are really and acutally correlated. The American Univerity of the Middle East are here admirably leading, sending regularly their boxes of books, their students and as fully as possible, their university extension lectures, to all the working villages and their states. Is there not here, therefore, an example of the university and pbytechnicum working with the pioneering camps as those of Palestine."<sup>1</sup>

The actual situation of these agricultural colonies will relate to the geographical possibilities for land reclamation. Geddes has something to say about the form of the colonial settlement. He appears pre-occupied with the external relationship of the agricultural community. He pleads for an awareness that a mesh of communication links is necessary to fuse together the various colonies with each other and with some larger service centre. Agricultural reclamation, he believes, should take place radially outwards from each settlement in order to minimise cost and travel as the reclaimed area expands.

" Colonies are parts of an organism, valley, town and village - in the pressing difficulties of each situation roads are needed to weave the parts towards a resultant scheme which will rank amongst foremost regional object lessons."

The agricultural region, he considers,

"and especially such a reclamation area as this, is the nursery and school of a view of life and a philosophy of action. - It is no longer mechanical, but essentially vital and constructive."

The constructive tasks which take precedence in Geddes's mind/

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1. Planning the Colonies, Ibid, page 3.

mind are re-forestation, swamp drainage and the utilisation of water resources. Reclamation and prevention are two basic themes in Geddes's rural activities; contour farming, terracing and tree planting, especially eucalyptus trees, are means to combat the denudation which he is aware is rife in the Middle East and which he, in fact, noted in his earlier work in Cyprus. He advocates, for example -

"To the speedy and extensive planting of sand dunes, there not also may be added some sowing of tree seeds upon some of the waste valley slopes between the Mount of Olives and the Dead Sea, for here is most desert; there are few flocks to devour the seedlings, and I understand the government owns large areas - so urgent is the matter of fuel forestry that a further unconventional suggestion must be ventured. Since the budget of the forestry department is too limited to engage the large amount of labour required, cannot a substantial measure of assistance be given to it from a proportion of the army of occupation - to the soldiers may be added auxiliary groups of boy scouts and school vacations may thus be utilised and even adjusted with advantage. Forestry camps might also soon attract an appreciable number of civilian volunteers to such invigorating and useful spending of holidays. In this way the public will begin to feel the fuel problem as urgent."<sup>1</sup>

A complementary feature for Geddes is the prevention of the encroachment of the desert. Reclamation of desert lands figures highly in his recommendations. As he advocates -

"With a well planned, a vigorous policy of desert conquest, great things will yet be done, and beginnings as soon as may be on selected areas are desirable. The art of water finding, not only by the diviner but by recently invented instruments, seems advancing and the sinking of wells is nowadays a far simpler and less costly matter than of old so that these can now be made at more frequent intervals. Again, where ground water is too deep or too scanty, may not new ponds be constructed with other pre-historic types still surviving on the south English chalk hills, or of some modern type which well repay experiment? - And again, I venture to urge experimental enquiry, especially whether/

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1. Rural Development, Typescript, page 12.

whether in these dear times of fuel with the high charges for grinding accordingly; the windmills of Jerusalem and Haifa might not repay repair in view of their substantial towers and doubtless surviving stones of machinery. The windmill's is practically an extinct craft, yet surely some handy engineer might easily revive it. If the windmills can be improved in sufficiency, yet abated in cost as well, their manifold usefulness to farm and even to the household will soon be justified." <sup>1</sup>

In one particular area Geddes advocates more detailed investigation of regional possibilities. This is the Jordan Valley which Geddes envisaged as a classic valley section. The multiplier for regional development in this area will be the use of the great natural reservoirs of the Lake of Galilee. Geddes envisages here the possibilities for electrical development which would,

"not only give light and power to villages and towns over a wide area, but also irrigate the lower Jordan valley which is at present so desolate for the want of it." <sup>2</sup>

This theme is discussed in some detail in a series of typescripts on the Jordan Valley section development. The scheme, as conceived by Geddes, is grass roots' planning related to the terracing of hillsides, the planting of forestry areas, a linking through into a scheme for a national park on the upper reaches of the Jordan, between Semakh and Beisan. The lower Jordan is seen by Geddes as an area for "experimental, tropical agriculture". Given the basis of a secure and adequate water supply, coupled with the high temperatures experienced in this area, Geddes sees unlimited possibilities for intensive horticultural development which could serve regional and indeed, international markets. It is in this area of the Jordan Valley that Geddes proposes to establish a significant number of agricultural colonies which may also, in winter, form health resorts/

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1. Ibid, pages 6-7.

2. Palestine Renewal, page 480.



resorts and tourist centres. The developments he envisaged would have a direct impact upon the hierarchy function of existing settlements. Geddes's schemata thus involves a re-appraisal of the importance, function and development potential of the settlements in the area. Far-sighted planning is seen by Geddes as necessary to channel the growth potential along desirable lines. For Tarak, for instance, Geddes envisages a future for recreation and tourism. "In many ways", he notes, "it can offer attractions to which residents will here find climatic conditions comparable rather to those of Egypt than to the rest of Palestine." Semakh, as a railway focus, is seen to be a growing regional centre, the economic and commercial capital of a very large district. Here the emphasis is on the improvement of the lakeside port with especial attention to ample provision for business centres, stores, as well as increasing shipping. Tiberius, the largest settlement in the region, Geddes regards as becoming an important tourist centre and here conservative surgery is used to good effect to help emphasise the architectural merit of certain parts of the city; whilst a series of garden suburbs are recommended for Tiberius, no major population development is foreseen owing to the fact that Semakh, for instance, being nearer to the future growth areas will eventually develop more rapidly to become the main commercial focus.

The Jordan Valley thus, as an ideal valley section, as seen by Geddes, becomes in his mind a clustering of colonial settlements for the purpose of rural reclamation and development. These are linked to a series of existing villages and townships with their functions streamlined to fit them for the incipient future.

## 2. The Urban Hierarchy and its Development

The urban centres of Tel Aviv, Jaffa, Haifa and Jerusalem, dominate the settlement hierarchy and as such far exceeded in their functions, settlements of a lower order. Jerusalem as the/

the inland nodal centre is seen as continuing in its function as a religious centre, but also becoming the focus for developments in the interior of Palestine, especially those in the Jordan Valley. Jerusalem has its future assured and its planning, as seen by Geddes, takes the form conducive to enhancing its religious and political character, developing its functional characteristics and generally highlighting its architectural merit.

The western coast settlements, however, posed different problems. Tel Aviv and Jaffa, distinct urban administrative units, which have become merged morphologically, are seen by Geddes as Greater Tel Aviv and are considered as one for planning purposes. Consequently, he attempts to streamline their functions to emphasise the complementary nature of these adjacent units. As a subconurbation their rank is automatically enhanced and they clearly rival Haifa as the primary commercial centre. Geddesian strategy for the west coast thus becomes dependent upon a rigorous assessment of these competitive centres. Their development potential is considered by Geddes to be derived from two complementary aspects. The first is future economic development within Palestine. This will influence the direction and growth of trade to harbourage and port facilities on the western coastline. The potential of these facilities is conditioned by local topographical factors which merit study.

The second item relates to the nature of overseas trade which will develop in the eastern basin of the Mediterranean. Haifa would appear to have the initial advantage in that government investment policy has been directed to the development of Haifa port. The implications of this policy for Tel Aviv and Jaffa have not been worked out and this becomes the first and primary consideration in Geddes's thinking. His objective is to make for the western part of Palestine, realistic planning proposals on which regional confidence can be based. Tel Aviv and Jaffa form physically a multi-focal urban centre and Geddes considers that it would be unrealistic to attempt to plan these complementary parts/

parts independently. The master plan and subsequent development control must, therefore, ignore the artificiality of the existing administrative boundaries. Geddes points out in the introduction to his planning report -

"With all respect to the ethnic distinctiveness and the civic individuality of Tel Aviv as township, its geographical, social and even fundamental economic situation is determined by its position as Northern Jaffa - the old town, the modern township, must increasingly work and grow together. The rise of additional townships as yesterday Sarona and before long perhaps, one or more others, makes it additionally clear that all concerned have already to recognise and increasingly to work for Greater Jaffa. Though the local industries and developments are not without distinctiveness, their fundamental conditions are essentially one and the due prosperity of each is closely interwoven with the wellbeing of all; conversely also, the more efficient and well developed can be Greater Jaffa, the better for all its component quarters and townships and for districts also." 1

A natural boundary to this urban complex is selected by Geddes as a wide green belt area which at present forms an unhygienic refuse dump but which, with discretionary planning, can be developed into a fringing green space and eventually a link to a series of open spaces within the towns themselves.

"The present municipal boundary for Jaffa neutral zone and Sarona alike, as shown on their recent small, official plan of delimitation, comes up only to the nearside, the western edge of Wadi Musrara. Such a boundary line is common enough in recent municipal administrative usage is made however, in their everyday mood, for which all times of trouble are over and only the humdrum routine of business existence remains - however fully this peaceful hope be granted and that the days of this reason of boundary may be past and done with, the progress of town planning has brought all its exponents to a clear understanding that the old military method is the only right one for peacetime also; for otherwise, not simply does the town which neglected its adjacent stream leave it to neglect and pollution from outside neighbours but invariably more or less spoil and pollute the stream and bank itself, as by rubbish dumps, drains and worse. It is also throwing away what is now everywhere being seen as/

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1 . The Town Planning Report, Jaffa and Tel Aviv, 1925, page 1.

as the finest of possible inland boundaries, when only second in possible beauty and health-giving to the sea-shore itself. Hence then, all awakened western communities and especially American ones, which until recently most of all missed this opportunity, and injured to also and are coming to the thorough control of their adjacent stream and of both banks and with public acquisition accordingly as rapidly as may be. For not simply is this now seen to be a matter of great importance for public health and in fact, essential to its improvement and its security; as enlightenment advance and the claim of adult exercise and then of juvenile and public recreation become considered, these banks are seen to afford one of the most excellent and least expensive forms of public park, as also of a type increasingly accessible since fringing the inhabited area so widely, in this case for Greater Jaffa, some ten kilometres. Instead then, of any longer treating the stream as but public drain and its banks as dump heap, as has been too much the custom of the industrial age and as is still danger of Greater Jaffa as it increases towards its boundary of today, the more intelligent citizen sees and uses the varied choice of pleasing sites which these bank offer and thence before long increasing land values even for all areas within reasonable access, instead of in obverse ratio as before. Hence then, no advance of modern town planning and of city development accordingly, is making better progress than this. Even in towns of the past there has been some preserving of pleasing views and accesses or even acquiring areas as public gardens, even small parks, while leaving the rest of the stream course to deterioration. But all this has long been seen and felt as totally inadequate and this even when municipalities, as in many cases, have acquired full sanitary control, even to stream purification, always costly and never adequate, until banks are de-industrialised and return to their proper and best possible uses as for public garden or park and garden villages by turns and these connected by parkway throughout. Hence, parkways are thus made not only as fully as possible along both sides of the stream, they are also adjusted to the city's avenues and thus to the interior parks as well, so that not merely a belt of green adorns the city, but with a network of interior lines and park and garden space - here, however, where no appreciable harm has yet been done and where control and even acquisition is relatively easy, it is surely to be hoped that these proposals may be favourably considered so that Greater Jaffa, with its noble sea-shore situation, may thus soon come to have an inland boundary worthy of this and as/

as little interior to it as may be." 1

The present situation in the region necessitates major comprehensive planning. Tel Aviv and Jaffa have suffered through a loss of government investment to the port of Haifa and the present port facilities are extensively congested. Geddes sees an immediate danger in that with a loss of general confidence in the future of the two towns, indiscriminate urban development may take place which could negate the advantages which already exist and which additionally could destroy the character and the possible future of component parts of this sub-region. Indeed, Geddes appears to see everywhere not disadvantages, but possibilities. He considers that a careful appraisal of the Palestinian situation makes it obvious that the port of Jaffa has a considerable future. There are limits to the opportunities offered by Haifa port, particularly with respect to its own threshold limitations. He comments, for instance, that

"The contemporary and advancing economic and social conditions of Palestine all go to prove that the days of Jaffa port are no means ended. In fact, the superlative over congestion with the reluctant waste and inefficiency beyond parallel so far as the writer's experience and enquiries go in the whole wide world today, must not be interpreted in the mood of despair which they too readily produce, but on the contrary, as substantial evidence of indispensable services to their varied and rapidly growing communities and to their extensive and increasingly productive region - the age of steam with its deepening of the draft of sea-going vessels, undoubtedly concentrates great commerce upon the comparatively few centres of great natural advantage and these are usually developed at great cost and with high engineering skill. Yet here, despite the deplorable and as yet inevitable fact that for twenty or more days per annum large ships cannot load or unload and must thus go on to Haifa, and this all the more as soon as its port improvements can be accomplished does not affect the fact that for at least eleven-twelfths of the year the business does get accomplished and this with an economy - hence, if these minor and interior drawbacks can be substantially abated and even to efficiency never realised before, as we hope in present/

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1.\*\*. Ibid, pages 6-7.

present planning to justify, a substantial new advance in prosperity is practicable without waiting for a large measure of exterior port protection at present decided against." 1

One base on which Geddes confidently expects a continuation and extension of trade is through an increasing development in the interior of fruit growing, especially oranges. Communication links to the interior, therefore, are essential as are immediate improvements to the port and its warehousing facilities. A number of current proposals are severely attacked by Geddes on the grounds that they are likely to indiscriminately destroy the complementary functional nature of Tel Aviv and Jaffa. He finds it totally unrealistic to disperse investment in the region ~~between~~ the two townships by trying to create additional port facilities at Tel Aviv itself and thereby losing the inherent possibilities of Tel Aviv as a major resort centre. These proposals are also attacked on the grounds that Jaffa port can easily accommodate all the expected traffic in the immediate future and that in the long-term additional outports may be easily created at an economic cost. He notes that,

"Here must be considered the proposed Tel Aviv jetty. Its first suggested situation at or about the present Casino, is certainly unsuitable on various town planning grounds, for the present focus of Tel Aviv as watering place with its bathing stations and as culmination of the main thoroughfares of Allenby Street also, would thus become converted into a port and warehouse quarter. Here then, is waste and loss of the existing town centre as developed during past years, for this existing quarter of good homes and seaside pleasures would be spoilt for their present values, yet it is quite unsuitable for adaptation to business uses. Railway sidings would abolish the present bathing stations and the railway would also extend northward and southward along the shore. On our recent plan is also shown a loop of railway line cutting through the whole seaward side of the new town to the silicote factory and thence back through the landward half of Tel Aviv station, an operation not only costly but destructive beyond measure. Such planning cannot be too strongly deprecated and this on every ground, since ruining the present town and especially residential/

residential and watering places of great and attractive future possibilities and these not only for all Palestine but even for Egypt, indeed, for that vast and increasing tourist circulation which so largely replaces the pilgrim world of old. Return, however, to the main fact which renders better marine facilities for Tel Aviv so desirable, viz., the present enormous import of building materials which are at present dumped in such wasteful and disastrous confusion at Jaffa. The above outlined reclamation scheme admits of their orderly landing in Jaffa bay, with speedy delivery of cement, wood tiles, metal work, etc., by motor lorries, or camels, to every point throughout Tel Aviv, where required; for it is easy to build a necessary length of shore road to connect with the existing road and street system of Tel Aviv and similarly with Jaffa itself, since this will also have its turn of building extension, both eastward and southward - It is not simply the present planner who cannot find means of transforming such a watering place as this into a sea-port. It is in every respect unpractical and unprofitable to attempt to convert such a little Ostend and Brighton into a little Liverpool or Antwerp. Each cannot but spoil the other and the problem of their reconciliation other than in separate and distinct neighbourhoods is beyond the wit of man. Towns could here be named which have badly depreciated themselves through attempting this reconciliation of opposites. While thus considering the above possible compromise as near the main existing development of Tel Aviv as may be without calamity to it and with such hope for advantage as may be, there remains many grounds in favour of concentrating southwards in Jaffa bay and these will gain strength in future, in course of which all separate townships will increasingly unite to co-operate as Greater Jaffa, primarily, of course, the general efficiencies and economies of a single port system adequately developed and secondly that of a simpler and more unified railway communication, - finally, no efficient permanent port can here be developed. The original and essential Tel Aviv as sea-side town would have been sacrificed to a degree practically irrecoverable and more, since the railway scheme as drafted on its plan was the most dangerous and even devastating to the amenity, the future development and normal existence of the town of any railway scheme in my experience or plan in my collection, the largest as yet in the world. I am well aware that thus to report must be disappointing to many good citizens of Tel Aviv but I am thereby all the more compelled to justify my conviction that the scheme in its first large form is not economically realisable." 1

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1 . Ibid, pages 8-9.

Geddes's basic plan hinges therefore, on the isolation of the primary difficulties in the development of Jaffa Bay as a major port area. An intensive analysis of the physical geography of the region suggests to Geddes that the series of economical projects may in fact be developed to overcome these difficulties. Consequently, an area of unused sand beach becomes reclaimed into an additional harbourage facility and more extensive warehousing accommodation. The natural rocky harbour is supplemented by the use of lighters. A port industrial area is clearly zoned, adjacent to a reclaimed part of the bay and becomes linked to a more efficient railway net with tentacles spreading from the harbour and linking to a relocated railway station in Tel Aviv itself. Heavy goods traffic becomes removed from the centre of Tel Aviv and located in extensive railway sidings, as are also railway workshops which at present are bedded into the urban fabric but which become re-aligned in accordance with the new proposed railway scheme.

Geddes has one further major proposal with regard to port development. In a previous report to the Palestinian government in 1920 Geddes had foreseen the possibilities inherent in the Tel Aviv and Jaffa region and had made a tentative proposal for a complementary port to be developed. At that time he had considered that, whilst port traffic was increasingly being concentrated in larger centres, there was still a need for smaller ports to deal with specific local traffic, especially in the industrial field. This theme was taken up again five years later in a proposal for dredging to be undertaken at the mouth of the Auja River to facilitate the movement of fishing boats and tourist pleasure craft. In the long run, this deep water facility could become the site for an outpost for Jaffa ahead of the direction of growth of the sub-conurbation. Geddes therefore pleads for a very careful consideration of the regional transport net to be linked in eventually with this future possibility.

"Before leaving this matter of port facilities for Tel Aviv I may here recall the idea outlined in the brief section on Tel Aviv of my report to the government of October, 1920, viz., that the mouth of the Auja may be adopted to afford landing alike to that greater Tel Aviv which at its present rate have even spread beyond it and to the district's and colonies beyond.



Despite the manifest rocks and sands, their clearance for the moderate distance which is all that is required does not appear difficult or costly - It is now time for railway authorities and still more for the public authorities over these to work for the better development of each region in terms of its whole communication system. In this the railway will, of course, remain central but now with more economic adjustment to this reopening era of minor communications by roads and even by canals wherever possible, yet railway extensions too will be necessary, thus obviously a suburban branch will be needed to the Auja mouth and in time northwards beyond it." 1

Within this physical planning framework Geddes envisages the fruitful collaboration between the existing independent authorities to produce a zoned commercial and industrial structure for the whole region. He suggests, for instance, the streamlining and concentration of cattle markets and slaughter houses and bearing in mind the possibilities inherent in Auja port, of diverting immediately specified industrial growth to this area. He notes that,

"though the Auja development is some years ahead, whereas the provision of industrial quarters for Tel Aviv and Jaffa and these in due relation to the main railway system are matters immediate and urgent, even these may be best foreseen and devised with this near future in view. For instance, it would be a mistake to start a paper factory in or near Jaffa or Tel Aviv stations, for the necessary ample intake of water and also outlet of defiled water can best be provided near the Auja River mouth, while over here would be the place for landing the presumable import of esparto grass, not to speak of possible paper export too. Similarly for tanning, the Auja situation is preferable. On the other hand, industrial growth which requires a high intake of largely feminine labour, such as cotton, silk and woollen industries, should be concentrated in the newly zoned industrial area adjacent to the existing built up units." 2

In one other field a major threshold problem may be overcome by this joint collaboration between Tel Aviv and Jaffa. This is the problem of future water supply and drainage. Geddes notes that,

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1. Ibid, pages 10-11

2. Ibid, pages 28-29

"The association of Jaffa with Tel Aviv, Saron, etc., in fact of the whole Greater Jaffa, present and possible, in a single well organised and equitably adjusted water scheme, is of course, of obviously an economic necessity for their growing future. I cannot imagine either these intelligent communications failing to consider this or government approving more piecemeal or competitive schemes." 1

It is necessary, he believes, that the Auja River itself be harnessed to a catchment area operation to reduce the pollution in the river and secondly, for a far more reaching investigation of the possibilities in springs, wells and catchment area in the hinterland. This he believes, can only be done for the unified administrative authority who would share the cost.

A consideration of threshold limits to future development is basic to Geddes's regional thinking and forms likewise an important component of his assessment of the future of Haifa, the main regional competitor to Jaffa - Tel Aviv. The future of this port is assured through a government investment policy,<sup>2</sup> though Geddes sees numerous difficulties to be overcome. Following a detailed investigation "with the whole area and its varied aspects and activities in mind" it became possible for Geddes to discuss the primary limitations on the future expansion of Haifa and these were separated into three specific categories. Initially the problem of relief - Haifa is dominated by Mount Carmel and as a key problem is related to the accessibility of the port to its hinterland and the diversion of direction of growth of the port around this massif. The provision of water for long term development of the city is important. Here Geddes foresees little difficulty in the future given adequate measures for the retention of run-off, (by means of an extensive re-afforestation policy) and the storage of water in the hinterland of Haifa<sup>3</sup>

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1. Ibid, pages 40-42
  2. Geddes's contention that Jaffa port indeed had a future was fully supported by the fact that only in 1966 did the Israeli Government finally decide to close the port of Jaffa.
  3. Report to the Municipality of Haifa, page 6-7.

The crucial problem, however, as with Jaffa, relates to the overall planning of the port. He notes that, for instance,

"Centralisation and concentration are increasingly necessary and in big port business especially. It will be that the old town will be transformed but probably haphazardly. The condition is now such that there is an urgent need for careful planning - thus, the designers of this port cannot ignore or shelve this question. It involves considering and providing for the most efficient possible working of the whole of the town's maritime and commercial affairs and its manufacturing future as well. Failing this comprehensiveness, the confusion which characterises East London will be more or less repeated." <sup>1</sup>

Proposals had already been made for an extension to Haifa port, by the construction of a massive breakwater. He believes that there is an immediate need for economy and that one problem of Haifa port, the variations in wave amplitudes can be more economically overcome by the use of more direct modern technology. He advocates "pneumatic wave breakers", a series of pipes laid into the harbour through which air is driven and the resulting bubbles breaking up the wave oscillations, and as in Jaffa, he envisages the use of floating wave breakers (a mulberry harbour concept).

Geddes feels that the primary difficulty is to communicate novel ideas. His objective, therefore, is to overcome the hardening of the planner and municipality "to the conventional, their opposition to free and outspoken thinking and experimentation towards the future which is the essence of the planner's task". <sup>2</sup>

The adjacent port of Acre is being supplanted by government investment policy and Geddes envisages a fruitful co-operation between the two settlements in order to effect a regional balance of functions. He sees, possibilities for a spacial expansion of the industrial growth which will necessarily follow the increasing traffic through the Haifa port. The Acre plain offers ample space for a wide variety of industrial uses which would be added to after the reclamation of a number/

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1. Ibid, page 47.

2. Ibid, pages 61-63.

number of lagoon areas. Geddes envisages the development of a large industrial complex which would include oil, coal storage and major railway works. However, he is at great pains to stress that Acre itself with, -

"its fine sea view and pleasant inland excursions" already offers one of the best of outings and most convenient of holiday centres for the growing city of Haifa, which will thus, to a slight extent, atone for supplanting it as a regional port - hotels may thus, before many years, find rivals springing up and also boarding houses and for civic success in this line, fuller cleaning and brightening are desirable, with further planting of trees, etc., to veil its more desolate and ruined aspects. Above all the malarious reputation of the city and neighbourhood must be got rid of and this should be a profitable matter by better use of waters at present running to waste for useful and economical irrigation." To ensure that these two functions, the growth of the industrial site for Haifa and the amenity value of Acre itself, may not be irreconcilable, Geddes firmly advocates a smokeless industrial area, the planting of tree lines along the sand dunes, partly to afford timber fuel, partly to stabilise the sand dunes, but additionally to act as a visual screen between parts of the industrial area and the town.<sup>1</sup>

Geddesian appraisal of the future development possibilities of the two new nuclei, Haifa and Jaffa, based upon an examination of the threshold limits draws him logically to the assessment of the impact of such future developments upon the existing land use pattern.

#### The Impact of Regional Development on Urban Space

The situation in both Haifa and Tel Aviv - Jaffa is very similar and Geddes's approach to the two regions is markedly comparable, viz., comprehensive long term land use planning. His primary objectives appear to be the centralisation of urban functions, both commercial and

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1. Pages 47-51 and also a typescript, Notes on the Planning of Haifa undated, page 3.

institutional, into specific and accessible areas and the linking together of internal rehousing and rehabilitation policies with a positive programme of suburban and overspill settlements. The basic feature of both reports is a plea by Geddes, for the acquisition of land well in advance of expected developments. Provision of land for housing and recreational purposes is to be supported by strict developmental and environmental control by the public authority. Geddes's preoccupation with long term regional development possibilities brings him to the conclusion that in the absence of a positive policy of land acquisition, eventually the municipalities will find themselves in the situation of facing increasing land valuation for its development. He is at great pains to stress the need to use every available site within the urban fabric and to acquire external sites immediately. He advocates, for instance, taxation of sites left vacant over a period of two years that the municipalities should take advantage of government land lying adjacent to the local authority, which they should purchase with all speed.<sup>1</sup>

In all sub regions Geddes advocates a positive policy relating to the quality of housing accommodation and limitation of plot ratios.

It is desirable, he notes, "that buildings should not exceed three stories. It has been recognised in public health that the fourth storey is a stratum of ill health,"<sup>(2)</sup> and also, "that it is a popular belief that because land is dear we must build high, but the main fact is that as we build high we make land dear, no doubt a vicious circle arises, already only too manifest in Tel Aviv; but nonetheless, the way to cheapen land and to keep it so is to limit population per donum and hectare and as far as may be. Thus in the home city I know best, I remember great philanthropic corporation piling and walling up six hundred persons per acre, though happily they are now kept down - Said to me, a visitor to Tel Aviv, from one of the colonies, "What bad building regulations in Tel Aviv", said I, "What regulations?". "Why, one is only allowed to cover one-third of his plot." "How much would you wish?" "Two-thirds, of course". "Well, if you wish to introduce the mortality rates of Bombay and particularly those of child mortality in the first year, maximum in the world, 66.6%, that's the way to set about it. They build higher too, to four, five, six stories". "Well/

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1. Jaffa, Report - page 12 and page 31, Haifa, page 32.

2. Haifa, page 19.

"Well, why not?" "Because there is a stratum of lowered health, of lowered health in women and children especially, in all cities, increasing with every storey beyond the second and especially between third and fourth." "How so when less dust?" "Here is the medical answer, imagine yourself a working man's wife with her full marketing basket on one arm, a baby on the other and another baby coming within; so now tell me, how many stairs you would like to climb up?" "I never thought of that before". Again, though the child mortality of the next and even greater port, Colombo, is still high, it is under a third of Bombay's and the lowest of all the great cities of the tropical east, and why. Because in the main, still much of one and two storey houses and largely with gardens, because its founders the Dutch, who brought their gardening interests, skill and taste with them to Ceylon and have diffused them throughout the population." 1

Each housing area should, according to Geddes, be based on sound principles of segregation of pedestrian and traffic. If becomes possible, he believes, with careful planning, to provide "for the growing requirements of business without their interfering, as at present, with the peaceful amenities of home" and Geddes, both for Haifa and Tel Aviv - Jaffa, differentiates between the main ways and home ways. He sees, "Given main ways carrying all through traffic, we can now plan the interior of each home block with few roads as possible, thus gaining ground from the long customary, but wasteful, road length and road space and saving a substantial area beside cost of constructions and upkeep. There is possible uses for this land saved. There is on the one hand to enlarge the house plots and on the other to provide space for gardens, playground, tennis courts, or the like; indeed, all these as far as possible. It is often hastily objected, if we narrow these home streets we shall diminish air, but air is omnipresent. The only difference between street and garden is that the street is dusty. The essential matter is that the houses on each side be sufficiently kept back. I thus recommend seven rather than eight metres as sufficient breadth for such home streets as enough for serving their always moderate number of homes, say from thirty or so to fifty or more. Individual and municipal economy co-incide in keeping these homeways as to paying, etc. - yet where unpaved margins are left for flowering trees, thus also may have their way without extra expense. Though hitherto the regulation minimum set-back of houses has been two metres, it is expedient that the houses be henceforth kept at least three metres back from the street, thus giving a total distance between the houses of some thirteen metres." 2

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1. Jaffa, pages 13-15.
  2. Jaffa, pages 19-21.

The judicious use of conservative surgery techniques for rehabilitation processes is also part of Geddes's recommendations for the centralisation of functions within the two centres. The anticipated growth of both nuclei makes it essential that an expansion of commercial facilities and central business district facilities should be provided for. The present confused development of these town centres makes accessibility difficult and Geddes is at great pains in both reports to investigate the possibilities for creating additional space and points of access. This he finds relatively easy to do. In Tel Aviv, for instance, the existence of a number of larger boulevards, especially the central avenue in Tel Aviv and the availability of open plots in the area, allows for the creation of a hexagonal place where Geddes recommends that permission to erect four storey buildings should be given.

"These and for the whole six sides should be designed with due measure of architectural unity, by a single well-chosen architect, for only in this way can this central city feature be made and readily and permanently effective. Shops, should in time, occupy the whole range of the ground floors and if necessary, the mazzanin too, though business, law and other offices may naturally be accommodated. Elevators should be provided for these and for flats of dwellings above."

This area is linked in the south east to an additional square where more simple shoppings, a market, garages and a bazar are accommodated. The growth of this area should be strictly controlled, Geddes considers, and it is desirable to protect home areas from transformation and especially in the more seaward side. In Tel Aviv thus, a minimum of clearance is necessary to allow for an extensive centralisation of the central function of the city. In Haifa, on the other hand, the problem of the existing bazar, the impossibility of creating economically new access points, draws Geddes to a recommendation which envisaged a completely new large quarter for business. The only part of the city with sufficiency of access is a large park near Allenby Street and thus Geddes subordinates his garden desires, "to accept this treatment with the condition that we enhance open space elsewhere to avoid the loss to the community of this essential life orientated features." 1

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1. Haifa, page 23.

The changes he advocates in the existing land use structure involve a necessity for rehousing. "One must ensure," he notes, "that adequate housing is provided for all who have to be dispossessed. A great deal of Geddes's reports for the two urban nuclei are related to this question of overspill developments. He advocates comprehensive planning of these new settlements. Whilst he is quick to praise the English garden style approach, Geddes does not wish to see this transplanted indiscriminately outside its natural context.<sup>1</sup> Also, he sees this solution as only being of short term relevance for, he notes that "even the present new plans will someday be criticised as insufficient for the demand of the rising generation, but I go as far as I at the present dare."<sup>2</sup>

Geddes's main pre-occupation is with the care of the rural environment for he records,

"To spoil this beauty and to vulgarise the countryside would be unpardonable carelessness and worse, a disaster of every kind."

Ill-planned suburban growth already exists adjacent to Haifa, with the examples of,

"The utmost extremes of overcrowding, scrambling and perching on precipitous sides of small wadis"

This must be avoided at all costs in new schemes. A series of very carefully designed village or township centres must be created which can provide a variety of social needs without detriment to amenity. He notes that the Carmel village, for instance, is not really a true village.

"The beginnings are all from the side of wealth and at least the prosperity of the leisure class. What are the higher requirements of all classes for social life and intercourse, for art education, for play and festival, for moral and religious cultures? But here surely comes the contrast between our current age and every earlier one, that of its strictly economic culture, with naive omission of any consideration of and provision for adequate social life beyond that of comfortable individualism, tactily based, as this is, on the exploitation of land values. All Carmel is as yet practically a vast public park/

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1. Jaffa, page 13.

2. Jaffa, page 18.



park and we must not too fully take away this, though large reservation must now be inevitable. Hence then our planning, even to be satisfied upon the individualistic lines of past examples and present demand needs to take thought anew; in fact, it has to start afresh and now from the collective centre, the village with adequate, that is, liberal reservations of open space and corresponding care and completeness of design. To see that these things are provided is the first duty of the town planning authority," 1

Village planning should be well sited topographically, adapted to the needs of aspect and above all become linked into a regional park system which feeds back into the centre of the existing towns. There should be, Geddes claims,

"Adaptation to site and also contrasts of the curving and winding contour roads. All the units should be linked together, if possible, by formation of green lanes at least four metres wide. Moreover alike for ordinary pleasures, and educational interest what better and more recreative walk can any city wish for and that from the centre of the city (or only by and by through the Central Park and its public gardens, or past the new building areas) and thence seawards (either by boulevard or cemetery road) to this beautiful wild spot with its high outlooks over land and sea. In short then, the artificial park and boulevard require this small nature park as their due contrast and complement. To build on or otherwise transform this would be a serious and irreparable disaster to the higher interests of the town." 2

It thus emerges that Geddes envisages for these two major urban nuclei, a series of overspill centres set in green space. There is, however, no rigid application of an inflexible green belt principle,

for Geddes integrates in both Haifa and Tel Aviv, the green belt as a part of expanding urbanism and as such makes rural land use a component of urban land use. For Haifa, the slopes of Mount Carmel become housed at a density of 50 per acre, but are linked to a riverfront walkway by means of access across the railway to the waterfront. This Geddes calls a park valley section - an existing wadi which is used as a rubbish dump, but which he envisaged can be renovated and made into an attractive feature of the town. Along the Acre Plain, garden villages

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1. Report on Haifa, page 12.

2. Jaffa, page 32.

are to be developed alongside the expanding industrial area. These are linked by open space, to coastal recreational resorts and to the centre of Acre itself. Similarly in the green belt envisaged for Tel Aviv and Jaffa, he sees a need for village communities, linked to the main urban nuclei by green ribbons. The city plan thus becomes, in effect, a miniature city regional plan. "This concept", as he notes in his Report for Haifa, "is the wider conception of art in civic design. It is he points out, "thus by no mere accident, for instance, but deep in the nature of things, that the cities which lead in shipbuilding also attain to excellence in painting, from Venice of old, or Rotterdam in later age, to Glasgow in our own time. Or to choose a more immediate instance, the whole reason of existence of us town planners and the increasing adoption and survival of our types of plans in replacement of those of the far more numerous professions, of surveys, engineers, lies not simply in our basal attention to geographic conditions and social requirements, but also a different conception of art. This for them is a luxury to be added or not as client can afford, after fundamental utilitarian construction, but this view we now know is futlitarian and involving wasteful misconstruction; more or less commonplace by spurious elements of normal and healthy beauty, often without any adornment at all, simply of the omission of the customary large percentage of pure waste of roads, sites, etc. and the consequent economy which this replanning effects, varying on average from twenty to sixty per cent, or more. For beauty is the final index of health. It is as when human beings are well that they look so: so with cities and is it not the ideal city which is also the city beautiful?"

There is one further feature of Geddes's plans for the two major cities which merits comment. This section relates to the "culture institutes" for Haifa and for Tel Aviv -Jaffa. By culture institutes, Geddes specifically mentions a whole range of facilities which should be provided. These include theatres, music clubs, art galleries, museums, science museums, colleges, :- academic, professional and artisan, and an Outlook Tower. He strongly recommends that culture institutes must be planned in advance of growth; they must correlate the culture life of the city and bring about a relationship between science and practice of urban design. In both cities he envisages a large area of land being allocated for these cultural centres.

He notes, that "it has often been the case in the history of cities, that their culture institutes have been postponed until adequate sites for them are no longer obtainable. Modern cities, British and American especially, are thus discovering their need when too late adequately to/

to supply them save at great expense and then in too scattered locations. Hence, the necessity for comprehensive planning and of timely action to preserve the needed sites in due proximity, difficult and costly though full acquirement may be." 1

His advocacy of institutes is part of a process of anticipating the needs of the future.

"the amounts involved in town planning can only be alarming when viewed en bloc, as if for the moment; but thus they are not properly understood since but foresight of preparation of a policy of gradual execution during the coming years as may be required and with increasing population and resources in meeting them and the more the present scheme is studied and considered the more it will be seen to be conceived and detailed with economy throughout and true economy, that for which after Israel and not a little from its teaching in Scotland and New England have often also been derived, but also appreciated, since in the long run rewarded. The true economy defined by Emmerson is that of saving upon the lower planes of life to spend on higher ones. The culture institutes thus become an advanced preparation for the needs, educational, recreational and social, which a growing community and presumably at an increasing level of prosperity, will demand over a period of time, Canalisation of regional interest and understanding through an outlook tower, sited on "an acropolis site" becomes of paramount importance."

### Jerusalem

The Holy City and its environs was investigated by Geddes during 1919 and 1920 and presented a different category of planning problem from that which he faced in the Haifa and Tel Aviv areas. As the dominant inland city, Jerusalem was seen by Geddes as the central point of service and influence for the developments he recommended in the rural areas in the Jordan Valley. In these rural reports he made reference to the needed communications pattern which would relate the two. For the city itself, however, the prime consideration in Geddes's mind was not the question of its relative growth potential with regard to other centres but its essential function as a historic city. Given this basic premise, Geddes produces reports which are complementary in nature to those for Tel Aviv and Haifa in that they show an additional dimension of Geddes's regional thinking. The Jerusalem reports become essentially studies in environmental design. The population growth which is occurring in the City of Jerusalem and which Geddes foresees will continue, raises questions of the accommodation of this growth in such/

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1. Jaffa, page 66.

such a form as not to destroy the essential character of the old town. This problem, essentially one of accommodation, is complicated by the difficulties of a multi-racial multi-cultural city where different architectural forms, and elements of social cohesiveness, have been built into distinct areas. The programme for development of the city must go step-in-step, he believes, with the confirmation of the essential character of Jerusalem - a highlighting of the essential points of historic interest, the conservation of buildings of both historic and architectural merit and through these operations, the capitalisation on a considerable tourist potential. Industrial and commercial development becomes less significant in the Jerusalem reports though full cognisance is given to the likely trends in both cases. Again, however, the emphasis is to locate such developments on sites and in such forms as will not intrude into the overall architectural design of the city.

Geddes's work in Jerusalem has been misunderstood. Ashbee, in his documentation of the work of the Pro-Jerusalem Society between 1918 and 1920, comments that Geddes's plan starts,

"from the hypothesis of a university development mainly towards Mount Scopus." 1

This comment appears far removed from the reality of the situation as expressed in Geddes's planning writing. It is valid comment that during Geddes's Palestine period he became pre-occupied with the major question of the Zionist University which he planned on Mount Scopus, to the north-east of the city proper. Indeed, one section of his first report on Jerusalem strongly advocates this site and specifies the function of this university. Consideration, however, of the university only forms a small part of the report, indeed less than 5 per cent and whilst the university site is seen as offering a useful nucleus for a series of educational and culture institutes, these points are/

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1. Jerusalem, 1918-1920, being the records of the Pro-Jerusalem Council during the period of the British Military Administration, edited by C.R. Ashbee, London, 1921, John Murray.

are raised at the end of the report and after very detailed investigation has taken place of the needs of Jerusalem itself. His second plan is entirely related to the city with only an occasional reference to the possibilities in the university.

It appears that Ashbee failed to differentiate between Geddes's recommendations for the university and his investigations and proposals for the town. A further point of criticism made by Ashbee was that it was impossible for Geddes to guarantee that the urban expansion would take place to the north-east, in the direction of Mount Scopus. He infers that the whole of Geddes's proposals for Jerusalem were based on this premise, whereas in fact, Geddes made specific recommendations for future development in other areas to the north and in the south of the city. Geddes's objective was simply to find suitable areas for development and to integrate his schemes with those relating to the environmental needs of the central city. Indeed, Geddes's preoccupation with the problems of Jerusalem largely account for the occurrence of two reports. His preliminary investigations in the report of November, 1919, showed that all the existing survey data of the region was totally inadequate; and the veracity of detailed planning would be seriously threatened by the magnitude of the discrepancies, he found. Thus, the preliminary report could only be general in outline and on his return to the city at a later date he would hope to find that a detailed survey of Jerusalem would have been completed.<sup>1</sup> In fact, this was never done and on Geddes's return the following year, he found that much of the basic survey work had to be undertaken by himself.

This factor also accounts for the method of presentation adopted by Geddes. His first report is almost a travelogue. In a style of the earlier Dunfermline Report Geddes takes his reader on a series of perambulations throughout the city, pinpointing areas for rehabilitation, and possibilities/

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1. Jerusalem Report, 1919. Introduction, page 1.

possibilities for development. In his second report he pinpoints in more detail specific action areas and a programme for urban works and overspill. His first method,

"adopted for the preparation of the present sketch plan, is that which I am accustomed to apply in every city, that of thorough and repeated perambulation day after day, in all directions and practically without use of any plans at all, until considerable familiarity with the whole city, old and new, has been obtained and for inside and outside aspects alike," this

naturally led through to the second report of more substance and character. For Patrick Geddes, the special situation of Jerusalem necessitated a high level of environmental planning. He notes, for instance,

"that planning, whatever its efficiency, in usual ways, hygienic, economic, etc., must here fail unless it conserve and develop the city in what has been its characteristic aspects to all men and through all times, its inspiring panorama - how far can this ideal be again realised, this situation made the most of? - that is, the standard by which all contemporary planning and projected execution have ultimately to be judged." 1

He goes on to spell out in detail the architectural quality of the city, its possibilities and defects.

"The industrial age and nineteenth century only approaching conclusion before and since the war (1914-1918) had, of course, no distinctive style in the artistic sense, though its factories and store at their plainest had latterly advanced building wellnigh solely upon its engineering side. Yet more than any or all preceding ages, the Industrial Age sought to experiment freely with all past styles by turns. Styles were classical during the Napoleonic Empire, Gothic with the Romantic movement in its various periods following this, while in England of late years the fashion had been again 18th century Georgian. But all styles alike have fallen short. This was firstly, because building was mostly conceived in the two dimensions of paper drawings rather than of the solid three of stone, but above all it was because building was no longer rooted in local conditions in regional and civic character, and did not rise to house an adequate social purpose nor renewed contemporary ideal, but was retrospective. Religious, educational and scientific buildings with luxurious and decorative exteriors were never more numerous, but these have all fallen short of achievement. As the great part of such architecture shows, the intellectual and imaginative faculties cannot create separately from the life of a land. For effective action all faculties must ever be combined into a single cord of thought and life.

Jerusalem, outside the walls, with its new buildings within these/

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1. Second Jerusalem Report, Introduction: Character of Jerusalem and the Need of Corresponding Planning.

these as well, teems with conspicuous examples of typically nineteenth century failures, starting from the shabby utilitarianism of its railway station we pass the Montefiore cottages, the starting points of modern ghettos without number, and mostly for the worse. The ordinary buildings of Jaffa Road are dull without exception, and duller wherever decorated, while decoration reaches its extremest in the recent Clock Tower which dafores the Jaffa Gate. National styles are imitative, they do not renew their past in a world site. The Russian buildings squandered and spoiled their splendid site and present only the most dully and chilly imitation of what a Russian church is or might here have been. The various French buildings are also cold and lifeless, without that refinement and touch of grace which characterises the better works emanating from the conventional Ecole des Beaux of Arts of Paris. The most conspicuous of the French facades towards the Damascus Gate are too much on a par with the crudest of modern French religious buildings, the big new church Fourriers at Lyons. The English buildings are but a possible sample of modern neo-Tudor Oxford, and the newer Italian building is again too simply a student's old Sienna and Florence. The Russian Tower upon the hill has but the loftiness of ostentation; it is without any element of real design, nor is the German Tower on Zion much less lacking in this. The German Hospice (opposite the Damascus Gate) now the Governorate, shows more of masoncraft and its architect, unlike his predecessors, had thought of repeating the domed roofs of old Jerusalem, but with what crudeness, what ostentation, to the point of megalomania. The same vices are seen near the still larger Lutheran Hospice, now Government House, with its over-large tower. Instead of expressing their religious purpose, these German buildings recall German city barracks or Kaiserburg respectively.

Inside the walls, the modern buildings bring the same succession of disappointments. The modern Muristan Church of St. John, is shown at its very sharpest in contrast to its surviving mediaeval portal and this is again desolatingly accented by the big new effect of perambulating the panel inserted over its door. The immense neighbouring radiation of new shopping streets leading up to the would be imposing by massed and columned prepostarons of its fountain group and despite all its lavish wastefulness of the finest columned stone of all Jerusalem, is so chilling and depressing as to explain its human emptiness and economic failure accordingly. The Franciscan Buildings, despite their statue of Francis, their poetic and spiritual founder, typically reveal the loss of his spirit in their lapse to sheer gloom. The pompously over-decorated facade of the adjacent new Greek Monastic buildings are the fullest blend of capitalistic ostentation with bureaucratic monotony in all Jerusalem.

These criticisms are not separately captious, but made as indications towards a needed general review. They are thus necessary to make clear how varied have been the architectural experiments and yet/

yet how complete are the failures of nineteenth century architecture in Jerusalem, more than even in Europe.

For obvious, sharp and simple expressions and simple contrast, compare the New Gate to the Damascus Gate, viewed from without and within, only in such an open air way can one properly judge of architecture.

But since pictures and photographs are the customary substitute for real observation and no doubt they often help towards it, the reader seeking guidance to the unique beauty may conveniently select a set of the admirable American colony photographers' postcards his larger prints also.

For here are the noble city walls sometimes in their perspectives or with city homes piled above, here are the Great Castle, the Damascus Gate and others, both of its city panorama and interior ones from high points and the house tops of homes without number with their well-known solid walling, their few windows, but often balconies or projecting, their flat roofs, their numberless small domestic domes. They all pile up in fascinatingly complex groups and mass around the greater domes of churches and of synagogues or leading the eye onwards to that of the Rock Minarets, with their balconies rise up high in the foregrounds or give new centres to the distances. Then we walk along the narrow old streets, alternatively dark under their long arcadings and bright with sunny foreground and vivid gleam beyond. Here and there on their course an occasional stately old house or a surviving well-wrought wall fountain, now of Crusading and later Western styles, again Saracemic and sometimes even mixed. Finally, with choice of entrance arcaded or open, and each beautiful, we enter the Great Harem enclosure with its inlooks, to north and west, outlooks to east and south and roundlooks everywhere with the many buildings, monuments, small and great, composing in endless variety around the central dome.

All this and more, has to be seen once and again from each and every point, low and high, rampart walk and at various hours, indeed in all lights from sunrise to sunset and by moonlight too, by whoever seeks to know the old city and enter into its many mooded spirit, thus appreciating its fascination to the pilgrims of every age and land. Even when some familiarity is obtained there are surprises. Thus, when the night settles on the Harem and linger for dawn to break through and slowly disperse it, we have a drifting succession of pictures - first glide quiet grey and delicately tinted northern watercolours of arches and minor monuments, the great dome faintly outlined above and these re-uniting in the full panorama of sunrise, flushed with rose colour yet ablaze with gold. And though sunsets are briefer and earlier over the eastwards sloping city, the landscape of the long hill ridge, the Mount of Olives and Scopas, the heights on either side as well, is doubly bright by contrast, and we watch its glow fading slowly through twilight into night.

Such city pictures, such landscape settings have, of course, their blemishes, indeed neither few nor small. Of these when studied carefully enough on the spot and outlines with photographs and sketches on, can largely be effaced, and even the worst and most permanent can be integrated. Primarily by tree planting at various points too by some further/



further buildings of careful composition, and moderate in scale. In the treatment alike of the old city and of its main surroundings the Sacred Park especially, the utmost care and restraint is needed. But with these no small results in aggregate will follow. But the responsibility is great for each change if it does not help towards making Jerusalem more and more a "joy of the whole earth" must hinder this, and to the pain and even sorrow of every seeing eye.

Hence so rightly Djemal Pasha, who had some eye for civic buildings, forbade more western tile-roofs in the old city, and rejected foolish "improvement" demolitions to make wide streets which would have beside the Jaffa Gate (though now doubtless with an archway) should thus, of course, be carried out. The character and aspects of the old city must be strictly retained." 1

The planning scheme devised by Geddes which would promote the quality environment he envisaged, required a threefold approach - a positive policy of environmental control and rehabilitation in the existing built-up areas of the city: the creation of new garden suburbs, which would in turn allow for manoeuvrability in the old city by removing pressure on housing accommodation and thirdly, the promotion of a carefully controlled economic base arising from Jerusalem's attribute as an emerging cultural and tourist centre and its situation as the focus of inland rural development.

A major preoccupation for Patrick Geddes appears always to be the initial impact that any settlement has upon the visitor. In Aden and Dunfermline Geddes was quick to point out the unsightliness of the initial panorama produced by unjustifiable building:- detrimental intrusions into the visual environment. In a similar way he lays great stress in the Introduction to the Jerusalem Report, upon the disorganisation of scale which has resulted from indiscriminate building on the approach road from the railway station to the old city, the unkempt appearance of the railway itself and the deterioration of a natural lakeland area by an absence of control on the tipping of rubbish. He is also quick to note the effect of steep gradients on travellers approaching the town, who may become quickly fatigued by the undulating character of the existing road from the stations. He appears to be making a test case of this first area/

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1. Ibid., Architectural Aspects of Jerusalem.

area of comment in the belief that given the right remedial treatment there can be produced an attractive environment in itself and one preparing the visitor to look for and appreciate the quality environment which Geddes will fashion in the old city. Thus, the removal of a number of delapidated buildings along the ramparts of Jerusalem will create a vista of the walls of the city, excavation of a number of in-filled water pools and lakes, will bring into being a unified "water landscape" which, coupled with judicious tree planting, would create for this part of Jerusalem an attractive green belt. The green belt itself exercises a number of functions. As Geddes notes, water storage,

"is of great agricultural value, not merely as irrigation reservoirs, but as helping to maintain the water level around and thus diminish aridity and they promote the growth of trees which further raise the water level near the surface - the value of these pools is manifold and by no means exclusively for their historic association and their permanent beauty. They are of cooling value to their neighbourhoods through their steady evaporation in hot weather." 1

The tightly developed city of Jerusalem poses a difficult planning problem for Geddes. He sees that it is essential to develop a planned policy of redistribution of population from the older parts in order that the necessary space can be found to enhance the approaches to historic buildings and to give an opportunity for an open space policy. He stresses the need for a discretionary use of planning powers. The old town, which acts as a symbol for so many religions, could become a classic instance of co-operative effort towards renovation and rehabilitation.

"It is," he notes, "the very place in which to develop the goodwill of idealism into the goodwill of action - without altering the main thoroughfares or acquiring the more valuable properties along their course, but on the contrary by working on interior lines and with inferior properties, it should be possible, in a few years, to make great improvements in the health and beauty of Old Jerusalem." 2

The Report concerning the old town, is full of recommendations for judicious conservative surgery; the/

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1. Ibid, page 6, First Report.
  2. Ibid, page 8, Second Report.

the cleaning of avenues, the creation of linked open space in housing areas leading to a green belt on the outskirts of the town; the planting of trees. He notes, for instance,

"Some have recommended the widening of streets, even in some cases, boulevards, but such proposals are totally incongruous and fortunately impracticable. What can be done, however, with great improvement, is the removal of the enormous masses of rubbish and ruin and of occasional delapidated building, when of no historic interest or artistic value. Thus we may accomplish an occasional bit of street widening, sometimes even an open square in which may be planted a shady tree or one at each available corner; again, as every rambler throughout Jerusalem knows, not a few lanes come to a dead end towards the centre of the city block. Here, sometimes, the removal of a single central house would afford a little garden square or playground and with better conditions for all surrounding houses. This too would become accessible by one or two other lanes coming from different directions towards the same central obstruction thus removed. These then are the very utmost of my desired demolitions and each, of course, only with the approval of the City Advisor and not one single inhabited or habitable house, even of those would I remove, till fresh housing accommodation of better character has been provided elsewhere." <sup>1</sup>

Geddes is fully aware that some of his recommendations will arouse prejudice, not the least his idea of creating gardens throughout the city. The Jerusalem Reports shed an interesting light on the real meaning, for Geddes, of garden city. He is at great pains to stress the importance, on the grounds of hygiene and aesthetics, of opening up the old city, and of intergating new housing schemes with the open space policy in the old town. The garden city would appear to mean far more than simply the creation of planned open space in and around public buildings and housing areas. The term, appears to be used by Geddes as a form of shorthand, the real meaning of which is total environmental quality, embracing the visual and aesthetic, the hygienic and the economic. It also appears to imply the integration of new development with old through the processes of carefully controlled developmental planning for stage population dispersal, together with the/

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1. Ibid, page 7, First Report.

the linking of recreational areas from the minute garden plot through the neighbourhood square, the walkway, or boulevard, to the green belt and countryside. As such, it becomes a sophisticated planning methodology, through which a series of human requirements are met in one interlinked scheme.

Thus when discussing the possible decongestion to the north of the old city, Geddes comments that,

"Good spaces for this are still obtainable. It will be seen and too more clearly upon the ground, that this is arranged so in no way to deteriorate the neighbouring villa dwellings upon the higher sloped. I strongly plead the importance of the speedy and ample development of these working-class suburbs for which there could be at once reasonable demand and this moreover, cannot but rapidly increase with the approaching enlargements and development of the city. It is, of course, clearly to be understood this housing, especially when as in the above given cases coming into the panorama of the city, should be as far as possible in the traditional style, i.e., with flat roofs or small domes and not sloped roofs with red tiles. The advantages of the flat roof over the sloping tile roof, which have been of late introduced from northern countries and which are far less suitable for this climate, are obvious and need not be insisted upon, especially since modern methods as well as ancient ones enable us to make flat roofs rainproof. Each suburb should also, of course, have its food shops and its market place with the schools, playgrounds, etc. After this decongestion is fairly in progress, we can proceed to many improvements within the old city yet always of the class already indicated, that is, of conservative surgery, i.e., repair, with only the minimum of clearance necessary, as for playgrounds and gardens, etc. With the coming increase of water supply now happily certain, these gardens will easily be kept in flower and before such clearance spaces are planted the archaeologist will have his innings. This decongestion will also afford opportunity for the various religious communities to acquire and develop such moderate extensions as may be necessary to them. As a single example, from the Christian quarter, it is manifest that the various monasteries associated with the Holy Sepulchre require more breathing space. With the removal of a single row of houses and with the acquirement of the small garden at the north end, the length of the Wailing Wall, for example, will also be about doubled and the space in front of it sufficiently increased, while a row of cypress trees can be planted along the western side and the whole enclosed by a wall and gates - the squalid buildings on the west side of the road, next to the older dumping ground along the valley, will naturally be removed to make room for the necessary new markets and Khan. Since so much dumping has here been done, it is better now to add some more from the aforesaid, and thus to widen a space for the Khan. When this is done, trees should be planted on the whole slopes so as to restore this valley to its normal park condition. The whole/

whole then will particularly correspond to that of the central panorama of Edinburgh, with its valley gardens and castle above. Some houses run down into this valley park on the north, mid-way between the Jaffa Gate Market and the Moslem cemetery. A path may be cut between them leading on into the upper portion of the proposed park area. This also should be planted as far as and indeed, a little beyond, the opening of the great Moslem cemetery, if possible, up to and around the old Birket - there are possibilities also for the formation of a park area outside the Jaffa Gate, including the steep slopes outside the wall, to the neighbouring valley. This fine enclosure, with its deep and good soil, its shelter from the wind by the western wall and its fine group of trees, make this the best of situations for this purpose and promises an admirable new future to Jerusalem. In these ways, the citizen may pass from home to public garden and to country." 1

The feature of Geddes's report is an insistence upon the comprehensive nature of planning and the need for detailed environmental knowledge. This element appears, perhaps most clearly, in his concern for public hygiene. He frequently makes reference to piles of rubbish and refuse appearing in various parts of the old city, on hillsides and in riverbeds, in fact, in almost every tippable area. In some cases, as previously noted, he is prepared to confirm this use in order to produce a symmetry of contours. Elsewhere, however, he advocates the removal of many of these eyesores, in the interests of environment and hygiene.

"One conspicuous example of desirable removal of delapidations and rubbish heaps, let me take large spaces around the tenements belonging to the Franciscan convent, with its few cottages above, since here with only the moderate outlay for removal, space for trees and for fresh houses more in the character of a garden village, can be supplied and playground and garden space as well - immediately after passing in by the gate, we see on the right hand a little door with a deep descent to a khan, with a quantity of manure is alone sufficient to keep up the supply of flies for Jerusalem, even were there not many others. As a necessary measure of public hygiene, one of the earliest improvements of the old city should be the removal of all such places to proper accommodation outside the city, provided if necessary, by the Municipality and at a moderate rent." 2

Geddes sees here, possibilities of replacing soil in eroded areas on/

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1. Ibid, pages 9-12, First Report.
  2. Ibid, First Report, page 15.

on the outskirts of the city. Around the village of Siloah, for instance, he indicates that,

"It would be an easy matter to remove this earth and rubbish further downhill to lay it on both sides of the valley below Siloah, with large new garden terraces accordingly. It will be asked, is this an economic operation, I believe yes, even in gardening returns, though, of course, experiment is needed to prove this. What makes this proposal of assured value may be at once understood when we examine the archaeological excavations in progress above the pool of Siloah, for here gigantic embankments of rubbish made at great expense and high, often extortionate, rental, surround each side of the small cleared areas. Archaeological investigation has been long carried out here and there over this area but its results disappear since the earth has to be put back again. But now let us take the bulk of it away wholesale, once for all, from the City of David; of course, under archaeological inspection and thus lay the area sufficiently bare for the archaeologists to work it out in detail and with the merest fraction of their present expense. With a simple decauville railway, full trucks will run down by gravitation, thus immensely mitigating the expense of handling the rubbish, besides providing an enlarged garden area sufficiently great to produce a notable increase of vegetables for Jerusalem, with lowered prices and cost of living accordingly. The gardens of the present Zion ridge can thus be progressively and liberally compensated and this not in money but in kind, even with increased space if need be; with new houses built for them further down as necessary and this way may be laid out and kept permanently open the early biblical Jerusalem of which the present old city is but a later development, like the new town again spreading in turn beyond the present walls. On the economic gain to Jerusalem as a pilgrim and tourist city by this operation, I need not expatiate. It is obvious that its attraction should be increased and its visitors' stay also be lengthened, say by a day on the average; enough to point this out as another example of the ways in which city improvements are not measured by cash dividends but not the less that of direct and cumulative return." 1

The detailed planning recommended by Geddes for the Old City, landscaping, open space policy, control on hygiene and design of buildings, clearance of rubbish and tree planting, can be brought to nought given a city which expands at its periphery in a haphazard manner. It is necessary, he sees, to enforce strict building regulations on the city as it develops in the future, in order to ensure that an aesthetic garden environment can be carried from the city radially outwards.

Policy/

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1. Ibid, First Report, pages 18-19.

Policy decisions must be taken without delay regarding the creation around the Old City of a positive open space policy, landscape gardens, valley walkways and a green belt, within which certain moderate developments may be encouraged, particularly suburban housing developments. These garden schemes must be to a great extent self contained in order to promote community life. For Talpioth garden suburb, for instance, Geddes stresses that his planning illustrates very clearly that,

"Town planning is not matter of drawing board, compass and rule, a bit of geography, history and present requirements. Start then uphill, from the Bethlehem Road, just beyond the last convent on the left, which is shown as treated and cut up with rectangular severity upon the recent plan, but must naturally be left untouched. This old route, still much used by peasants coming to market, is obviously the old ridgeway of the district, it is indeed, the old road to Bethlehem with branches further east. Our planning, therefore, begins with preserving this old thoroughfare and improving it. The secondary and next streets and their connecting minor streets have been gradually worked out upon the ground and always in due relation to its contours so as to scheme out a large garden village. Of this the necessary public buildings, school, hall, place of worship, etc., will naturally occupy and adorn the central place upon the height and thus furnish a feature around which will range the many groups of houses, each with its garden space of varying magnitude. Roads are also varied by spaces of public gardens, with promenade and seats; tennis courts and playgrounds are also provided at convenient distances. Thus, gradually, arises a garden village, not, I trust, without a character of its own, yet with this obtained by utilising all the local advantages and not arbitrarily designed in the drawing office. Opportunities arise over again at various points along the main road network, as notably along the Jaffa Road th Nablís Road and the various points between. Such developments have indeed been long arising, for as regards space and area for population the greater area of modern Jerusalem is already much of a garden village, though unfortunately a planless one. Now we simply introduce the few principles already indicated with the result that each locality has its relief and its local character enhanced, instead of being confused or even effaced." 1

There is also a pressing need to plan in order to minimise the push and pull effect of new developments outside the old city. Geddes sees that the long term development of Jerusalem will reflect its nodal position between the coast of Palestine and the interior developments along the Jordan Valley. There/

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1. Ibid, First Report, pages 22-23.

There will inevitably emerge considerable transportation problems. The pressures which could develop on the old city commercially could seriously reduce the effectiveness of his proposals for a more open plan for the old city. In consequence, his scheme is linked forward to two major proposals involved in what he describes as an outer ring project -

"One which is far in the future, which is the duty of the planner to provide for this, though not unduly to press its execution, will, of course, arise in proportion as circumstances allow, indeed in good part these already exist, are merely providing for their orderly union into a single system." <sup>1</sup>

This outer project contains a proposal for an outer ring-road for the city to take traffic passing between the developing rural regions and their natural port outlet, thereby syphoning off the traffic which is not specifically orientated to Jerusalem itself. The other component involves the creation of a new commercial central area, placed mid-way between the old city and the areas of greatest growth potential. This central area would be so placed as to satisfy the function of administration for the old and new parts, be within easy access of the new garden suburbs, and which would offer possibilities for future commercial development. This proposal, interesting in its illustration of Geddes's long term thinking, would, in its turn, allow for the gradual reduction of administrative and commercial uses in some parts of the overcrowded old city. <sup>2</sup>

Geddes's Jerusalem Reports, whilst being directed to the production of quality in the living environment, also contain needed proposals for the economic base upon which the city must prosper. Geddes is aware that Jerusalem is one of the major urban centre of a much larger economic complex, that of Palestine as a whole. Its geographical circumstances enforce limits to its water and fuel supplies. Additionally its distance from the major ports would make large industrialisation extremely difficult to foster. Geddes does not think it likely that major industrialisation would be economic and he believes that such a process would/

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1. Ibid, First Report, page 27.

2. Ibid, Second Report, pages 19-21.



would contribute to an undermining of the quality environment. A number of basic industries however are essential if Jerusalem is to maintain its function as the primary urban centres for the interior developments within Palestine, and amongst these are the building industry, cement making and agricultural processing. These are carefully zoned by Geddes into an area around the present railway station where sidings are available and at a site where the topography allows for such an industrial zone to be well landscaped and not intrude upon the panoramas which are possible in the environment of the city. The basic economic support however, will come from existing craft and handicraft industries and though Jerusalem's function as a centre of higher education and tourism. These in their turn, Geddes believes, will give rise to secondary industries, particularly printing and scientific instrument making.<sup>1</sup>

The educational complex envisaged by Geddes developing on Mount Scopus, based on the university research institutes, and civic museum will, he believes, become the long term multiplier in that the growing needs of the reclamation policy for Palestine will require a centre of environmental research. It becomes thus that the university forms an integral part of the industrial future for the city; and in this way Jerusalem acquires an especial functional character which is not duplicated elsewhere in Palestine. Over a period of time, this function will come to complement the more commercially oriented developments, at an urban level in Jaffa, Tel Aviv and Haifa and at the rural level in the Jordan Valley.

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1. The Industries of Jerusalem, Second Report, pages 1-6.

## Conclusions.

The Middles East reports, with their emphasis on a regional view of planning provide an essential complement to the Indian studies which illuminate in great detail the specific technical components of the planning process. Together they show Geddes's preoccupation with the view that a planner must be capable of thinking and operating at two levels. Successful planning requires that detailed schemes conform to a wider yardstick. That there must be no irreconcilability between developmental activity anywhere within the planning region. Hence, Geddes affirms the need for a planning framework within which this conformity becomes possible; the city region; the regional city; the national entity. Another implication is that within the framework planning must have teeth under the penumbra of political control.

The individual planner bears a considerable responsibility within the Geddesian scheme. Indeed, Geddes appears to be demanding capabilities which are of a very high order. The planner becomes scientist and humanist; possesses a comprehensive knowledge of social, economic and political affairs; is a man well versed in public relations and works towards an abrogation of his own especial situation by promoting purposive participation. These appear to be unrealisable attainments. Geddes himself could not always live up to these stringent requirements. In India he often swept through an area in a matter of hours and left others to work out the details of a master scheme. He rarely returned to ensure continuity and consistency of approach. On the other hand the charge of narrowness of view cannot be levelled. In all his proposals he shows clear evidence of comprehensive and synoptic thinking. This capacity was built on a Place Work Folk analysis in all its ramifications, coupled with a search for the 'valley section frame' applicable to place. It would appear that the standard set by Geddes follows from his own appreciation and insight, of conditions below the optimum. Amongst these 'evils', health, amenity, aesthetics appear to figure/

to figure significantly. He came to realise that one man or one planner had finite limits and so he placed even greater stress upon the need for a fundamental theoretical approach. He never departed from his stand that the quality of a planning fundamentally rested upon values derived from understanding of the need of the individual. There was inbuilt into this view an implicit and often explicit assumption that planning is part of a wider field of social action but as a central and codifying discipline has a primary catalytic role. There is another aspect which Geddes propounds with emphasis. He is insistent that planning and fact gathering are two processes. The planner's fundamental objective is change leading towards optimisation of conditions within the total environment. Planning must be concerned with prescriptions towards the realisation of goals. Fact gathering is one process in the chain of comprehension of the phenomenal and behavioral situations, but, in itself, does not promote positive action. In his own work Geddes takes as read that adequate survey has taken place and his emphasis is always on prescription and projection; the isolation of goals and the means to achieve them. His process is always cumulative and yet rarely inflexible. There is incorporated in all his work an ~~end in~~ public involvement though on occasions the means to achieve this state in its entirety is left vague or unsaid. Perhaps Geddes was conscious of the dangers in spelling out too closely such a process. Alternatively, and more likely he was unable to give exact form to this evolutionary situation except to spell out how the process would take shape in the future. This aspect illuminates his visionary insight. There are numerous instances in the range of his planning where this is well documented. There is a degree of consistency particularly expressed in his advocacy of institutions of an educative nature. Education and planning are so frequently linked in his proposals that this reflects a fundamental assumption based upon his reading of society. It led him however, to transpose his own role, as educator, innovator and inspirer, and make this a key characteristic of purposive/

purposive planning. In fact it was this attribute which had often resulted and was to result in the lack of acceptance of his work and ideas. It may well be that Geddes was temperamentally fitted for this role but it was somewhat naive to assume that others would be. It was to be some twenty years after he died that the planning profession in Britain became conscious of its responsibility to educate the public at large in some of the issues involved in planning which Geddes had pinpointed.

PART 1V

## PART IV - THE RELEVANCE OF PATRICK GEDDES

Chapter I - THE GEDDESIAN PHILOSOPHY OF PLANNING

The examination of Geddes's range of activities and his primary work in the fields of urban and regional planning allow for a number of tentative conclusions to be made relating to the nature of Geddesian planning philosophy and also, to the period when his major notions were formulated. These in turn become relevant to an assesement of Geddes's contribution to the evolution of planning as a special field of activity.

It has been shown that following the crucial period of blindness in Mexico, Geddes began to depart from a scientific career and began to participate in a series of developing fields of activity which later became a number of specific social sciences, notably sociology, applied economics and geography. The intermeshing of science and social science into a positive and constructive scheme of thinking came to fruition through the series of thinking machines or thinking diagrams, which Geddes increasingly relied upon as a basis for thought and also action.

In Edinburgh, Geddes had begun the process of environmental rehabilitation through his attack upon the slum problem and stimulation of garden developments - a largely self-help process, later backed by the collective action of the Town and Gown Association which he inspired.

Cyprus later became the opportunity for a wider regional application of this thesis of regeneration of communities under competent and inspired leadership. This was Geddes's first attempt at regional and resource planning. Later still, in 1904, in the Dunfermline Report, Geddes codified his views on the urban and regional developmental context with an added dimension of a special stress on the aesthetic quality of the environment. It has been postulated that many of Geddes's basic themes were inbuilt into the critical arrangement of the Outlook Tower, the type civic institute which exemplified a methodology for regional understanding and/

and by which the continuing role of the citizen in the planning process was stressed.

It is of some interest that after 1904, when Geddes had completed his community urban and regional experiments in the field, he began to lose interest in the Outlook Tower which appeared no longer to have the stimulus for originality inbuilt into its mechanism, an attribute characteristic of Geddes's early efforts to promote this institution. The Tower had functioned effectively, in Geddes view, as a "think tank" directed towards the re-arrangement of specialised learning towards civic action. It had been the secure base from which Geddes mounted his propaganda on needed regional survey, regional understanding and regional action.

It had also become the focus of an interchange of views and ideas through which Geddes matured his ideas on these themes. Geddes's loss of interest in the Outlook Tower as a main spring-board for his activities is partly attributable to the evolution of the Tower as an institutional centre into a more artistically inclined club. It had attracted a semi-permanent membership which differed essentially in outlook from the widely diverging views which were expressed in the Outlook Tower in its earlier days, when such figures as Kropotkin, Demoulins, and Geddes himself, were advocating positive social views. The Tower arrangement had become complete in its basic essentials. It may well have been that Geddes himself came to realise that through the Outlook Tower he could only preach to the already converted and that there was a need to move from this established base (and one to which he constantly returned and used as a centre for correspondence) in order to influence a wider audience. A great deal of fruitful work still continued to come from the Tower, especially under the guidance of a number of Geddes' disciplines. This work was primarily in the field of education, in the development of the link between school and Tower. Regional/

Regional survey techniques which Geddes inspired came to be concentrated more on the school medium for their expression. It is noticeable that very little of this later work became embodied in Geddes's major exhibitions relating to civics and planning.

The wider publicity which Geddes was seeking came about through the mounting of the National Exhibition. This propaganda, a most unsettling philosophy, according to Abercrombie, burst upon the wider public audience towards the end of the first decade of the 20th century. The Exhibitions - an arrangement of pictures, maps, drawings, diagrams, were based upon the early civic exhibitions mounted by Geddes in the Tower, and which certainly predates 1904. It would certainly appear that by this time, 1904, the Outlook Tower, as a means to promote new thought and constructive civil action, had provided Geddes with an essential component of his overall scheme and as such could provide little more.

Geddes's most fruitful work in India and the Middle East comes some decade later. The consistency of his approach reflected in his reports bears testimony to an already mature philosophy and technique of planning. In a very few instances is one able to find any major advance on the conceptions which he already worked out, theoretically and on the ground, in Scotland and Cyprus. As a scientist Geddes was well aware of the importance of testing hypotheses. The vigour with which he undertook his activities earlier in Cyprus and then in Dunfermline, together with his urban rehabilitation processes in Edinburgh, shows this practical application of his theories and philosophy. His later work in the Middle East and India only seems an extension of this earlier period and it becomes realistic to postulate that well before the first Town Planning Act in Britain, in 1909, Geddes's philosophy of planning and many of his techniques had already been formulated and inbuilt into a comprehensive system of thought and action. Indeed, one may suggest that/



that the Outlook Tower was already an effective instrument in the 1890's which exhibited many of Geddes's essential thinking processes; and thus that a great deal of his planning work was founded on views developed in his early days as a scientist. The specific elements which Geddes drew from this period may now be considered.

It has been mentioned in part I that earlier in Geddes's career he came under the influence of Huxley, to whom he turned after an abortive attempt to follow a course of study at Edinburgh University. It is clear that Geddes had an exceptionally perceptive curiosity as a young man, founded upon an understanding of the activeness of nature. This he obtained in his early days in the countryside near Perth. For Geddes, routine academic learning appeared to provide little stimulus. Huxley, in his day, was an innovator in educational practice, combining teaching expertise with vision, a capacity to inspire his students and a marked awareness of the physical environment as an important factor in evolution. It is probable that from Huxley, Geddes began to juxtapose life and matter; indeed, Huxley's biographer cites Geddes' career, as an extension, in practice, of Huxley's philosophy.<sup>1</sup>

Geddes certainly became aware of the necessity for precision of examination and retreat into research through which a critical faculty could be developed. This capacity for withdrawal in order to assess a problem became reflected in Geddes's writings at a later date on the importance of the "cloister" in the understanding of the urban environment.

Huxley's influence became matched by that of Comte. To Comte the scientific goal was the discovery of universal laws. The hierarchy of sciences, devised by him, was a means to the end of understanding human behaviour in all its variations. This early attempt at a multivariant analysis was later incorporated by Geddes in his systems of thinking diagrams. Le Play added a third dimension for Geddes. The elaborate nomenclature of the Science Sociale provided a guide/

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1. See P. 256, C. Bibby, T. H. Huxley Scientist, Humanist Educator, London 1959.

guide towards the understanding of the relationship between the phenomenal and the behavioural environment. Geddes went further than Le Play in postulating not only human adjustment to environment, but an unlimited human behavioural capacity for changing the phenomenal environment. This reversal of Le Play's order accounts for the interchangeable variations of Geddes's early thinking processes which involved place and work and folk, and was analysed initially through the application of an extensive nomenclature or check-list. It was founded on a classification of sciences and lead thought towards social action. These notions became publicised in the *Classification of Statistics* (1881) and the *Principles of Economics* (1885).<sup>1</sup> The essential thesis suggested by these papers was that society consists of living organisms functioning in time and space, which modify environment by perpetuating themselves and by abstracting matter and energy from the environment. Geddes believed that there was a necessity for both co-operative and competitive inter-action between the organisms within society but that the purpose to which energy was put, the maintenance of life, required moral principles. The economic system, therefore, of a society, required direction towards making the best use of the environment for the society. By the use of science Geddes postulated it was possible to isolate critical paths pointing the rules of conduct. This system involved an analysis of the entire society to which all the actions of economics must be related. It appeared to Geddes that an economic system which produced consumable goods added relatively little to the overall long-term growth of civilisation. He saw the need for including the organism in this economic scheme. For Geddes the generalisations of classical economics dealing with the sources of wealth were wont to ignore this dimension and consequently he divided products into necessaries and super-necessaries and observed that the latter were more important to the accumulative growth of civilisation. However, the/

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1.     The classification of Statistics and its results.   Edinburgh, 1881.  
        An Analysis of the Principles of Economics.   Edinburgh, 1885.

the evaluation of super-necessaries could only be undertaken when the total life of society was assessed and this included the aesthetic appreciation of the individual.<sup>2</sup>

To Geddes it was the necessities that were the transitory products. They were quickly consumed while the super-necessaries remained. This appears to be an important stage in Geddes's thought for it implies that conservation of aesthetic quality must be maintained.

A further extension of this theme was mooted by Geddes in that one should enquire "In what directions do all the various observed social changes tend, what modifications of them are consistent with the physical law and by the systemisation of them, attain our ideals of Utopias."<sup>3</sup> The clue to this approach was derived from the biological fact that as function makes the organ it also shapes the organism and modifies it, either for evolution or for degeneration. Moreover, other things being equal, it determines the quality of health and limits its length to life.

In applying this to economics, Geddes makes it clear that there was more to the problem than the apparent necessities of life such as food and shelter. Maintenance of life was, in fact, but a special case in a vaster process, the modifications of organisms by environment. Consequently, all factors of the environment had to be taken into account. The modifications effected by the various occupations for instance were unequal and they resulted in extremes of wealth and poverty, activity and sloth. As a result occupational modifications could affect the entire community structure. From these facts of occupational modifications, Geddes saw clear criteria for action.<sup>4</sup>

"So here we have two alternative practical ideals, to maximise the maintenance and evolution of the community, or to minimise the same. All action is referable to either of these two categories and tends necessarily in one of these directions."

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2. Page 21. Principles of Economics

3. Page 22.

4. Page 30.

This systemisation of social fact on the principles derived from the preliminary sciences show clearly the consequences of action. If the relationships of biology in the lower orders could be held to apply to human society, then many of the premises of traditional economics were theoretical, and could not claim to be based on natural principles. Geddes, therefore, concluded that the role of economics was a result of a clear progression from the simple idea of the environment as a source of energy and the determinant of the level of living. The utilisation of energy to produce consumable produce was, to Geddes, analogous to the idea in biology of the environment determining the life cycle of the organism.

The cornerstone of the Geddesian system can also be seen in his view of earlier organic forms. The ability of the individual to evaluate products for aesthetic value required more than a self-regarding competitive instinct. The human motive towards creation, which was essential in the transformation of the environment, was linked in species evolution with the ability to adapt to the environment and thus survive. In tracing the effect of the environment on society, a method based on the preliminary sciences that was needed to see this role for the individual. If altruism could be included in an economic system human motives, as such, had now a new role in the social structure.

A number of values which Geddes saw in this competitive element were later elaborated in the *Outlines of Biology*.<sup>5</sup> These were a sturdy independence, originality, a certain fullness of life. He pointed out that it becomes one of the deepest problems of the statesman to guide the communal co-operative evolution so that it does not invoke jettisoning the rewards of competitive individualism. This duality between competition and co-operation is characteristic of society as Geddes saw it, but he accepted neither way as the final answer - but did postulate that the individual must accept the fact of co-operative existence. Naturally this was not necessarily the sort of individualism valued/

valued in the late 19th century but for Geddes it was a form necessary to the citizen who must make use of the morality implied by the Geddesian system of economics.

Geddes's later pre-occupation with these ideas in his planning schemes is well documented. He was searching for means to bring about a harmonisation of co-operation and competition, and this failure goes some way to explaining the repetitive aspect in his work. Notably his insistence on the focus of community activity in institutions, particularly in an Outlook Tower. One of the primary objectives to be attained in the Outlook Tower was, indeed, the creation of an awareness of environment and the promotion of a spirit of co-operation between peoples and between specialisms, to further a social idea.

Geddes's concern with the development of new organic relationship within society drew him into the consideration of planning the community. He had a keen sense of the historic. This became expressed in an evolutionary interpretation of the rise and fall of city life, through which Geddes attempted to isolate those periods in which high ideals of citizenship and culture became realised. His yardstick appears to have been based on a notion of a complete maturation of organism within environment. To achieve a meaningful analysis of the variables which mitigated against the achievements of the ideal city, Geddes attempted to reduce the complexities of modern urban life to a simple notation by which the relationship between man and man and man and environment could be measured in all its essentials. This notation he later labelled the Valley Section, within which inter-relationships could be measured, examined and the synoptic approach taught. He applied his conception to Cyprus when examining the developmental possibilities of a number of inland areas. Later he presented a mature statement of his propositions in a paper read to the Sociological Society in London, in 1904.<sup>7</sup> Here Geddes was aiming to trace out the evolution of modern ideas and groups and to examine the various states of harmony and tension which occur within a modern civilised community.

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7. Civics as Applied Sociology.

For prototypes Geddes suggested seven occupational units - miner, woodman, hunter, shepherd, crofter, peasant and fisherman. Each of these could be seen as a form of direct adaptation to the environment as it differed in the various parts of the Valley section. Thus, the woodman harvested timber of upland areas, the shepherd required grazing pastures and was restricted to areas between forest and cultivated land lower down on the plain, the crofter extracting a precarious subsistence from the uplands was the poorest counterpart of the peasant who tilled the aluvial plain. Geddes saw the parsimony of the farmer and the advancing civilisation of the latter as a direct result of their differing economic conditions. The characteristic outlooks of these occupations were traced through in Geddes's scheme to the present day. The interests of the miner were preserved in such institutions as iron and steel works. The woodman's interests, pulp and paper industries, while the shepherd saw his work evolved into the production and sale of woollen goods and clothing. The farmer was still represented in the greengrocer and the baker, while the fisherman's trade had evolved into the modern merchant, marine and navy.

Geddes did not claim that such threads were anywhere near the complexity of the actual situation, but wound out as a pointer to the original influence of the environment in the essential perspectives that have evolved. He saw the settlement of men as initially determined by the immediate environment and thence extend again to larger and larger towns and cities, yet retaining profoundly, even if obscurely, much of their initial character and activity, spirit and type.

In larger towns and cities the evolution of civilisation had been anything but ideal and Geddes's description of cities in their evolution from polis to metropolis and magalopolis is well known as is Mumford's further elaboration of the concept. Geddes also conceived the pathological city as an end product of the mechanism of contemporary economics/

economics and social life.

The development of techniques which were seen by Geddes as casual factors in this progression bear some examination. There was initially the paleotechnic stage of coal and steel and then secondly, the neotechnic phase with hydroelectric development and internal combustion. Geddes envisaged that eventually a new period would emerge in which men learnt to take advantage of biological and geographical facts in a more constructive manner: a biotechnical or geotechnical evolutionary stage.

He believed that at some stage the mechanism of society began to outlive the thought of morality of its citizens and as such citizenship became impossible. The co-operative mode of existence became subordinate to the easier way of competition.

The village to Geddes was exceptional in that this point had not been reached. He commented on a co-operative concept of life which he believed would be verifiable in the common run of the village with its own community life and its traditional practices of co-operation. But in the transition to the modern society, however, a change had occurred.

In terms of the primitive occupations of the Valley Section Geddes had an explanation of this change. The environment in its different conditions had evolved co-operation in unequal measures. He pinpointed the advantages of agricultural life over the hunting culture and the superiority as cited is probably that of a more highly differentiated society, as opposed to the more individuated one. He had noted in his works on economics the reduction of competition attendant upon the division of labour; the hunter, performing many more of the functions needed for his subsistence than a member of even the more primitive farming group, could not hope to match the productivity of the latter. But, Geddes noted, as soon as the management of its interlacing specialisations passed too far beyond the consciousness of the citizen the/

the possibility of turning the natural environment to the benefit of society vanished and there was a return to a state as poor and as unconscious of the possibility of real freedom as before.

Geddes commented that although the hunter was, in the general course of evolution, bound to give way to the agricultural life, his techniques of existence could live on in later stages. He noted the beginning of the domination of hunters with their warlike freedom in the original Valley Section, when the nomadic hunting tribes began to exact tributes from the agricultural community.

To Geddes it was the disorganisation of the simple life that allowed the competitive ideology of the hunter to affect the entire community and consequently, Geddes could see correlated with the easy fall from citizenship to politics "the rising of that strange modern myth which has taken away from men the memory and the standing of their city and this isolates each, blinds and enchants him, into a mere industrial, henceforth astray in business or in politics, in market place or in forum".<sup>8</sup>

It was then, with people living by tradition and fashion rather than by the thought necessary to surpass the competitive mode of life, that it became expedient to follow the chief. (Comte's terminology). In this blind acceptance Geddes saw the spiritual life of the city draining away. True democracy could not exist if the town was to be a mechanism presided over by the hunter, now developed into a dominant aristocracy.

Geddes saw the essence of the civilisation arising, not from the leaders, but from the people.

Worker and women unite to form the elementary human family and from them, not only by bodily dissent, but by social dissent, i.e., from their everyday life and labour, there develops the essential fabric of institution and ideas, temporal and spiritual."<sup>9</sup>

The town had been able to express the evolution of the hunter into a leading aristocracy, as well as to utilise the products of the miner and/

8.       ibid. Report to Dunbar of Indore, P.185.

9.       The Coming Policy, P.110-111.



and the woodman in its technology, but the inner life of the people tended to languish. In the modern town, went on Geddes, the people were still able to sense the region around them, but were unable to adjust morality and tradition to new developments. The town in this limited sense was the pathological extreme, the reverse of the ideal, where life was dominated by social mechanism, material technology and products and surface sensations. The core of this life in the modern town was termed by Geddes, the School. Here the teaching of the applied sciences had evolved from the craft knowledge of the fundamental occupations. It was here in this handing down of techniques and customs that the town had its downfall.

The School became the reflection and the cause of the mechanistic and traditional bound nature of the town. As a result Geddes found townsmen -

"ignorant of life and growth, usually confined to the circle of ideas which these leaders in industry, commerce and finance commonly possess."<sup>10</sup>

Geddes saw in every town a potential to become something more. He believed that the essential need was produced by an inability to foster the inner life of its citizens, but it was in the potential carried by these individuals that the possibilities of the ideal form was carried.

"A town", said Geddes, "becomes a true city in the measure that it develops new and higher powers to enrich and enhance the inner life of its citizens, to combine their diverse interests into an ethical policy and to evoke those high gifts of personality which master circumstance, transcend traditions and rise on the wings of spirit into the realm of creative culture."<sup>11</sup>

The link between town and citizen in which the powers to enrich the inner life could exist, was the culture carrying institution. This institution Geddes labelled the Cloister. It was here that the experience of the townsman was injected, or could be injected, with a new element. Within the 'Cloister' there occurred a two-fold process of thought, critical and constructive - criticism of existing ideas towards a synthesis of a new kind - the formation of new ideals.

10. Life Outlines of Biology, P.1390.

11. Coming Polity, 143.

Geddes firmly believed that thought must reach out to embrace art and science must evolve principles of morality to guide the actions of the city. Geddes was no mere theoretician. He believed that in his own life and in the life of the citizen a positive achievement in the Cloister could not occur in isolation. It needed the continual stimulation of the world of action.

"In the Cloister", said Geddes, "it is for few to remain, or be it free for each to return at will. Ideals to survive must surely live, that is, to be realised. Hence the full life one needs to meditate with the free solitary, yet live and serve mankind."<sup>13</sup>

It was essential, that individuals periodically entered the world of detached thought, but that the thought and its new synthesis be reflected in deeds. Ideally, each citizen had to take part in the affairs of both the Cloister and the city; the translation from thought to deed was to take place not from a person in the Cloister to a person in the city, but within each individual. Only thus might the moral atmosphere of the Cloister pervade at times the entire community.

This is reflected very much in Geddes's plan for Dunfermline. He spoke of the artist as no longer the amuser of wealth, but a worker of skill, touched with the imagination and emotion, his place is again with the people, his work once again for them.<sup>14</sup>

Art, however, was not only to respond to the people, it was to come from them and the product in a new form, would be the creation of a city that could perpetuate this creation.

It is clear that the dynamic nature of the Cloister-city relationship was its salient characteristic. Total evolution was never to be complete in the limits of the individual and the danger of regression was always present. The city each day, saw Geddes, subside or decay more or less completely into the mere town as the Cloister does into the School. The towns and cities of the world as thus classified by him according to their past development and present conditions, /

13. Cirris, P.88

14. *ibid.* P.205

conditions, could be measured.<sup>15</sup> This degeneration had its roots in the teaching mechanism when the interaction of thought and deed ceased. The city, "the supreme product of organic evolution, embodied in the cultural heritage of the region", was an artefact through which men expressed their cultural tradition. The city, in Geddes's view, is a social organism which thus comes to express "the diversity, vitality and richness of human life," and through which individual and collective well-being becomes realised.<sup>17</sup> The city, being an adaptation to nature, is a term frequently used by Geddes to express the notion of a harmonious balance of city and region - the city is no parasitic growth which denudes its region of vital resources, but a fine instrument which grows from the region and expresses its vital elan. For this situation to become realised, Geddes contends that there must be measurable goals of social action in which all citizenry participate in both the formation and action stages. This requires a considerable developmental effort and is by no means an easy task - a factor which Geddes realised. The start point for the formation of goals lay in an acceptance of minimum standards of existence for all, which were derived from a critical examination of the needs of the individual - needs for shelter, health, income and also civic participation. Coupled with this was also a need for the individual to experience standards of amenity or aesthetic design. The city as the codifying point for human activity, is the start point for change - and change on a scale which people can understand. Consequently, Geddes severely attacks planning practice which promotes the widespread destruction of the civic heritage through massive clearance. For Geddes, renewal must be based on the moderate use of planning powers, beginning at the local level and gradually widening to embrace the city and its environment and thereby carrying with it an ever-widening educational process. The keynote of this Geddesian operation is a wide application of science. In the Geddesian scheme sciences become ordered to investigate/

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15. Civics, P.91.

17. City as an Artefact, Mss. Outlook Tower, 1893.

investigate the immediate problems of the society and the environment and then become applied towards developmental activity. It is in this way that geography, for example, becomes geotechnics; psychology becomes bio-psychology. In attempting to understand the intricacies of both the phenomenal and the behavioral environment the primary step is taken towards the promotion of planning action through which an intermeshed multiplier effect between community and town and region may be achieved. This intricacy between facts, thoughts and deeds characterises Geddes's planning activities in Dunfermline and Cyprus and later in the Middle East and in India. After his death it became the base notion of the Tennessee Valley Experiment. The institutional foundation in which this creative activity was to be located was Geddes's Cloister, the centre of applied research and regional education. The Outlook Tower as the type Cloister exemplifies the many facets of Geddesian philosophy through the accumulation of scientifically derived data for the region, the application of science towards the isolation of evils and their eradication, a critical path of learning for both specialist and citizen and a centre for regional education. For Geddes and others, the Tower represented a sociological experiment through which the city and its hinterland could be adequately understood and planned. The Tower is one illustration of Geddes as a man of action a man driven to attempt to realise in practice a theoretical philosophy. In this, Geddes himself epitomises his ideal citizen who constantly questions the past and present, discerns trends and isolates goals for developmental activity.

There is a recurring theme in all Geddes's work, and particularly noticeable in his activities in the Middle East and the Indian Sub-continent. This is that the planning activities appear to rest on a number of basic premises - the 'Utopia' of city as an ideal carrying a social tradition which transcended the life of its individual citizens; and the Valley Section, within which the city and its region may be optimumly planned. These theoretical norms were linked to the creation of an institutional/

institutional base, a group of culture institutes for the promotion of applied scientific study and the isolation of goals related to a specific place. Geddes constantly attacks a narrow specialist academic entrepreneurial or political view which promotes sectarian interest. His work is characterised by an insistence on the reordering of learning, and a development of new fields of applied thought. His theoretical base goes some way to explain Geddes's lack of precise planning. He appears rarely to be concerned with one particular planning problem confined to a small area, but with a multiplicity of problems. He becomes more and more the planner of master schemes.

For Geddes, drawing maps was not effective planning. The crucial limit was indeed precise scientific survey, but its objective was in the formulation of long term goals for the society and the isolation of the steps which must be taken towards the realisation of such goals. Geddes thus becomes characterised as the planner "who lays his eggs in other birds' nests". His objective becomes an attack on the whole social attitude of his contemporary society,

In this light it thus becomes comprehensible why Geddes avoided the traditional political processes of his time. He was prepared to try to influence politicians, witness his efforts on behalf of the Sociological Society in the preparation of the first Town Planning Act of 1909, but, unlike others, he was not prepared to become enmeshed in the institutionalised processes of local government.

Although an academic figure, Geddes rarely followed the traditional academic path. His career at Dundee was characterised by an unusual term of office and his professorship at Bombay was to develop a post-graduate School of Sociology. Indeed, in this field of sociology, Geddes's work is characterised by a particularly non-academic approach. Further, it is noticeable that in the voluminous mass of Geddes correspondence he appears to have few intimate and direct contacts with the traditional academic of his day.

He rarely lectured in the universities and indeed, Mumford has recorded that on one occasion when he did appear in London University, the quality of his lecture was such that it may have cost him the Chair of Sociology at that institution. (21)

Over the years, intellectual stimulation appeared to come from those scholars who exhibited an inter-disciplinary approach, notably Demoulins, Kropotkin, Reclus brothers, H.J. Fleur, A.J. Herbertson, Marion Newbiggin. It is only in the field of biology did he retain an intimate contact throughout the whole of his life with an outstanding biologist, A.J. Thomson.

This paradox of an academic figure who apparently had little contact with many notable academics of his day is a difficult one to explain. Geddes was a pioneer in the field of social science and planning and his approach necessitated the integration into a comprehensive philosophy, of a number of apparently dis-similar fields of study. His writings on planning amply bear testimony to a thought process which ranges very widely in an attempt to explain trends and processes and identify objectives. Precision of detail in an academic manner is not characteristics of Geddes's writings. It may well have been that this feature raised a major problem of communication between Geddes and many of his contemporaries. Geddes perhaps was either unwilling or unable to meet the academic on his own terms and remain within the confines of a single subject specialism and that the academic in turn was unable to comprehend Geddes's wide ranging processes of thought. This professorial quality of Geddes's thought derived essentially from his ordering of the sciences through his thinking diagrams, and produced a disciplinary framework which intersected tangentially most others of the time. Although Geddes was prepared to enter the field of academic life, as evidenced by his application for the Chair of Sociology at London, /

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21. Letter from Mumford to Peter Green.

London, his lack of success highlights an essential personal problem of communication.

Communication between Geddes and his audience is relevant to the question of the involvement of the citizen in the actions of the social organism. The logical application of Geddesian planning was to immerse the citizen in the life of the city and the region. Indeed, as Geddes noted,

"The measure of success of the city survey depends upon its appeal to the individuals that compose the city, upon its power to arouse each from his often life-long training in seeing himself as a self-interested economic man and more to realising himself as an affective citizen, valuing his life's work, whether this be high or humble, as to his contribution to the city, in his city and for his city." (22)

The emphasis on publicity through travelling exhibitions was Geddes's primary activity in the years between 1909 and 1913. It appears that Geddes was addressing his remarks directly to the citizen. In this he by-passes the political leadership of the day and his objective as noted elsewhere, was not only to arouse the populace to action, but also to educate the citizen group from which emerges the political leadership. Geddes pinned his hopes on the individual transmitting the goal of the cloister institution into the city.

"The essential problem of life," Geddes noted, "is not material but psychical, in a word, life needs to be religious, educational; it is above all religious for only in the measure of our breadth of sympathy with nature and its powers and with our fellow men in their past and present. Only thus can we have any real understanding of science, much less of philosophy, moral or statesmanship and only this can we successfully initiate the needed reconstruction of city and country upon geotechnic lines and with a corresponding command for the need for neotechnic detail." (24)

Geddes was searching for the realisation of an ideal - a city showing a natural relationship of its physical form to the needs of nature as did the natural landscape. In order to attain this, Geddes had/

22. Indore Report, page 166.

24. Indore, Part II page 17.

had to cope with restricted and limiting thought and assumption. It was thus that education for citizenship became a repetitive element in Geddes's planning proposals. Hence also Geddes constantly attacks contemporary educational practice and lays great stress upon a return to a life orientated educational process in which practical civics was to be the start point.

There were at this period a number of socially orientated elements in society which Geddes valued as a basis for co-operative education and notably amongst which were the Boy Scouts movement, and a school of gardening experiment in primary education, which he in-built into his proposals in Dunfermline for the enlistment of boys of the town in co-operative projects. (25) There were also other currents in Geddes's contemporary society which he seized upon - elementary education had just begun and there was emerging in various quarters, a demand for adult education which Geddes helped to promote through extra-mural teaching and adult education.

His writings before 1904 clearly exhibit the view that once the process of education through civic survey and exhibition was begun, then the citizen himself would carry forward the process. However, the idea of a whole life civic orientation of the citizen was rather naive and Geddes himself noted that he was somewhat ahead of his time -

"My volume was favourable, even warmly, reviewed, yet one reviewer after a eulogy of the book added this word for the writer - 'your improvements are admirable but your public do not want them; what they want is to be left alone, it is in vain for you to write before the dawn'". (26)

The Outlook Tower, as a basic institute, promoting the process, likewise seemed to eventually offer less promise. One observer has noted, for example, -

25. Dunfermline Report, pages 21-22.

26. City Development, page 1.



The process which Geddes hoped to achieve was, in fact, revolutionary in character and drew some of its ideas from the ideal communities of the nature advocated at the beginning of the century by Robert Owen. The transformation of the individual envisaged by Geddes, depended upon things outside himself - an idea which he conveyed to Bransford in 1917,

"I have to accept that unless I am there to spur people on they won't move. (28)

This comment comes as an interesting point in Geddes's life and goes some way to explain one major characteristic of his Indian Planning Reports. In Cyprus the Edinburgh Lawn Market and the Outlook Tower, Geddes had initiated ideas of development and activity, fashioned the process and left others to carry on. In India, the recurring theme of citizen involvement in planning is very much still to the forefront, but there has become introduced a major element relating to town planning itself and the quality of the town planner. It has been noted that Geddes placed a considerable stress on defining the qualities of leadership, vision and idealism of the individual planner and places the responsibility firmly on the planner to promote citizen activity and participation in the planning process. The goal for the individual planner is indeed high in Geddes's thesis in that the planner as a catalyst must exhibit many of the Geddesian traits in the comprehension of the social goal, and the capacity to translate it into realisable action proposals. It may be suggested that in the light of Geddes's own experience and limited success in educating society to/

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27. T. Freeman, Reader in Geography, Manchester University, letter, 15th March, 1965.

28. Geddes to Bransford, Lahore, 1917.

to new objectives and ideals, he had come to regard planning, as the key medium through which the evolutionary process as he saw it, could come to fruition - briefly, that planning as an activity takes over the role that Geddes himself, as an individual, had played. This transposition perhaps appears somewhat paradoxical in the light of Geddes's considerable success in India. This was the period when his personal intervention in the development of the Indian city was extremely effective, as witnessed for instance, by the well-known episode of a Maharaja for a Day.

Geddes's impact on a society more closely tied to the natural environment was considerable and one would expect only a confirmation of his views that the arousal of citizenship could be effected and would quickly bring forth the co-operative ideal envisaged in his planning philosophy. He had had a similar experience in Ireland with his intervention in the workers' problem in Dublin. <sup>(30)</sup> It may well be that Geddes as a visionary saw the essential problem of the urbanised society of Britain in particular as being one of overcoming an inertia of a 19th century industrial and commercial success. He reiterated in *Cities in Evolution* <sup>(31)</sup> that the processes of urbanisation would produce a situation in which the assessment of natural and human resources would have to be undertaken. This process would involve the re-organisation of the administrative structure of local government, the emergence of a city region as a planning unit and that the aesthetic quality of environment would come to be placed equally with industrial productivity of the environment as ends to be achieved. The possibilities offered by the neotechnic future required a custodian institution. It would be this institution that would harness and order science towards the isolation of long-term goals for society and through its management of resources ensure that these goals were achieved. **Planning as a professional activity thus could be the medium/**

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30. See P.151 *Pioneer of Sociology*. P. Mairet, 1957.

31. First Edition, 1915. William and Northgate, London.

medium for resource planning. Without changing the structure of his ideal society, Geddes comes to place greater stress on the education for planning and the education of the planner - in order that his own ideas may, in time, come to function.

Geddesian planning placed a premium upon the inter-dependence of thought and action. His planning reports typify this aspect of his work and although Geddes was an ardent advocate of survey before plan, his reports show no such division. Survey and plan become one operation. It was noted, for instance, in his work in Cyprus, that a considerable number of development proposals came from a rapid investigation of site during a time span of only a few hours. A number of "valley section" diagrams contained a series of headings relating to geological, geographical, historical and social circumstances followed immediately by proposals in note form for a modification of the existing economic and morphological patterns. This capacity to isolate cause and effect in the physical and behavioural environments was based on Geddes's notational methods of thinking. The thinking diagrams are a touchstone of Geddesian planning. They inculcate the correct approach for others to follow and, therefore, merit comment.

### The Geddes Thinking Diagrams

The most commonly known Geddes diagram is one of thirty-six squares - a series of planes of thought, which link together acts, facts, thought and deeds. On the left-hand side of the diagram there is a space for the comparatively passive or receptive side of life, that considerably influenced by the environment - on the right-hand side an active or creative side in which man dominates his environment. The upper half represents the object, collective and external life, both passive and active; the lower half, subjective, personal and inner life, receptive and creative.

An alternate way of regarding the thirty-six squares is to see the top left-hand sector as representing the simple, practical life of the/

the people, carrying on their activities in town and village. The lower left-hand sections are the facts imparted by simple, mental life of pupils and teachers in schools and by experience which makes men leaders of their fellow men. The lower right-hand sector introduces the reader into the inner life of the thoughts and dreams of man in university, studio or cloister and the final upper right-hand section advances to the resulting deeds in society as an expression of the dreams of inner life. This final sector Geddes called 'life in deed'. In brief, the thirty-six squares represent an appraisal of the primary components of what Geddes understood to be the behavioural and the phenomenal environment. Each square holds the relationship, therefore, to every other square within the schemata. It thus becomes possible to conceive of a notational system of thought through which the total range of man's activities may be related to any one aspect and that any one aspect may be investigated in depth through the application of the specialised sciences which are appropriate to it. This multi-variant analytical process was developed initially by Geddes during his period of temporary blindness in Mexico, and allowed him to link together and extend on the classificatory systems of Comte, Le Play and Huxley. Geddes's pre-occupation with a continuing elaboration upon the basic schemata afforded by the thirty-six square is well documented in numerous articles and papers which he wrote on the process. (32)

A cogent and early statement by Geddes of his approach to the thirty-six squares was made in an unpublished article written in 1899 and this is reproduced in full in order to illuminate this stage in the development of the process. (33)

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32. Best known are "Civics as Applied Sociology", part II, "A Proposed Co-ordination of the Social Sciences", *Sociological Review*, January, 1924 and "Life and Outline of Biology", Geddes and Thomson, 1931.

33. The thirty-six squares of life.







Over twenty years later Geddes wrote to Marcel Hardy that the constant elaboration of place, work, folk conceptions towards practical development activity still greatly concerned him. (34)

"The survey and planning of place involves increasingly a survey of work and of folk and more of planning the world also and for the respective types of folk and their greater effectiveness, more true to their work with abatement of evils of their past deteriorating it and them and by place importance but also work importance and health importance, of course, and to be met also and their better instruction too, the true school of nature study and elemental occupations and with far more interesting and normal life accordingly, even family life improved as well. Beyond all this side of place, work and folk and with awakened sense, developed experience through activity and with life and feeling more vitalised accordingly, comes the deeper and higher side of life, that of emotionalised and demotive dream and thought and synergy, and these toward realisation indeed. How advance this? Our regional survey leads towards civic consciousness and thus arises the conception of civic ideal as ethic. At least something of emotional idealism, intellect working over its experience of place, work, folk, begins to clarify towards ethical doctrine, civic doctrine and impulse, imagery of possible bettered environment appears and thus towards the region and city beautiful. With all this our scientific studies help, yet also so long as they specialise they delay and even hinder. The general conceptions of regionalism and civics can thus be reached, notably by men, workers, artists, etc., without very prolonged scientific studies, just as the last generation of the people become socialist without any very profound economics and history. But to realise its developments, even its simple improvements, the city must act and as corporate body, supported by citizens individually and in association - this implies the development of the city beyond more corporation acting for and indifferent to grudging individuals, and towards etho-polity and city indeed. No doubt, this is as yet but the day of small things, but of such are all organic developments. With growing experience of the region city's possibilities and needs we are approaching synthesis which grows towards and with synergy more and more collective, yet with individual energies finding outlets, bits of career and in usefulness in civic service. This every mayor feels as he assumes office and so do his colleagues, his best civic servants and why not increasingly for individuals of the ordinary community and especially as linked in voluntary and supplementary associations like pro-Jerusalem aforesaid, which is now trying to spread from us thirty elderly members towards three thousand associates mostly younger. Meanwhile the imageries of improvements have been coming together into design, as clear in plan, as convincing in exposition too, as their planners can make it. Hence then is something worth achievement and the city can gradually work towards realising this. To reach those citizens' needs a touch of art, hence perspectives of the new/



new Jerusalem are needed at once in 'Wort and Bild'. All this is a brief recapitulation of the presentment of social life I am always making, of place, work, folk; folk, work, place, but with its very brevity does it now put more clearly the largely written theses of social reconstruction and renewal of true politics therefore, disencumbered of the inter-metropolitan tensions, hatreds, wars, which have brought about the present everywhere distressful after-war situation."

Here Geddes has recorded a sense of some failure in that the ideals which he sees emerging through co-operative and synthetic thought apparently have not been achieved and that "evils" still pervade the environmental scene. The introduction by Geddes of the term "evil" allows for an additional dimension in Geddes's thought processes; thirty six squares are thus a multi-variant possibility which may be considered as divisible into both positive and negative aspects. The square of place, for instance, may be thus interpreted as place with environmental possibilities, scenic value, or place lacking such scenic values: place with resources or place without resources. The possibilities offered under this schemata become extensive. The dating of the introduction by Geddes, of this additional dimension, the negatives, occurring in the phenomenal and behavioural environment, have been dated by Arthur Geddes<sup>(35)</sup> as being at about 1903 or 1904.

Geddes himself went a stage further and by 1909 had introduced a time scale into his thinking notations. He wrote to Victor Brandford outlining a system of survey for cities as - "a treatment of sociology, a socio-technics".<sup>(36)</sup>

"Here is a proposition of importance for city surveys and their corresponding sequels as city reports and city action."

The letter was in a form of a series of sub-headings itemising stage by stage the process of survey of the community. Geddes outlines for Brandford the process of surveys which he had been following over a period of years - a survey process which "utilises, unifies and organises the specialisms and sub-syntheses of Tower," (Thinking Machine) and resulting in a report which is "congruent with the interests and habits of man/

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35. Discussion, June 1966.

36. Geddes to Brandford, Ramsay Gardens, Edinburgh, 20th Sept. 1909.

man of science, the habits and interests of man of affairs."

"Survey" notes Geddes, "is orderly in its arrangement, proceeding from the preliminary science to higher science, simple to complex science, from relatively known to less known, from science to applications. A survey is thus a fertile one and not only in science but towards practice. In every way, therefore, our reports thus flow easily from our survey and has the best chance of being carried out. So natural and so complete is this parallelism of survey and service, thought and action, sociology and socio-technics, of civics and city development, that (I) restate the summary of proceeding pages in simplest headings which can then be developed into detail for each region and city and by each user, surveyor or improver, as the case may be."

<u>Survey</u>	<u>Report</u>
1. Region and Occupations	1. Regional Conservation and Development.
2. Historic, Current, Incipient.	2. Historic, Conservation, Intelligent Criticism, Progress as Development continued and accelerated.
3. Individual and Community	3. Efficiency and Prosperity.

Geddes suggests to Brandford that as sociologists -

"we may thus congratulate ourselves on having reached, no less fully than our predecessors, the political economists, a complete presentment and sympathy with the practical world, with its current activities and main aspects. So far you can hardly but agree, but on deeper reflection you will find that this rests on delusion. Our scientific survey, so well prepared, is but an apple of science, the serpent is beguiling as of old. How so, because we are going into action upon a plan, a report arranged merely in the order of knowledge which is not the process of life. Our accepted scheme of action, regional and occupational, historic, vital, is all of it, on the geographical and determinous lines of EFO, PWF, whereas we had thought we had learnt that the vital and therefore only practicable and functional order is OFE. Now, if you have been thus taken in and deceived, if you, as I have so often and long been beguiled into thus repeating the error, what are you going to do about it? for it appears that the matter of civic surveys have been thrown into confusion. What then is a solution of this present tangle of difficulty? Miseries and evils, poverties, follies, vices and crimes are in our essential impression of town and science must face these. Hence, our surveys must be pushed beyond the previous completed order and yet utilising it, recognising the diseases of the city's life and their historic factors as deeper and even present occupational ones, their past, present and future development equal the complex evils. I have to add other dimensions to my scheme. Each one of the sequences PWF to community, co-operation and achievement or ethopolity of synergy, each one of these cycles from the real simple, psychological reaction, then on to the creative psychological side, actively remaking a community, through co-operative achievement, or making achievement by co-operation. Each of these stages is a generation long, /

long, so that the young are born into a previous achievement and their children are born into what be good or ill, perfect or imperfect (it will always be imperfect) so what is wrong? - the negatives and complexes are there in the present, i.e., the place in which the next generation finds themselves; so that, therefore, I have now got to add at least another diagram, carried on from the previous one, or carrying on to the new one."

The dimension added by Geddes raises the operative value of his thinking processes to a very high order and the system, in fact, becomes a mental computer through which every observable fact of the environment, both phenomenal and behavioural, may be examined over time within a complexity of the total environment.

Geddesian notational cartography, if one might aptly describe the diagrammatic processes he devised, afforded an opportunity to investigate almost simultaneously a number of planes of thought. These may be summarised as -

1. A means to conceive and analyse the dynamic unity of the environment - a feed-back process which isolated the decision taking situation by relating both the inner and the outer worlds of the individual.
2. The possibility of isolating one element against the whole with the type of enquiry leading outwards from the viewpoint of a single object into the environment.
3. The evolution of a single object in time, from past to present and into future, giving rise, therefore, to the possibility of understanding sequential changes both in the isolated object and in its significant relationships with other objects.
4. The possibility of viewing the single item from the standpoint of the complexity or totality of environmental features.
5. A means to continuous elaboration of those scientific specialisms concerned with an explanation of the isolated feature and,
6. A means to fuse such studies into new fields of enquiry which transcend existing subject specialisms and by which a phenomenon and its relationships may be comprehended.

The/

The closest analogy one may draw with the Geddesian system is that of the pictorial cartoon in a magazine such as Punch. In many such cartoons, for example, the reader sees the picture, perhaps embracing two people. He grasps an immediate situation - the two people, and their environment - seen in an immediate relationship. All that is in fact required is some form of caption, one sentence or perhaps two, in order that the total sequence may be realised. The caption thus gives a specific linear relationship between the two people concerned, the relationship of A to B. This then becomes cut back with a counter relationship, B to A, whilst both are being transected by the relationship between the two people and the environmental context or C. The tangential lines, Geddes often referred to as the web of life, are thus similar to warp and weft and line. The sequence then, which may be grasped immediately through the picture, is one which could read A to B, A to C, B to A, B to C, C to A and to B. The continuous elaboration which is possible on such a theme becomes difficult to translate to prose. Unless there is a deliberate use of the complemented process, of thought from the spacial back to the linear, or from the pictorial to the narrative, the possibility of communicating such a simultaneous process of thought, becomes extremely difficult. Geddes himself, realised the danger that he might become entangled in his own thought webs and clearly amongst his contemporaries, perhaps only A.J. Thomson was able to understand the methodology and the possibilities in Geddes's thinking processes.

"Perhaps the biggest thing that Geddes has done is what few people at present understand. He has thought out a notation. If we are to understand anything, a flower, a bird, a social phenomenon, a scientific theory, religion, we must know its linkages. Most people see one aspect, few people see three aspects, but Geddes sees all that the wit of man can think of and why, because he has elaborated a scheme of all possible relations, a thinking machine, an organon, expressible by diagrams of many kinds, the fruits of the hand thinking he discovered in his blindness. This shows us how far we have been from exhausting the vital relationships of the subject, what unthought linkages there are to explore and to experiment with before coming to a conclusion with any approximation to the requisite many-sidedness. False simplicity, at any rate, we may be saved from/

from by Geddes's notation. Further, Geddes is one of those who have seen below the surface, who understand what is really happening. There are, of course, many interpreters, but most of them are very partial. They have no organon for exhausting inter-relations, aspects or significances, as Geddes had. One need not agree with him all the time - he is probably often wrong, but some of his prophecies have seemed quite uncanny and the present point is that his technique of social interpretation has reached a degree of subtlety which is unequalled. Why is that? - because his genius has developed scientifically, he has evolved his novum organon." (38)

Mumford viewed Geddes's diagrams in a different way. (39)

In Encounter, Mumford discusses at length his appraisal of Geddes in the 1920's and noted that Geddes's material, "the accumulation of the graphs of a lifetime, were the unformed theses, the unwritten books" (which remained unformed and unwritten and that the graphs and charts were "a standard part of his travel equipment, like the cabinet of medicines an invalid dare not leave behind, even if he never touches one."

Mumford is writing of Geddes at the age of 69 and both he and Arthur Geddes noted that at this period of Geddes's life there was some degree of rigidity of view and of outlook. There are, however, certain elements in Geddes's early life which indicate a more flexible approach to/

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38. A. J. Thomson, quoted in De fries, The Interpreter Geddes.

39. Letter from Mumford.

40. The Disciples Rebellion, A Memoir of Patrick Geddes by Louis Mumford. Encounter, Sept. 1966 p. 11-21.

to the thinking diagram process. The manuscript material relating to Geddes's planning activities in Cyprus and Dunfermline contain numerous diagrams which depart from the thirty-six square principle in that they are place orientated. They are based fundamentally upon an environmental problem and then proceed in spacial steps to embrace the components of the thirty-six square diagrammatic scheme. It would appear that at this stage of Geddes's career the regional base of place, work and folk, arranged in a systematic way of cross squares, was thought of not as a carefully fenced immutable system, but as an aide-memoir to investigation of the inter-relating warp and weft, the flying shuttle of activity as seen by observation. In effect, these earlier diagrams take the form of a questionnaire. The environmental problem poses for the observer one or more specific questions - questions relating to cause and effect in time and space and questions carrying forward into a future context.

On occasions Geddes was known to have likened planning to a game of chess, where the multiplicity of pieces are orchestrated in order to turn disadvantages in environment into positive planning advantages and developmental activity. In chess, each game poses different problems though certain rules and piece moves may be constant between games. Viewing Geddes's diagrammatic schemata in this light goes some way to explaining a number of the characteristics of the man which have already been commented upon.

Arthur Geddes recorded that Patrick Geddes would waken early in India, four or five o'clock in the morning and fill in sheets with questions relating to the problems to be faced during the coming day. These charts were always based upon place, work, folk; organism, function, environment complex which were directed towards the specific question of the time. It has been noted that a considerable repetitive element entered into Geddes's work - repetitive elements which revolve around the relationship between the individual, the community, the town and the region. These relationships bring forth new fields of specialist study in order to explain particular environmental circumstances and which concentrates upon the feed-back process to the whole life of both the individual and the community. It may well be that Mumford has only seized half the point of the notational thinking as devised by Geddes, for/

for in the twenties largely on account of Geddes's age there was a rigidity of character and a reluctance to translate the spacial picture to the linear prose. Mumford did note Geddes's wish that he (Mumford) would fill the gap by writing up Geddes's philosophy of life, and thereby translating his thinking processes into prose. When Mumford declined, Arthur Geddes was subjected to the same pressure. <sup>(42)</sup>

"I need your help Mumford - this is in fact, of course, exactly what he kept on saying to me."

Our interpretation of Geddes's diagrams also goes some way to explain why Geddes appeared to confine his activities to being a consultant in planning and why, in fact, so little use has been made of Geddes's thought processes. Given a particular problem, in a particular environment, Geddes would always relate the problem to the complexities, time and spacial, in both behavioural and phenomenal environments. From this analysis Geddes could work out a process for developmental activity, a critical path for planning to follow, and directed towards the realisation of the goals for planning which would emerge out of the analysis of the problem in its much wider context. The ramifications and continuous elaboration into the details of the day-by-day process of site planning, land purchase, and development control alone, would require months of additional activity. This time Geddes rarely had available. It was in the isolation of the goals not necessarily every detail of the process that concerned Geddes. The Geddes planning report, and his schemata in general, was not a check list but a point of departure, conclusions which could not be verified by reference to two or three points of investigation, but which required a mental capacity or a computerised process, which could embrace at one and the same time a multiplicity of factors. One might suggest that this process was so highly personalised, and impossible of verification, that rejection by others might be expected.

Additionally, the process allowed of no feed-back correction. Each particular planning problem evoked a hypothesis from Geddes but without/

without some central clearing house devised on the principle of the index museum or Outlook Tower, there could be no checking of various hypotheses related to different places. Apparently Geddes was aware of this problem for another repetitive element in his work is a requirement that town and city establish Outlook Towers partly as a centre for citizen participation, but also as documentation centres in which the results of planning experimentation could be measured and correlated. The necessity for international collaboration between such institutes and between centres of higher and applied learning, was also crucial in Geddes's thinking.

The Outlook Tower, as a point of reference, had fulfilled this central clearing house, it had constituted in effect, a form of memory, a centre of accumulated experience into which Geddes had woven his thought processes and practical experience.<sup>(43)</sup> It was in the Tower and in the subsequent exhibitions that Geddes's thinking processes were given reality in a manner which would be comprehensible. Geddes in the midst of the Tower or the exhibition could thus translate his ideas. It was from these sources that those workers who perhaps best understood Geddes's thinking processes emerged, - in science, Thomson: in Geography, Herbertson: in Botany, Marcel Hardy and in planning, Patrick Abercrombie, to whom Geddes in his Den (the Exhibition) could sit talking, talking and talking and make planning comprehensible.

Geddesian thinking processes had a two-fold aim. One was related to Geddes's own requirements to devise a systems approach to goal isolation. He noted that -

"I am not a romancer who draws horoscopes, nor a politician who can answer all the questions, but I am trying always, in garden and in city by turns to work out a method which can adapt itself to anything, whether it has to be vacant spaces in old Edinburgh, or to revive an old city like Jerusalem in India, in fact a technique of life."<sup>(44)</sup>

The second objective was a translation of these ideals into action. It becomes apparent that the scientific rigour needed to comprehend the Geddesian/

43. The term "memory" was coined in this sense by Christopher Alexander, the American Architect.

44. Quoted by De Fries.



Geddesian process had to be of a high order and that there also had to be a positive capacity to communicate. Geddes certainly was pre-occupied with the problem of finding a basis for the transmission of his ideas to society. He saw the need for an institution to unite the inner life of the Cloister, to the practical world of deeds. Geddes conceived the university in this role, to which he added the planner, or the planning profession. His view was that,

"as knowledge unified toward synthesis, that is our long dreamed of univeristy as practice unifies and through all minor co-operations towards synergy, that is the making of an ideal city; but only as synthesis and synergy are wrought also into one by associating the thinking life and the working life and more and more fully science philosophy here, leagues of nations there, are thus not the distinct lines of advance as their respective exponents at present think. We need both types of mind to be fused together, hence these thinking machines which have been the main inward occupation of my life and the town planning which have become increasingly its onward applications, are indispensable to each other and go on improving together as well as by turns."(45)

Indeed, the problems inherent in the communication of Geddesian notations can only be overcome given the juxtaposition of a number of factors. The total veracity of Geddes's thinking processes has never been proved and the possibilities for such an investigation must necessarily lie in centres of higher learning, especially in a modern context with computer facilities. Such a central institution must have as its motivating force the application of studies towards specific environmental problems. Geddes, indeed, was an ardent advocate of university reform of varying degrees - he attempted to draw the university into the civic life of Edinburgh through the Town and Gown Association. The failure to persuade academics drew Geddes into the formation of his own type university, the Tower, his own medium of applied research: the sociological society and also into the emphasis in education of first-hand field survey. The university, in Geddes view, could be the proving ground for developments in the applied sciences and particularly in those fields which an interpretation of his notation highlighted. Such centres had to be linked in Geddes scheme to the planner or/

or the planning profession. It has been noted that one of the prime responsibilities which Geddes places upon the planner is to call forth from applied disciplines, answers to questions which he poses relating to the working of the environment. In Geddes's schemata, the planner through notational thinking becomes the catalyst by which social change becomes implemented and through which the goals are communicated to the society at large.

A salient characteristic of Geddesian planning was a regard for the past which Geddes saw living in the present. He was concerned lest any element of the social organism and thus any potential for development, was destroyed. "He was", noted Mumford, "loath to cut the umbilical cord that bound the present to the past".<sup>(46)</sup>

Town planning was a beginning for Geddes, a means of translating his notion of ideals into practical reality. Planners were the pioneers of the incipient age of biotechnics and thus the planner had little room for manoeuvre. Geddes was a hard task master calling both for the application of advanced techniques and thought processes to the overall problems of society by the planning elite, but also for the conversion of the citizen through the work of the planner. This implied that the planner must go far beyond the mere intellectual process of making plans and create the machinery to educate and convert the masses. Town planning for Geddes had to be a continuing and comprehensible process. He stressed that,

"if we could improve the condition of the people, improvement must be on the scale they can observe and realise."

In the Indore Report, for instance, he concluded that the planner can fail unless he becomes something of a medical worker to the people.<sup>(48)</sup>

The planner's task, in essence, was to illustrate how he, as a representative of the collective interests of the community, could at the same time satisfy the most immediate and pressing problems of the individual. By appearing to work miracles, Geddes hoped that the planner would gain the support/

46. Civic Contribution, p.7.

48. p. 37.

support of the citizen and then show them how their efforts contributed towards the social goal of town development.

"As this education continues and more and more individuals develop into citizens, ideas will become organised into personal purpose in public life, instead of being diffused and scattered like new dust over old, as at present. The people of the city will no longer be a mutually distrustful crowd but an army bent on victory."

The process of planning, therefore, in essence, becomes a full realisation of Geddes's thinking processes and hopes. In the first instance the base for planning lies in the Valley Section, the unit of complementation through which all the interdependent strands of society may be isolated. These are assessed by a mastery of sophisticated techniques of analysis and synthesis and supported by inputs of applied science called forth by the planner from the 'university'. Basic to this study is the use of the Geddesian technique of the questionnaire. The relationships thus drawn from past through present allow for the isolation of future goals and the division of the critical path towards the fusing within the Valley Section, of economic, social and physical planning.

The second stage is in a rapid implementation of development proposals in such a way as to affect the conditions of life of the individual citizen, and thereby to inspire in the citizen a confidence in the planning profession.

The third and crucial role is then for the planner to bring about active participation in the implementation of some of his original proposals and in the shaping of others. Here Geddes lays a high premium on the means to achieve participation by face to face contact between planner and citizen through exhibitions, and by tapping the potential within the citizen, especially local knowledge and local interest. Eventually Geddes envisages the citizen preparing survey and together with the planner, isolating goals for future development. This stage thus becomes a mutually educative process in spacial and resource planning. The effect of this theoretical conception is to suggest a perspective for the planner whose role is to act upon it. The end product is that the people of the city come to have confidence in themselves and their ability to be able to determine their/

their collective future. Town planning then,

"becomes not the mere product of the quiet drawing office but the expressions of local history, the civic and national changes of mood and contrast of mind. In effect, it is a recognition that each generation and in this each essential group and type of it, must express its own life and thus make its contribution to its city in its own characteristic way."(51)

This is clearly a long-term process and Geddes apparently ignores the political element within society; indeed Mumford has censured Geddes for this, commenting that Geddes's political proposals remain vague and formless.<sup>(52)</sup>

Geddes clearly took account of the process of political life. His answer to the shortcomings of the political system lay in the educational process. He addressed his remarks direct to the citizen, but in the short run the planner was to be the custodian of the society's future with a remit and responsibility to educate both the politician and the citizen. In the short term this would induce a detached, non-sectarian assessment of the goals for planning. In the long run, Geddes has the politician emerge from an educated citizenry and which would result in a juxtaposition therefore of the "true aristocracy with the true democracy."<sup>(53)</sup>

One criticism might be made that Geddes largely ignored the personal motivations of individuals. He was well aware of these processes, in fact; he noted in *Cities in Evolution* the discords of parties and occupations, and placed his faith on what he saw to be an inexorable future, a situation where common goals would have to be realised.

- "In the clearer forecasts and preparations of the possible future lying before each community, which the corresponding art of civics would also bring within reach, the prevalent discords of parties and occupations may be increasingly resolved; competition may be mitigated, often transformed into co-operation; even hostilities and egoisms may be raised into rivalries towards the promotion of the common weal and thus find their victory and success in self-realisation through service."<sup>(54)</sup>

The higher technic age brought the possibility for considerable civic co-operation but also the pressures resulting from over exploitation of environment/

51. Civic Survey of Edinburgh, 1911.

52. Civic Contribution of Geddes, p.7.

53. Indore, p. 198.

54. *Cities in Evolution*, Ibid. p. 160.

environment. Geddes clearly foresaw that the growth of urbanism, the emergence of conurbation and metropolitan areas, the exploitation of environmental resources in the 'robber' economy of the paleotechnic age, would require eventually, careful prediction of the possible courses of action open to planning if the drain on environmental resources and the negative welfare effects of the urban situation were to be overcome. He pinned his hope on an educated society faced with such environmental limitations in which co-operative action towards consensus goals would emerge and minimise the adverse effects of the political system. In this Geddes was, perhaps, proposing far more than his contemporary society could understand. The veracity of many of his observations have come to be proved since his death.

## Chapter II - THE RELEVANCE OF GEDDES

An evaluation of Geddes's work is no mean task. It is made complicated by the considerable disagreement between his contemporaries and successors as to the part he played in the development, in their formative years, of the social sciences, education and planning. The field of planning as the culminating part of Geddes's work, has never been investigated in depth and apart from a number of articles, mainly written by his contemporaries, little serious analytical work has been attempted. Sir William (now Lord) Holford, became aware of the danger of relying on the testimony of Geddes's contemporaries -

"I was never directly stimulated nor exasperated by his prescriptions - those who are influenced, not by Geddes's own personality, but by those who were taught by him, by the disciples in other words, have the advantage of an objective approach unaffected by hero-worship or by personal prejudice - the further we move away from him, the clearer stands out the great scaffolding which he erected for others to climb on - as with so many original thinkers who took out no patents in their ideas, but rather sowed them broadcast in any likely soil, it is difficult for those who come after to estimate the value of the pioneering quality of the ideas themselves."

Holford concluded that Geddes had anticipated his own thinking in the field of planning and that wherever he went he met Geddes coming back at him. (1)

In a personal discussion with Lord Holford, he expressed the idea that justice has never really been done to Geddes as a planner, his observations bear testimony to Geddes's projective thinking processes which post dated developments in his contemporary society. In spite of Geddes's own view that planning action should be within the grasp of the citizen of the time his fundamental preoccupation was to create a structure for planning which would be applicable to the bio-technic situation which he saw emerging. The problem thus emerged of communication to others of action proposals which were relevant to the contemporary scene but which, at one and the same time, conformed to the master goals at which Geddes was aiming and which could/

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1. Lord Holford - Opinion cited page 13-14. Report, Symposium P.G. Centenary Celebration, Edinburgh College of Art, Oct., 1954.

could only become realised as society developed. Personalisation of Geddes's message added to this problem of communication and it has been noted that later in his life he came to place more reliance on the possibilities offered by a professional group of planners as a means of transmitting the touchstones of his philosophy.

In the area of communication between Geddes and his professional contemporaries there were also problems. Raymond Unwin, for example, wrote to Geddes as late as 1930, stressing that the transmission of Geddes's thought to his contemporaries was inhibited by Geddes's own methods of presentation and the apparent divorce of Geddes's work from practical reality to be faced by the planner in the field.

Geddes's lecture to the Town Planning Institute (which will be quoted in full later) was, in fact, a model of clear presentation and one may assume that Unwin's advice had been taken by Geddes.

The social reformer and literateur, Hugh McDermid, likewise found considerable difficulty in following Geddes.

"Restless physical energy, boundless flow of ideas, a delight in living that set Geddes apart from less fortunate and less developed mortals - but readers of his works will be able to understand the sum total of his ideas far better than his contemporaries whose first hand contacts, whether short or long, necessarily failed to give them any detached appreciation of the man. Any single talk with Geddes, or even a series of talks, was like dropping in to hear an hour of a lecture that had started years before and would not end for years to come. As for the ceaseless folding and refolding of pieces of paper into squares in which he set key words and algebraic symbols for different ideas or systems of ideas - these not only allowed him to outrun his own tireless rapidity as a brilliant conversationalist, but enabled him to compress into a few inches the equivalent of a whole library of scientific tomes. Slower minds could make nothing of such methods, however."(4)

As a Geddesian advocate, Abercrombie perhaps expressed the essential/

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3. Unwin to Geddes, Old Queen Street, Westminster, 26th May 1930.
  4. Hugh McDermid, "The Company I've Kept" London 1966, pages 82-83.



essential problem of Geddes when he considered that planning had been made far more difficult by Geddes; that the comprehensive approach he advocated required an outstanding intellectual competence. Abercrombie carried forward many of Geddes's conceptions in his own practical planning, particularly in the regional studies of the Kent coalfield, Dublin, London and the Clyde Valley. Abercrombie works out the process of comprehensive regional survey and analysis. In the "atelier" of the School of Civic Design at Liverpool, he in turn transmitted to students of planning the notion of planning as an all embracing discipline.

In George Pepler's judgement -

"The greatest contribution made by Abercrombie was in the application of Geddes's principles of civic survey through regional planning."(5)

In a retrospective view of Geddes, Abercrombie selected the Dunfermline Report as a basis for much of his own thinking - "a pregnant volume and a case study in an attempt to practise period planning.", Geddesian exhibitions, and his humanised planning in the Indian Sub-continent. Additionally, however, Abercrombie noted dangers in accepting Geddes uncritically. The School of Civics at Bombay, was he recorded,

"A period of solid teaching, but rather a danger in these latter stages of being surrounded by a worshipping and admiring crowd and there was a little bit too much adoration as compared with the sharp discussion and criticism of the earlier efforts."(6)

An additional dimension is added to the difficulty of evaluating Geddes, by the relative absence of specific examples of the built environment created by him. Unlike contemporaries such as Howard or Unwin, Geddes left no legacy of new towns or garden suburbs or groups of buildings in sufficient quantity to bear testimony to a specific planning philosophy. One has to range far and wide to find Geddes's imprint in an architectural form on the landscape. In Edinburgh one finds the lay-out of the Zoological Park conforming to Geddes's original scheme, the Outlook Tower still a dominant feature of the Old Town and is surrounded by a number of the closes which through Geddes's activities have retained a specific character/

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5. George Pepler - Patrick Abercrombie, *An Appreciation*, Journal of the T.P.I., XL111, No. 6, May, 1957, p. 130-132.
  6. Report from Geddes's Centenary Celebrations, pages 5-12.

character. Notable cases are James Court, Riddel's Court, Brodies Land, Ramsay Gardens, and may be grouped alongside the Wellcourt community in the village of Dean as persisting features. One looks hard for Geddes's imprint on the city of Dunfermline and perhaps the most outstanding result of his thinking is in the retention of a green belt.

In the Middle East and Indian Sub-continent the picture is very similar, a triangular street plan in Tel Aviv, an industrial site in Lucknow, a disused university building on Mount Scopus and examples of preservation of building in Coimbatore and Patalia. Of all Geddes buildings only two appear to have a continuity of functions - Crosby Hall in London a Women's Hostel, and the College Ecossais in Montpellier, which has recently become the centre for a regional studies group.

It becomes clear from these scattered examples that Geddes's contribution can not be assessed against the yardstick of specific buildings. One must clearly, thus, investigate Geddes's influence on currents of thought.

Basic to the Geddesian approach to planning is the fusing together of biological and sociological considerations. Geddes entered early into the development of sociology in Britain, particularly through his pioneering rehabilitation work in the Royal Mile in Edinburgh followed by the founding with Branford, of the Sociological Society.

By 1899, Charles Zueblin, of the University of Chicago, was labelling the Outlook Tower the world's first sociological laboratory, a centre from which sociological ideas, theoretical and practical, were becoming disseminated. Geddes himself had sufficient conviction in his own capabilities as a sociologist to present himself for the Martin White Chair at the London School of Economics in the first decade of this century - a Chair which went to Hobhouse, rather than Geddes. Later Geddes was invited to inaugurate the post-graduate school of civics and sociology in Bombay.

These instances would suggest that Geddes's contribution to this growing field could be documented with ease. This is not the case and indeed, one finds amongst the historians of sociology a noticeable reluctance/

reluctance to do more than give Geddes a somewhat negative influence on the development of this field. T.S. Simey attributes to him a diversion from the precise statistical beginnings of Booth through a conflict which arose between Hobhouse and Geddes over the nature of sociological studies within the universities. This view supported by both Barnes and Ruth Glass.<sup>(7)</sup>

All three writers find in this conflict of views between the academic sociologists within the universities, and the more action orientated school pioneered by Geddes and Branford, a basic factor in the neglect of sociology within the British universities. Barnes goes to the extent of recording that in his view,

"It was (sociology) inevitably regarded as a science, a philosophy, a religion and a social programme, primarily dependent upon Messianic leadership. No discipline can win a foothold when these things can be truthfully said of it."<sup>(8)</sup>

Geddes himself seemed aware of this problem. As late as 1927, in correspondence with Alex Farquharson, Secretary of the Sociological Society, Geddes expresses a hope for unity in the field and explores methods of bringing together the work of the academic and non-academic sociologists in Britain. This correspondence evoked a positive reply from Farquharson<sup>(9)</sup> which highlights the essence of the problem.

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7. Charles Booth, *Social Scientist*, T.S. Syme, 1960 O.U.P. pages 249-51.
  8. Barnes, *Ibid.* page 812 *Social Thought from Lore to Science* 1961.
  9. 63 Belgrave Road, Westminster, 7th February, 1927.

There is some substance in the strictures imposed by Farquharson in that one major medium for the communication of sociological ideas in Britain was controlled by Geddes and Branford. This was the Sociological Review, to which both were frequent contributors. Geddes and Branford used the Sociological papers as a means of advocating the Le Play methodology towards the end of the reconstruction of contemporary urban and industrial society.

Barnes, reviewing the history of Geddes's involvement considers that the Sociological Society inhibited the **discussion** of major sociological matters per se, for it was entirely oriented towards the policy of social reconstruction and social planning.<sup>(10)</sup>

Crucial to the process which Geddes envisaged for Sociology was survey in the Le Play sense, as **amended** by Geddes and fitted to the Valley Section concept. Not unexpectedly, this insistence on field survey, coupled with Geddes's own practical teaching through field classes, extra-mural work and from the Outlook Tower, brought Geddes's sociological contribution to the forefront in the field of geography rather than in academic sociology.

Professor Beaver has noted that in the early days of the Sociological Society, an organisation known as the International Visits Association had come in to being to forward the work of regional survey.<sup>(11)</sup>

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10. Ibid, page 811.

11. Le Play Society and Field Work, S.H. Beaver, Geography, July 1962, XLVII p. 225-40.

The Association was reformed after the First World War as the Le Play House Educational Tours and this period coincided with the formative growth of university geography in Britain. Associated with the Le Play Society and the Field Investigations were a series of names whose reputations have in fact, been made in the field of Geography. Its presidents with an international reputation included Geddes, Mackinder and Sir John Russell. In this way a number of future professors of Geography inherited from earlier pioneers the field survey technique. These included C.B. Fawcett, (Manchester); K.C. Edwards, (Nottingham); Lord Stamp, (London); R.E. Dickinson, (Syracuse and Leeds); A. Davis, (Exeter); Estyn Evans, (London), who carried forward the work developed by Geddes and implemented earlier by Fleure at (Aberystwyth); and Herbertson at Oxford.

Many aspects of the survey that Geddes advocated were distinctly non-geographical if one pays regard to academic boundaries and was only acceptable indeed to the early pioneers within the field. Some elements of this Geddesian input are still traceable in geographical works which have a distinct planning orientation. Instances are found in the east Midlands, studies under the leadership of Professor Edwards, for Britain as a whole in the Land Utilisation Survey, pioneered by Professor Stamp and perhaps in an international context the observations on city and city regionalism developed by R.E. Dickinson.

It would appear, therefore, that in the context of Geddes's lifetime his contribution to the developing field of sociology per se carried the seeds of a self-defeating mechanism through which its greatest impact came to fall on students in other fields, notably in Geography. Indeed, investigations of the schools of sociology in universities in Western Europe and in North America have shown that in no case is Geddes's sociological teaching considered as being basic to any course of study. In few cases where Geddes is known, it is through the work of Mumford, a factor which will be considered later in this chapter.

The second component which underpins Geddes's theoretical suppositions is the concern for organism functioning with environment, a correlation which Geddes drew from his work as a biologist. Geddes's considerable promise as a scientist has been earlier noted and it is not the intention to elaborate further on this theme.

Professor A.D. Peacock attempted an assessment of Geddes as a biologist in 1954.<sup>(12)</sup> Peacock successfully conveyed a feeling of unexpected disappointment when measuring Geddes. His view of Life, the Outlines of Biology, are that -

"In spite of its many excellences, the book does not seem to have met with the success it deserves. Indeed, I feel it is neglected today. Why is this? possibly its dimensions and sober appearance are rather formidable to university students and the reading public. The former are not common and reflective; where the blame lies is not the point, but seek facts simplicita from text-books and specialist works and the philosophy of the subject they prefer dilute or in small doses. Again, appreciation and indifference alike to any creative work all too often results from a prevailing mood or fashion towards subject or style. I fear few folk today will give the book just that extra worthwhile attention demanded of the long sentences of the older fashioned idiom. It is perhaps very significant that about the time of the book's appearance, popular taste was hit by a biological series issued in fortnightly parts at a handy price and speak copiously and brightly illustrated and most ably written in fewer words by authors very much in the public eye."

And later, quoting Professor Tulloch, on Geddes -

"The most vivid souvenir that I have of those days is the striking contrast between the approach of Geddes and of Reid, Professor of Physiology, to education. Reid demanded that knowledge be detailed and exact; he confined himself strictly to his own subject in which his exposition was crystal clear, an approach that the student could, because of its analytical character and its limitations, readily understand. In contrast Geddes with no sacrifice of exactitude ranged widely over many fields of human endeavour correlating the various branches of knowledge. He was synthetic rather than analytical; the result was unusual for one was less conscious of the impact of the teaching of Geddes while under his instruction than one was after the passing of years."

Peacock concludes that -

"In sum, as a purely research biologist, Geddes is recorded in scientific literature as the author of two discoveries of fact and one of ideas, respectively the feeding mechanism of molluscs, the role of symbiotic algae and the physiological conception of sex."

But Peacock goes on -

"To make the point that he is claimed a genius is justified otherwise than by purely academic standards - what makes Geddes great is the enduring impress he has made upon human biology, his concern with the relationships implicit in his trilogy of folk, work, place."

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12. The Alumnus Chronicle, 1954, pp. 1-14, Patrick Geddes, Biologist.

It becomes evident that the evaluation of Geddes is moved to a further area. It is the evaluation of the biological and sociological component in his planning conceptions - 'the curious bio-sociology' which underpinned much of the thinking of the Regional Planning Association of America in the 1920's<sup>(13)</sup> - a bio-sociology which likened the city to an organism with its own laws of growth and development. This interesting phrase highlights Geddes's individuality in the manner in which he viewed city development. Geddes drew on his specialised studies of organisms in order to draw analogies between the growth and development of the organism and society. The appeal of a biological model was quite understandable. There was on the one hand the intellectual enticement of applying Darwin's theory of evolution to social phenomena, through which was an exciting explanation that seemed to account for a great deal in the world of nature. On the other hand it seemed to find expression in the social world. The apparent close analogy between the complexity of social and purely biological factors made it appear that they must operate according to some rationale. Though Geddes was an enthusiast for this form of thought process, he never became completely carried away by this owing to the continuous elaboration which became possible for him through the diagrammatic schemata which he devised. He never lost sight of the fact that societies are composed of human beings, themselves living organisms.

Geddes's basic conception linked the natural environment with other living things. The natural environment apparently produced an interdependence, sometimes direct and sometimes indirect, between living matter which becomes adapted to one another and to nature. The optimum process is achieved through the creation of a vital equilibrium in which each living thing seems to move towards the most harmonious balance possible in relation to its environment. This line of enquiry is simple and direct - it yielded patterned consequences in spite of the diversity and supposed unpredictability of human relations. It allowed for a number of equally simple and direct theses, competition between organisms with an environment/

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13. Roy Lulove, *Community Planning in the 1920's. The Contribution of the Regional Planning Association of America*, opinion cited, p. 87.

environment could be related to the economic competitions in the real world, under which species developed adaptations to improve their chances for survival. Locational situations, occupational groups and social structures, were all part of this process. The area of symbiosis between plant and animal and environment could be subscribed and the processes studied. It was easily transferable in a series of hierarchical scales - the locality or neighbourhood, the community area of the town, the region. Many of these analogies were later developed into a series of wide-ranging empirical studies by the Chicago School of Sociology in which early attempts were devised to formulate land use models. One might expect that through Professor Zeublin's work in this department some of Geddes's own conceptions would have been fed into this process. In fact, there appears little evidence that this was the case and that Park and Burgess devised their work independently of the theories that Geddes had developed. In part this may be ascribed to Geddes's own activities in that he developed no comprehensive series of investigations based upon these concepts. Secondly, in order to use the tools for planning purposes, he ranged more widely than the early human ecologists were prepared to do, in that he attempted to introduce questions of purpose, motivation and perception. These are studies which depended on a great deal of subjective judgement and did not lend themselves easily to empirical observation. It was thus that Geddes, in this field, ran along different paths from those which were followed by the human ecologists.

For Geddes, the bio-sociological approach was one which underpinned his diagrammatic schemata and became a start point for planning action. The organism (or man) had certain specific needs through time which became expressed in space through architectural creation or artifactorial creation, buildings, institutions, communities, and towns. Organismal development over time required a constant reappraisal of the conditions of balance between the organism and its environment. Correction of the adverse items within both the organism and environment may thus be required - for example, the internal diseases of the organism, overgrowth or undergrowth; a correct balancing of parts through a reshaping of the hierarchy of functions; the correction of environment through the conservation and replenishment of resources, the prevention of wastage; an overall balancing out of functions between regions.

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This process of appraisal is not a linear sequence starting from a local scale and gradually moving through a hierarchy of units to a regional and national scale. It becomes, in effect, an extension of the diagrammatic schemata of thought in that the start point could be at any level in the hierarchy of the social or the physical structure. The study should be related back to the individual, his needs and requirements and forward to the region or amalgamation of regions.

One may see in this process Geddes's own attempt to fashion an open ended eco system into which his own form of cost and benefit analysis could be woven. An appraisal of Geddes's views on these relationships is expressed in his writings allows for a simple chart or a number of the essential bases to be drawn -

## ORGANISM AND ENVIRONMENT

### Scale Hierarchy

#### I. Individual Organism

Privacy - Shelter

Security and Safety - Pedestrian Level

Health - Physical Environment

Sanitation

Cleanliness

Mental Environment

Noise. Retreat.

Visual - common design

colour, harmony

sunsuary images.

Intellectual Needs - responsibility

participation

contact.

#### II. Community - Village

Amalgamation of I

Community, Institutions - Education

Marketing

Welfare

Social

Crafts

Political - participation

Access to nature

Secondary transport arteries.

Detailed architectural and Social Planning.

III./

### III. Urban Level

Balance of Community units.

Linkage to I and II by primary transport arteries.

Urban Institutional Base - Citizenship

Education

Political

Planning - Physical, Economic and Social.

Employment Base.

### IV. Region (Valley Section)

1. Balance of Urban and Rural

2. Conservation and Replenishment of Resources.

3. Ideal Planning Unit: Master planning, economic, social, physical.

4. Control of new technologies.

5. Regional Culture Institutions - Political

Educational

### V. Nation

Planning for Regional Balance

The Geddesian hierarchy has no rigid fixed boundaries. It perhaps may be seen as a process towards the isolation of values. Geddes refrained from giving an inflexible physical expression to his planning proposals and in a similar vein he refrained from quantifying the size of the hierarchical units. The basic consideration appears to rely upon the range of individual experience and perception. Geddes was well aware of the different needs of people at different ages and his primary organisational unit, termed for convenience, 'the community or village' is at a level which satisfies a number of primary needs of all age groups and one which, for Geddes, could become a realisable unit for citizen action in an educative, political and planning context. In this way variations in density of settlement, culture or custom of inhabitants becomes embraced without difficulty if citizenship rather than physical design is the start point, as it was for Geddes.

The town or urban scale, as the primary artefact of man becomes that unit in which the expression of man's work and desires becomes fashioned at a larger scale and one where a balance may be achieved - where the socio-biological, economic and political requirements of the individual could find a high degree of expression. The conception of needs goes some way to explain the warning shots fired by Geddes at the turn of the century in respect of the dangers, as he saw them, in an increasing rate and scale/

scale of urbanisation. He believed that changes in economic life as between the paleotechnic and neotechnic, the dangers inherent in a rapid growth of technology, would inevitably bring a reappraisal of organic balance. It became necessary to incorporate higher levels in the hierarchy. Environmental control and conversation thus becomes vested in the larger mental horizon of the region at a point at which the assessment of overall balances between various urban scales can be appreciated and maintained. This then becomes the core unit for the fusing of economic, social and physical planning goals and likewise becomes the central feature of the regional political machinery. Further stages naturally follow. The relationship of the region to the nation is crucial and equally as Geddes frequently pointed out, is the relationship of nation to the international community.

This multi-variant and comprehensive appraisal of the required levels for planning which embrace both phenomenal and behavioral considerations, was avant-grade in his own day. For its veracity to be realised in his lifetime, it would have required, say the incidence of the stark reality of a fully motorised society where the difference in scale between car and pedestrian was apparent; a high incidence of regional unemployment over extensive areas of the British Isles, an articulate and mobile society searching for every decreasing recreational space. The fact that such occurrences post-dated Geddes goes some way to explain why his ideas had little chance of taking deep roots in contemporary thinking.

This concept of Geddesian spacial planning, one in which 'life' does not mean the minimum necessary for existence but a maximum fit to arouse enthusiasts, coupled with the belief that this maximum form of life can be completely known and is attainable, would appear to be relevant to the issues which face society some thirty years after Geddes death.

The question still remains, however, did Geddes make any contribution to planning in his own time? Geddes was one of the founder members of the Town Planning Institute, a professional body incidentally which took shape well after Geddes had formulated his main planning theses and had mounted a wave of publicity through the Cities Exhibitions. As a publicist Geddes/

Geddes was unrivalled by his contemporaries in the Institute and one might have expected that many of his views would prevail. Some support for this contention is given by George Pepler, who recorded that -

Pepler's view is interesting and yet suggestive of a rather more limited range of Geddes's influence. Pepler, like Raymond Unwin, found Geddes's intellectual approach stimulating but experienced some difficulty in translating Geddes's illumination into specific practice. He recorded this view to Geddes in a letter dated 1930.<sup>(15)</sup>

"My Dear Geddes,

Unwin has handed on to me a copy of your letter to him, dated 20th inst. I enclose a map of England and Wales with the boundaries of the regional planning committees marked on; also, a special survey has been made and beautifully published of the River Thames from Staines to Putney. The stretch from Staines to Putney has also been surveyed and that will be published shortly. These two surveys relate specially to preserving the river amenities. Surveys are in hand also for Cornwall, Devon and Oxfordshire. For all the joint town planning areas some kind of survey has been, or is being made and for example, those by Abercrombie for East Kent and Bristol and Bath regions were admirable. As far as I know the only city which has had a thorough survey is Sheffield and that was prepared by Abercrombie. They did a somewhat similar one for Cork. Wallasey had a development plan prepared and published, including some surveys by R. Bruce. You may have heard that Bruce died the other day - I do not think it is fair to suggest that the Institute is overweighted with people not very much interested in surveys. The real difficulty is that English people are temperamentally averse to the idea that it is necessary to look before you leap. The rule of thumb people are the ones in whom they put their trust. I am continually addressing conferences of local authorities and urging the necessity of surveys and I think this may be said to be bearing its fruit in the surveys which are appearing in connection with the regional plans and reports. The trouble with the Le Play surveys is that they are apt to be too diffuse and not sufficiently directed towards a practical end. I entirely agree that we want more sociology in our/

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14. G.L. Pepler - Geddes's Contribution to Town Planning, Town Planning Review XXVI, April 1955, pp. 23-24.
  15. From the Ministry of Health, 27th May, 1930.

our work and we should get more if the sociologist appeared more willing to shape their studies along lines the practical application of which was more obvious to the engineer and surveyor. I enclose a list of the published reports.

Yours sincerely,  
George Pepler.

In this field it would appear that Geddes, as an advocate of survey, had begun to make an impression on his contemporaries, particularly through the work of Unwin and Pepler who were strong advocates of this system, and through Abercrombie's field studies. Nevertheless Geddes's own thoughts on the state of planning in Britain were given in an address to the Town Planning Institute in 1930,<sup>(16)</sup> in which he strongly expressed the view that planning practice was beginning to fall short of what it should be. Geddes's lecture became, in effect, a review of the planning profession and it followed a clear line. To the question, 'Why not more progress in town planning', Geddes's answer was that the profession was establishing itself on rather a narrow base, that it was becoming set in its approach. They were becoming -

Geddes went on to develop the theme. He considered the profession lacked a civic, social and regional orientation, and that it was becoming concerned with limited horizons and was ignoring the complexity of phenomena. This stemmed, Geddes believed, from two elements - firstly that the planners themselves were adopting a too limited mental horizon and that secondly, the professional view of planning was badly orientated.

He put his first proposition as a "definite business one." He believed said Geddes, that their profession ought to be looked upon -

The Town Planning Exhibition, for instance, which had been going  
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16. Transcription lecture - "Why not more Progress in Town Planning?"

the rounds from 1910 to 1914, needed some younger men to bring the exhibition up to date and to explain it. This would become ' a definite form of propaganda.' He believed that the Institute should go out into the field as a unit, meet up with -

"members of other associations and especially those formed for civic and regional purposes - they might go further and join with societies like the Institute for Social Service and with local antiquarians and national history societies all interested in the preservation of nature and beauty."

The planner, he went on, should become something of a parish priest, be in contact with people, know their desires, their problems and their area. Planning, according to Geddes, had to become an essential feature of society and recognised as such by the citizen. This required an all-embracing mental attitude by the planner and Geddes went on then to comment that there seemed to be a narrowing of view in planners.

"Town planning, he commented, required the architect, the engineer, the surveyor, the lawyer and the administrator but it has overlooked the existence of the social student. It was no longer possible for him to propose a sociologist as a member of that institute, or a geographer or an economist of the like for they could not be admitted. He would like to submit a motion at some future meeting and ask whether they should not take in the sociologist, the artist, landscape planner and the like, for their aid would be magnificent. In all sorts of ways then, let me plead for the sociological point of view for this widening of the institute. But when he talked of the sociologist it was said they adopted language different to ordinary mortals, that they frightened people with their proposed surveys and so on and that people were suspicious of plans and surveys and the practical men did not want it. But it was time to go over to the practical man, it was time to remind the countrymen of Darwin and Newton, and that the present theory was that there were no theories. Theory, he said, was just a broad way of looking at things in general."

Geddes clearly adopted Raymond Unwin's suggestion that he should play down his insistence upon survey and also took Pepler's point that his surveys seemed to have little practical value. His counter to this was that in fact, the broad way of looking at things, as expressed by the sociologist, (and in this context presumably Geddes himself) was eminently practical. He asked his audience to clear their minds of the confusion of sociology with socialism. As they went out of doors, he noted -

"they saw pavements and streets and atmosphere and sunset and houses as inorganic phenomena, but as their age of mechanical, physical and mathematical progress develops, people interpreted everything in simple and mechanical ways. The ring on his finger was circular and was precious metal,/"

metal, but such a mechanical description did not express the real meaning of the ring at all. The connection of everything physical and mechanical was true as far as it went, but there were two ways of looking at things, the material and the ideal and they were both needed; the place and work and people were to be taken together."

Geddes drew together the strands of his lecture in a conclusion which stressed the importance of reaching the public. He wanted, he said, to make it understood that just exactly as it was the glory of every religion to have in every village its temple or church or mosque, so it was the business of them, as town planners, to see that not only every city but every village had its culture system brought into definite being. He was appealing on behalf of the general public. They were, he noted, -

"all familiar with the decline of Rome before the Barbarian and how Roman fullness of life was succeeded by Roman depression - were they, as town planners, under such depression now? But then came the Renaissance and a new beautiful era came in and this collapsed again to the miserable theme of marble. In the same way the great industrial age arose in Britain and now it was cracking up, with its massive head of apparent gold, its huge links of brass and feet of clay. This peculiar age was getting found out, this mechanical age was seen to be insufficient to movement of life more abundant in courage in hope was before them all and was perfectly practicable. One of the things one was accustomed to was to be reckoned neither Utopian or extremely pessimistic, but the word Utopia of Sir Thomas More's great book was neither English or Greek, but an age of humour and the word meant a place of well-being or 'Ou-topos' nowhere. The poor little pessimists, he went on, always thought it nowhere and the town planner knew it was cheap to make something of Utopia."

Geddes's proposal, was that, they were in at the birth of a real definite social stage which required organised units from planners and thinkers and a definite co-operation of sociological societies and town planning institute to begin with. His comments are of some interest. He was extremely critical of the planning profession, a body which came into existence through the efforts of a number of men who saw the need for a new and different discipline, one essentially concerned with the organisation of space. The early pioneers, by necessity, were practical men. They were involved in the day to day operations of planning in communities and in the real world. Pepler's point to Geddes is indeed valid that these men had little time for continuous elaboration, they required more of a check-list to action, rather than a multi-variant thinking process. Survey, as an instance, /

instance, was a highly valuable tool to provide data relating to space and its use, in order that these uses could be reappraised within the confines of a specific areal problem. Survey in the Geddesian sense they felt would only lead to further and further study which involved the very nature of society itself. They had neither time nor inclination to pursue such an elaborate path. It is clearly Geddes's belief that without this wider horizon it would naturally follow that the engineer could do equally useful work as the planner if indeed, not more sophisticated work, being more at home with statistics and with lines.

A second point arises from Geddes's view, of the very nature of survey itself. Geddes is not being critical of a slavish adherence to survey and a continuous elaboration for the purpose of amassing statistical details though this was the obvious trap into which the uninitiated would fall. Indeed, Geddes seems to be calling for more elaboration, rather than less. The point he appears to be trying to make is that the survey, as a practical tool, is not necessarily time consuming but it requires at the outset, a comprehension of the complexity of phenomena which he himself derived from his thinking machines. Given this basic appraisal of complexity, the survey then becomes a method of answering specific questions in order to isolate long-term goals for planning. The substance of his criticism is that planners were not looking for the integration of economic and social planning with physical planning and as such were failing to achieve the isolation of goals into which all three aspects of planning would be fused. His major thesis, thus, moved forward to the contention that by institutionalising rather narrowly the planning profession, the dangers which could arise from an inward looking specialised discipline had become very real. There is an undertone which Geddes has accepted from Unwin and Pepler, that part of the fault lies in difficulty of communication of ideas and approaches in methodology across the disciplines, a fault which he, at this point, seems to accept for himself. He therefore pins his hope on education - an education for the planner which embraces two essential components. There must be a capacity to fuse into planning the results of specialist/



specialist points of view, in the belief that planning as a development activity must play a central role. The second requirement is that this image of a central and codifying discipline must be communicated to the public in order for successful planning to be undertaken.

The omissions in Geddes's lecture are noticeable. At no point does he mention the limitations imposed on planning by the political process or the legislative framework; neither does he mention, except in passing, the forces of technological change which are beginning to move society into a more fluid situation and thereby making goal isolation more difficult to achieve. Apart from his specific reference to the needed modernisation of his Cities Exhibitions as a means to influence public opinion he spells out no specific, practical steps which can be taken by the planner faced with the body politic as it existed; neither does Geddes spell out for the institute, the precise manner in which it could devise an educational role, nor also, why an institute which should aim for a very high level of competence, and which has scarcely embarked upon this path, should take note of a less informed public?

The eminently pragmatic basis of Geddes's theories had been proved to his own satisfaction in his planning actions in Europe, the Middle East and the Far East. This proof Geddes appears to take as being universally accepted and acceptable, an assumption which clearly places Geddes's views away from the immediate experience of his audience and related to an ideal state which he perhaps alone can envisage. Such a situation clearly inhibits the degree to which Geddes's impact on the contemporary planning scene was effective.

There stems clearly from Geddes an impact upon different people at different ranges of intelligence and aptitude. For many practising planners, they could adopt from Geddes a range of specifically technical items. The survey of site, for instance, before plan preparation became a key phrase in planning. This could easily be undertaken using the essential check-list which Geddes had proposed in "Cities in Evolution" - a careful appraisal of topography, geology, water supply, existing buildings and their/

their distribution. This could be followed without recourse to the much wider implication of survey as Geddes himself saw it; a notion of conservative surgery, with its connotations - the preservation of historic buildings and the insistence of minimum standards of sanitation and hygiene. Even this could be tried, though in the Geddesian sense, the term was synonymous with the discretionary use of powers. The idea of regional survey was yet another level - the notion that an extensive area of country should be looked at in depth in order to balance out the various requirements for land use. This was an idea that was eminently practical but could be used in a limited sense without recourse to Geddes's far wider appreciation of the essential corollary, the regional administrative framework. For some, notably Abercrombie, the technical component of planning was only a part of a much wider process but for the majority of Geddes's contemporaries this was certainly not the case.

As Holford and others have noted,<sup>(17)</sup> the inter-war planning situation in Britain was characterised by a fragmentary planning and that the comprehensive view in any way resembling Geddesian notions was a rare occurrence. Ashworth's view on Geddes that -

"There was still Geddes to cure town planning of its current oversimplification. The architectural approach was not for him, town planning was to be regulative of architecture and the study of civics was to be regulative and educative for town planning." (18)

may have been theoretically correct but in practice there is little evidence that this cure took deep root in Geddes's lifetime.

In the area of devising the administrative and legal framework for planning, Geddes likewise seems to have had relatively little impact in his day. Over many years his correspondence contains numerous comments on the inadequacies of the political system and its legislation. He appears to have taken little direct action towards the correction of this situation. His correspondence with Unwin was voluminous and with his close personal relationship may have contributed in some way to Unwin's support of the regional policy adopted by the London County Council in the inter-war period. To what extent Geddes's relationship with Pepler came to fruition, through/

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17. Land Use in an Urban Environment, ed. W. Holford, Liverpool, 1961.

18. W. Ashworth - The Genesis of Modern Town Planning. London 1954. p. 198 opinion cited.

through Pepler's own work in the Ministry of Housing and Local Government waits an evaluation of George Pepler himself, though it may be surmised at this stage that Pepler's own wide ranging appreciation of the complexities in planning, and his involvement in the formation of open space policy in Britain, may have drawn indirectly from Geddes.<sup>1</sup> In all Geddes's work in the Middle East and India, both for government authority and local municipality, there are only a few instances where he makes specific proposals for legislation to back up his planning considerations. The greatest number are related to the requirement for a local authority to take powers to acquire land in advance of needs.

Great stress has been placed, by previous biographers of Geddes, on his relations with John Burns who introduced the first Town Planning Bill into the Houses of Parliament. Burns gave active support to Geddes's idea of civic exhibitions but evidence is extremely scanty relating to any specific influence Geddes might have had on Burns in respect of town planning legislation. Burns's own biographer has found no trace of correspondence which could throw light on this question and amongst the Geddes collection the only specific reference to an official meeting between Geddes and Burns is a letter which Geddes wrote to the Secretary of the Sociological Society on the 24th April, 1909, which mentions a meeting with Burns in London on behalf of the Society, with the object of soliciting Burns's support for "our views and endeavours towards educating the public of the various cities."<sup>(19)</sup>

It would appear that Geddes's role in the field of planning legislation was even less critical than that he held for planning in general. Certainly, if one places Geddes alongside Ebenezer Howard, his influence seems relatively limited. Howard, as a theorist of planning, came through with specific practical proposals, both economic and social, and created architypal communities which served as a direct example for the new town movement in Britain since 1945. Here a theory was given concrete substance. In this Howard followed the line of Utopian visionaries from Owen, who built into specific plan form the values that a city must take, the social institutions which/

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1. Ref. Pepler Collection University of Strathclyde.

19. From U. C. Dundee to the Secretary of the Sociological Society, 24th April, 1909.

which should be included to give expression to the new psychology of the urbanite that would emerge.

In their various ways, the 19th and early 20th century pioneers of new communities devised specific models which could be tested. These models went some way to attacking a number of the problems which Geddes himself was aware of, excessive overcrowding, disease, crime, impoverishment of the level of individual life in the industrial city and the restoration of human dignity. The model communities as devised generally expressed a revulsion of their originators towards the impact of modern technology. In certain instances, notably Garnier and Corbusier, the results of technological advance was accepted and woven into a new fabric. The practitioners as opposed to the philosophers of planning, also came through with specific concrete solutions to a certain range of problems. Slum clearance and the creation of city parks, were means to alleviate a certain problem as was later the development of suburbia.

Geddes appears to stand somewhat apart from either of these mainstreams, the action orientated and the philosophically orientated. Indeed, Geddes's shorthand message, through which he condensed a complicated intellectual exercise, appeared to avoid reference to many of the practical difficulties which might complicate the simple answers. His thesis was that the objectives to be realised through planning involved certain moral values and civic responsibilities which would overcome the economic rationale of the day and that in basic human motivation and its eventual expression, one could find those values which were shared by the citizen and the planner, to which all would automatically work. This naive assumption characterised a great deal of his early work, and was perhaps the fatal flaw in it. Later he came to appreciate the inertia of society and in consequence placed great stress on the planning profession as a custodian element to bridge the time gap between his ideas and their realisation. At the time when the individual planner was being faced by the requirement to implement minimum standards of space, health and a minimum degree of control on land use; Geddes, in fact, was calling for regional and national planning on an extremely comprehensive scale, and for government subsidization/

subsidization of these regional rehabilitation projects. Additionally, Geddes was calling for the planner himself to operate a form of computer process in his work, the ramifications of which at the time, were only clearly visible to Geddes himself and which he found difficult to communicate to others. This handicap, coupled with so few concrete planning models for others to assess, implied that there could be no accumulative memory in the sense that one could discover from Howard in his two garden cities or Cadbury in Bourneville. Paradoxically, it is this very weakness inherent in the lack of specific physical proposals through which to implement the planning ideal that Geddes's transferability to the modern period rests. Its relevance arises from Geddes capacity to see within society trends and currents of development not readily visible to others and to erect a structure to anticipate these processes. This makes Geddes perhaps more relevant as a major pioneer to the present day than in his own lifetime. A number of elements in his teaching have been transmitted by individuals but because of this process the pupil, not the master, is more clearly remembered, and for parts not the whole of the system. The veracity of Geddes's total comprehension of the aims and objectives of planning can only be adequately assessed in the light of the contemporary situation in which many of the trends for which he devised his system have now become recognisable phenomena.

The applicability of Geddes's thought to contemporary planning problems will now be examined.

## CHAPTER III

## GEDDES AND THE CONTEMPORARY PLANNING SITUATION

The development of Geddes thought drew him to a repetitive insistence that prediction of events was basic to successful planning. His assessment of the trends within society brought him to the formulation of a consistent theoretical backcloth against which he measured each individual planning problem and fashioned an answer to it. His basic premises have been noted and may be summarised under three broad headings.

1. Organisms require a specific scale relationship with their environment through which their wants may be satisfied. This view was applied by Geddes to the needs of individuals, and communities on the one hand and to the requirements of economic systems on the other. Geddes thus postulated a hierarchy of functional needs. He considered that each scale relationship was discernible and measurable.

2. His second premise was that misuse of resources, both physical and human, could only be avoided if the complex inter-relationship between phenomena was fully understood. An overspecialised mental attitude could lead to an imbalanced picture of these relationships which could initiate, though ill advised development, an overgrowth in one segment of the environment inimical to the whole. Thus, education towards synoptic study was necessary. The means to achieve this viewpoint was through a comprehensive thinking process which could isolate the variables in the environment and trace out the connections between them. Geddes ideograms were a highly personalised methodology but could be translated to the citizen through a tower arrangement. The logic followed by Geddes was that once such a comprehensive viewpoint became realised there would follow naturally a co-operative action between citizens, planners, entrepreneurs and politicians towards an optimisation of the environmental possibilities. Essentially Geddes hoped for the realisation of an ideal based upon the Greek city state model where control economic or political would become discrete and based upon consensus politics. Leadership resting on dogmatic philosophy, fashion or whim had no place in his scheme.

3. The third component logically followed. Improvement in the human situation was the ultimate end of planning. It could only be achieved after minimum wants had been satisfied biologically and sociologically.

Implicitly and explicitly Geddes was following a Benthamite pattern in advocating the greatest good for the greatest number. He was by no means unique in holding these ideas. There had been other attempts to fashion societies based upon a co-operative principle perhaps the best known being those resulting from the work of Robert Owen. Attempts to introduce minimum standards of life characterised the activities of many of the nineteenth century reformers in Britain. Chamberlain for instance, pioneered the attack on the slums of Birmingham, and Leverhume and Cadbury built model communities for their workers. Geddes however, went further, in that his solutions were neither anti-urban nor pro-urban; they embraced both forms; they were not imposed from above but aimed to encourage growth from below at grass roots; they were personalised and humanised not remote and dictatorial. Above all the distinguishing mark of Geddesian planning was that in its comprehensiveness short term remedial measures were related to long term objectives. Other pioneers had also based schemes of action on prediction. Howard for instance saw in the garden city an answer to the dehumanisation of the urban environment. He predicted, with accuracy, the needed regional appraisal of clustering of services to make such a venture an economically viable unit. Geddes however, demanded a far more radical change of attitude and a more comprehensive viewpoint. Garden cities, were only one item to achieve not simply urbanism in the country but a new urbanism in the city itself. Geddes faced the reality of urban growth and accepted that it was a symbol of man's creative genius, albeit one going astray. His thesis did not simply advocate a return to nature as some critics have supposed but was a deliberate attempt to enhance the urban possibility by ensuring that all aspects of environmental planning achieved equal prominence: that the city indeed would be able to survive in its role as transmitter and epitoms of the culture of a society. This point has been missed by commentators who, perhaps, have been overpowered by its similarity to the work of Mumford an ardent advocate of the planned 'new town' as answer to expanding Tyrannopolis.<sup>(1)</sup> Geddes was anti-urban only in the sense that unplanned cities and misplaced urban economic thought of the nineteenth century had let unloose all the contents of pandora's box. His lectures to students at Bombay/

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1. See for instance: Jane Jacobs. The Death & Life of the American city, pp. 17-19 SM NAGY Matrix of Man. An Illustrated History of the Urban Environment. Pall Mall Press, 1968 pp. 288-9

Bombay University 1923 and early sections of his unfinished book "Olympus" entitled the City's Evils add an additional dimension to the thoughts expressed in Cities in Evolution. <sup>(2)</sup> They attack vigorously the dehumanisation of the human spirit, the loss of rural virtues, headlong decent to an amorphous urban sprawl and the adverse bio-psychological results of slum environments. At the same time they defend the city as the seat of culture, economic prosperity, democracy; given as Geddes turgidly remarks "the right view and balance of the environment." It has been noted that Geddes seemed unwilling to compromise in his planning works. He exceeded his remit; demanded a total commitment to a long term investment of money and effort to change the fabric of place, and insisted that planners and politicians, both local and national, accept that they are custodians of the future of the society. Rarely did Geddes appear to question his own ability to educate others and to overcome the inertia and often the resistance of his contemporaries. He frequently shrugged off rebuff with the comment that others would come to see what he was about in time. He appeared to rest this belief on the view that the manner in which society was evolving would produce the situation in which his ideas would be seen to be highly relevant. In many ways circumstances of his life worked against compromise. His originality was seen in a number of quarters which resulted in commissions of one sort or another; an endowed chair at Dundee, a university to plan at Jerusalem; a department to start at Bombay; Geddes was rarely unoccupied; something emerged which produced a source of income. Though he was never financially rich Geddes was independent of employment which would chain him to one set of problems; one type of political master. For 50 years Geddes could work and think independently, publicise his views and be critical, at will, untremelled by the confines of any one legal contract. Geddes was master and law unto himself. His idea on Place, Work and Folk could be worked out and the results were never subject to a time limit or rejected as being irrelevant to the issue under review. The planner in the office of a local authority had no such freedom; he was subject to vastly different pressures. On the other hand Geddes was never living in a world/

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2. The City's Evils. undated manuscript.



world of fantasy. His work was practical in his terms; his many constructive actions in education, publishing, renovation, bear witness to this, yet it is valid to note that his experience as a thinker moved him by stages further away from the planner coping with day to day problems. Indeed Geddes temperamentally appeared incapable of giving attention to just that sort of detail which others required. Fleure has highlighted this aspect of his character.

Geddes made a success of master planning; he could pay attention to detail yet his great contribution was in the broad sweep. Technique on the drawing board, the phrase in a piece of planning legislation, these were means to an end. He advocated the most painstaking survey and mapping; in India and the Middle East legislation to advance the cause of planning particularly through powers to acquire land for urban growth well in advance of need; yet he never became emeshed in problems of tracing owners of divided parcels of land nor in the precise wording of a legal document. This was for others to do. Objective; once assessed, all else should follow. This carried inbuilt possibilities for failure and his lecture to the Institute in 1930 records something of an inability to convince others. Indeed his previous biographers have used the appellation - failure; a magnificent failure perhaps but nevertheless a failure. To have come to this conclusion based upon a reading of Geddes in his lifetime appears to do less than justice to him. In many areas of the sciences and social sciences Geddes made substantial contributions but to assess his significance to planning one must accept Geddes own contention that he was working as much to give answers to those planning problems which would emerge as to rectify those of the day. Many contemporary events give substance to this claim./

claim. Some 50 years after Geddes published *Cities in Evolution* echoes of his thought appear which suggest that it is still on the march. One may instance students revolt against overspecialisation; legislation which demands of planners that they involve the citizen in planning schemes; debate amongst planners as to their role in society, questions relating to the preservation and conservation of historic towns and the vexed issue of whether towns are for people or cars. These illustrate a search for the end or goals of the planning. This was the major preoccupation in Geddes's work. Its appraisal is timely.

The years since Geddes died have witnessed far reaching changes. Within the field of planning the role of Government as a catalyst in central direction of economic affairs has come to be accepted. There has also been a tendency for central interference in the field of social planning. In many countries notably Great Britain, a considerable body of planning legislation now gives planners considerable opportunities to influence the economic, social and physical fabric of society. This is instanced in Britain by adoption of policies of counter drift; the creation of new towns and urban renewal activity on an unprecedented scale, all of which have influenced the distribution of population within and between regions. Planners have also benefitted from a sophistication of mathematical and other techniques. Aerial photography, computer science, sampling techniques and model making offer a possibility for refined and speedy survey, analysis and prediction. Growth in these fields has taken place at a period when the scale of the planning problem has changed both qualitatively and quantitatively through the increase of a population which has become more mobile and leisure conscious.

There are however, undercurrents of disquiet which on occasions burst out in a critical attack on planning as a field of activity. The nature of this criticism bears on the fundamental issue of the purpose of planning. The principal area of debate appears to centre on a view that planning has become institutionalised in a remote beaurocratic system which, through its actions, is having a bulldozer effect on the essence of place and community. This attitude is comprehensible in the light of massive redevelopment of towns, /

towns, the introduction of urban motorways, a redistribution of population in new communities - all of which require for their realisation complicated legal and administrative machinery.

It is also noticeable that there has emerged a debate within the field of planning itself which mirrors that at the public level. Practitioners of planning are themselves irked by cumbersome machinery which ties them to procedures seen to be slowing up the processes of constructive planning. In Britain the necessity to submit development plans to central government for approval is one such issue. Another arises from the hours of work spent on development control of the minutiae. There are, however, more substantial and fundamental questions which remain unanswered. The use of advanced statistical techniques have seen many planners jump on this handy bandwagon as providing quick answers to complicated problems. This tendency has been seen as one which will emphasise the difference between planner and public in that the latter becomes more easily reducible to mass statistic. Instead of planning being a game of chess, as Geddes would have it, where the planner plays the game, it is felt that the computer might come to not only play the game but devise the rules. Thus a move is afoot to find means of reintroducing a human orientation into planning; to seek for means to harmonise the legitimate requirement for an administrative and legal framework with a pressing need to make people, (the consumer), an integral part of the process. An additional element has been introduced in Britain where the professional body the Town Planning Institute is more than ever insisting that planners be trained in centres of higher education. This has placed a premium on decisions about what should planners be taught. The most recent statement relating to the final qualifying examination appears to imply that planners should know something about almost everything. This can only result in excessive mental indigestion amongst students and utter confusion amongst teachers. <sup>(4)</sup>

It is apparent that these questions are symptomatic of a society experiencing considerable change. Indeed one is now placed in a situation where, if the mistakes of the nineteenth century with its legacy of problems for the future are not to be repeated, questions of choice and priorities must be resolved. One may cite certain features of the contemporary scene, which/

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4. Town Planning Institute. Final Examination, 1968.

which are of moment:-

1. A more articulated society now demands more than a minimum for existence but a maximum level fit to satisfy the most enthusiastic of demands. The view that an optimum form (or maximization) of life can be known and is attainable is one no longer disregarded out of hand. It has become recognised that the search for an optimisation of life has become a necessity.<sup>(5)</sup>
2. That short term planning is no longer acceptable as a substitute for an intensive process of forethought leading to constructive action. It is recognised that the by products of remedial planning per se heap can up an anthill of secondary problems which cumulatively can have adverse effects on the welfare of individuals and groups.
3. That the rapid growth and phenomon of urbanism is introducing a new scale of planning problems; a dimension of change which is both quantitative and qualitative. Massive urbanism is a world wide phenomenon which brings in its wake unprecedented demands upon physical resources and introduces mutations in existing social problems. The view has been outdated that many social difficulties would be resolved following a rise in standards of living. Affluent urbanism has shown no radical eradication of these problems only a greater complexity, and paradoxically, a sharpening of group differences.
4. It has thus become accepted that purposive planning has to become more comprehensive in its range and its nature. One of its great tasks is to bring in to harmony the demands of population with the availability of resources. New fields of investigation are required to achieve this process together with means to create the educational process by which alternative courses of action can be adequately assessed and goals chosen. The total environment, physical and cultural, is now seen as a proper field of action for planning. The role of planning as one agent in societal change has now to be reassessed.
5. The impact of advances in science and technology are now so rapid that institutions and and predictions can be quickly outdated whilst at the same time the results of such changes can create additional problems of adjustment./

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5. See for example the discussions recorded in Environment for Man - the next 50 years. Edited - W.E. Ewald Jr. Indiana University Press, 1967. 2nd Edition.

adjustment.

6. That the administrative framework required for planning has to respond to rapidity of change. Fragmented municipal boundaries have been by passed, and a new framework through which a bridge between national and local planning can be achieved has to be created.

In the face of these difficulties a requirement to disseminate planning expertise has become accepted and yet there appear to be few attempts to create the means by which this can be achieved.

The popularity of the Ekistics movement is witness to the need to fashion a clearing house for international experience. The debate still continues and prompts commentators to suggest that urbanisation has left the planner behind. It may well be as Gardner Medwin contends that planners can only affect the end product of this process and yet the direction of such intervention is still only vaguely spelled out.<sup>(6)</sup>

In all these trends one finds direct echoes of Geddesian thinking and it is not surprising that there has been a reawakening of interest in his work as a pioneer who cut across the ideas and practices of his time. The fact that Geddes was preoccupied with questions relating to ends and means but was also a pragmatist is accepted as of relevance. His apparent failure to give specific FORM to his thesis is also seen as of merit. Form, Geddes realised, must respond to change and could come to be quickly dated by events; IDEAS and response to change - only these were significant. Without PG to stifle discussion it is possible to use his notions to lead to a philosophy or an approach as a basis for constructive criticism and action. A debate as to whether Geddes' philosophy was derived from Comte Spencer or Le Play and was or was not based upon sound premises is secondary to a consideration of what he said why he said it and what are the implications. Geddes was a salesman of ideas and his main preoccupation was in just those areas of social and economic life which pose problems today. Green and Loch have both concluded that in Geddes work may well be/

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6. Gardner Medwin op. cited Paper No. 1 Centennial Study and Training Programme on Metropolitan Problems. Toronto 1967.

be guidelines for constructive thought and action in the second half of the twentieth century.<sup>(7)</sup> Attempts are indeed being made to apply Geddes thinking to such problems in France and India and much of the regional planning in Israel by the architect of regionalism, Glikson, has been based on his thought.<sup>(8)</sup> Clearly there are considerable areas in Geddes work which either are not directly applicable today or where his notions have come to be incorporated within planning practice and over time been given a sharper cutting edge. The unanswered question about Geddes is whether areas still remain where his seminal thoughts do apply.

#### THE APPLICATION OF GEDDESIAN IDEAS

Many specific practices and techniques advocated by Geddes are now commonplace in planning. A number result directly from his own influence whereas many others have emerged through a gradual development of techniques stage by stage and owe no direct relationship to Geddes or his advocates. Sophisticated mathematical model making, maps of economic patterns, maps of disease, detailed demographic analysis are amongst items which have refined survey and analysis not necessarily beyond the stage Geddes envisaged, but certainly beyond the level he personally produced. There have been by-products of such methodologies into areas where Geddes contributed little. Perhaps one notable instance is in the possibilities offered in architectural design where mathematical formulae can be translated by machine into line diagram. This and other civic design techniques go far further than Geddes's own rather crude photographic and sketch presentation. However, such advances may be less beneficial than at first sight seem to be the case. Abercrombie, for instance, noted that Geddes mapwork and exhibition techniques left much to be desired and yet he won International awards at the Ghent Exhibition. Indeed one characteristic/

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7. M. Loch. The Planners and The Planned 6th March, 1965.  
P. Green. "Patrick Geddes Pioneer of Planning". 1st June, 1968.  
B.B.C. Programmes.
8. e.g. (i) Efforts of the Geddes Association founded 1967 to promote comprehensive regional planning with which the author has been associated. (ii) Work of B. Kohn and The Summer Institute Ahmedabad e.g. participation in Community. 1969 & L'Architecture d'Aujourd'hui April '69. (iii) see e.g. A. Glikson. The Concept of a Habitational Unit, in Ekistics Vol. 24 141. August 1967.

characteristic of Geddes work is the secondary place given to reproduction work and detailed statistical treatment. These were tools in a process. Today our techniques are producing a mass of data for analysis and recent high altitude photography associated with the United States space programme has added on a world scale a further deepening of the intelligence aspect of planning. One looks in vain for a contribution from Geddes in this area with the exception of his view that these techniques may be put to purposive use if they are aids to action in response to questions of a fundamentalist nature. These questions relate to welfare and opportunity.

Geddes never spelled out explicitly the only form social evolution should take. He drew back from doing more than tracing a logic of the possible steps open to his society based upon his analysis of the trends within it - a logic which arrived at an educational state for consensus planning. He delimited possibilities and options included amongst which was a choice between purposive environmental planning which could only benefit and a state of haphazard indiscriminate use of resources which would never permit the realisation of mans' potentialities. The precise nature of the form of evolution would vary between place though the constants of Geddes's matrix occurred. They rested on the premises already noted. The first duty of the planner was to ensure minimum standards and here derivation of meaningful statistical levels of the range of tolerance of the individual; biologically, would play an important part. These once determined could be applied in place over scales of activity expressed in hierarchies of one sort or another. This was to be the launching pad for more purposive ends; a maximisation of possibilities in the environment and in the individual. A wide area is consistently left vague and ill defined in Geddesian thinking in relation to the ultimate goal of planning over time or at any one time. Geddes never sanctified prediction as a finite end. He accepted that the application of advances in science and technology to society would introduce changes difficult to predict with absolute accuracy which would create new standards and demands and necessitate reappraisal of possibilities, It was only in certain broad areas that prediction, within acceptable limits, was possible and these rested upon biological constants; organic and evolutionary in nature. It was thus that Geddes pinpointed biological requirements/

requirements and the results overcrowding which could have negative effects on the wellbeing of the organism; lack of space; lack of water; lack of disposal facilities; lack of contact between people and between them and central authority. He was no mere prophet of doom for he pinned his hopes on an educational process by which these results would come to be known and ameliorated. Whilst his view was evolutionary he was no mere determinist for choice by man and society allowed for redirection of science into new fields to promote a realisation of goals the society selected. The fact that Geddes appears to refrain from explicitly describing the long results of the transition to a neotechnic society does not imply that he was incapable of giving substance to it. In fact Geddes pinpointed frequently that the logic of his process was in participation and consensus politics; a feature now being accepted as the area in planning where as yet little has been achieved. Indeed perhaps the most significant difference between Geddes's thinking and that of his disciple Mumford is that Geddes, whilst seeing the retrogressive steps society was taking, shaped an institution to overcome its major problems. This was planning as a profession. He stated the steps it should take to act as a catalyst and the bases on which its philosophy should rest. Here Geddes offers seminal ideas in so far as he defined the role of planning as an agent of purposive change towards social ends. He went further in his thinking than was strictly the result of his own experience and this fact marks him as a profoundly creative thinker relevant to today's issues. Perhaps the great need at present is to loose the constraints that limit originality and in Geddes we find clues as to how this may be achieved. Geddes was concerned with the formation of a new discipline. He was well aware that planning as such had no sole prerogative in the study of the environment. This was a complex field of enquiry and properly the area of investigation of all the sciences and developing social sciences. He pioneered ecological and sociological investigation in the interests of planners but for the discipline itself he saw no mere academic and theoretical future but one involving direct action. He explicitly stated that planning must possess a body of theoretical suppositions which set it apart and gave it coherency. At the same time he accepted as fundamental that its practitioners would be motivated by a strongly/



strongly interventionist viewpoint that, a priori, conditions could be improved. The danger was that planning could become regarded as a specifically sectarian viewpoint associated with radical tendencies. This could be inimical to its progress. He fought to make the study independent and scientific with an integrity of its own based upon thorough empirical observation, research and testing. His object was clearly to place planning between all interests whereby its views would be respected. Only in one area was Geddes delimiting what appeared to be a self defeating philosophy; that planning worked towards the release of decision making to the general public at large. Thus to further this process the planner had to be prepared to publicise his own objective viewpoint independently of the political masters whom he served. He had to insist upon minimal standards of amenity and service and a belief in the exposure of scientific research in a comprehensible manner as a basis for education towards participation. Geddes was well aware that no one discipline had all the answers but that rule by meritocracy could become bureaucratic unless this corrective process was achieved. Geddes' turgid comment that the planner acts like the parish priest is an explicit statement of what he hoped to create. The field of planning thus becomes an especial institution set up by society to meet the needs of change and to act with the best interest of all its members in mind; education towards consensus decision taking. There is a certain apparent naivety in Geddes' belief that consensus is possible and that planning would relinquish considerable areas of power. This called also for a situation where an articulated population wished to participate in developmental activity and that the means to do so were inbuilt in the social fabric.

Another area in which Geddes moves ahead of his contemporaries is in his acceptance that technology and fashion can run ahead of the institutions society has created. There is he believed a need to develop new institutions in advance of requirements and as a result he frequently appears to put the cart before the horse. Creates an Outlook Tower before the science of comprehensive planning is created; lays stress on self regeneration before slum clearance as if to enforce the difficult decision process before the adoption of the easy answer. Here he bears hard/

hard on the issue of science not as a tool used indiscriminately but as a means towards an ethical objective. His own work shows this especially in the field of housing where community standards are all important; in one place clearance is necessary as the fabric cannot be improved to a minimum level, elsewhere, where this possible, conservative surgery is the advocated technique. There could be no universal and easy answers and Abercrombie saw that in his demands, Geddes made planning more difficult. The fact that Geddes gave few simple answers cannot be levelled as a criticism if one accepts this level of appraisal and that planning must be place orientated.

Automatically this raises a fundamental issue in planning, that of time. Can the planner ignore deadlines; can he afford not to? To achieve a compromise between speedy planning action coupled with a detailed appraisal of its orientation within a wider contextual framework calls for an information retrieval system akin to that used by Geddes in his own work. He used the Outlook Tower as one means to achieve synoptic thinking and thought which constant revision and reassessment offered planning intelligence in advance of specific need. Geddes' own probings for new linkages of thought pinpointed areas of study the investigation of which could illuminate questions not yet posed. He asked for both elements to be represented in planning. Outlook Towers in every region exchanging and disseminating data from research and the thinking process in the planner which looked for essence not superficialities. Both drew into the orbit of planning the university in a consultant role.

These notions afford the germ of an idea not yet fully implemented which can go some way to reconcile the conflicting pressures to think as well as to act. It also offers an opportunity to reassess the role of the planner. The essential element is the creation of a special kind of planning research unit within each region. Here would be promoted not simply the work of analysis but more fundamentally the investigation of frontiers of knowledge. The prime desiderata would be that analysis of trend would indicate areas where phenomena seem to overlap. These would become the primary areas of investigation. This form of research would add basic intelligence to the normal process of prediction. Geddes himself isolated such areas for research though he rarely had the time to pursue them to an ultimate/

ultimate conclusion. Thus for instance, biology and engineering produced the field of bioengineering; sociology and medicine - the area of medico sociology. It might be noted in passing that these are areas in which active research is being followed in our day. Had a number of Geddes ideas been followed through a discrete body of information on matters such as high buildings and agrophobia, new communities and psychoneurosis levels would have been available. An allocation of priorities and finance to such centrally based research is a major implication of Geddesian thinking. An illustration that his thought process and multivariant systems are applicable to the current situation is well evidenced in current planning literature in those areas where attempts are now being made to trace through in continuous elaboration factors which influence or are influenced by any one particular project.<sup>(9)</sup>

The idea of a research "tower" is not to be confused with the role of the Applied University, though the two may well be linked. Geddes drew a clear dividing line between that area of activity and knowledge which planning provides and that which is drawn from other sources. The University acts more in the role of general consultant exploring specialised fields in research and answering for the planner the questions of moment. This capability was needed in Geddes's day but some of these functions could now be relinquished to planning given the financial support required. The role of a Department or School of planning within a University is likewise different. It would be concerned with instruction and research and whilst much of this would be regionally based it would by no means be restricted to this area alone. Indeed a view that as a discipline planning can bridge University studies and draw out from specialisms the appropriate applied research towards a planning synthesis has been shown to be only partially valid. The post-war introduction into Universities of Schools of environmental studies is illustrative of a gap in such areas of knowledge. Indeed the crucial difference between the University and the planning research centre is that the latter forms part of the regional planning structure, is inbuilt into it and its primary remit is to provide data on which immediate action can operate.

A number of steps in this direction have already been taken. The Greater/

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9. See e.g. 'Notation' Alcan Industries Ltd., 1968.

Greater London Council has established a research unit as have the Planning Councils within the Economic Regions. These are concerned with strategy and only incidentally with unexplored fields. As yet the full operative regional service which is required for planners through frequent digests of information and indexing systems has not been realised.

These can only be regarded as the beginnings of a wider process. Unless numerous regionally based units are created there will be a danger that the findings for one region or unit such as that in the Greater London Council would become indiscriminately applied elsewhere. This danger Geddes foresaw in his strictures regarding the application of type theories across the board. Who would form such a research team. A high premium in this operation would be the computer operative and data processing expert working under a planner. Here the responsibility would be to find a centre director possessing an especial quality of mind; a highly developed critical sense who could transcend frontiers, one who was capable of reviewing trends and seeing the interconnections between apparently dissimilar factors. A farther aspect is important. It would have to be accepted by political authority that finance for any research which explored frontiers was beneficial or would have the possibility of becoming so. This would require the breaking of a major constraint - that research must be seen to pay and have immediate applicability. Indeed the establishment of such centres would require that this form of research in planning was accorded equal status to that in the field of medicine.

The establishment of these data and information banks would remove some of the present research requirements vested in local authority planning departments. It would also allow a radical alteration in the work of planners in the field who would be operating in a spatial framework of a different nature than that at present. To understand the form of this unit one must first examine the nature of the region as Geddes proposed and its implications for the planning and political process.

In his regional thinking Geddes came to fuse together a geographical idea of an area as a concrete and unitary object with a philosophical notion of a shared cultural tradition. His view was holistic. He was searching/

searching to give expression to the idea of balance and fusion of the phenomenal and the behavioural. He was sufficiently realistic to appreciate that only in especial circumstances were physical boundaries "ideal" regional limits. He was drawn thus to a social and economic view. Additionally he saw that man is rarely limited by arbitrary lines drawn on a map but at some point in space such lines were necessary to provide the framework within which planning could operate legally and administratively.

Trends evident in the population map influenced his thinking. He originated his notion of the conurbation as a stage in the evolution of the settlement network. Over time this unit of living would become transformed into a more disparate mass of housing and industry through increasing mobility and changing economic requirements. The town would come to lose its traditional character through its incorporation into larger urban agglomerations which themselves would distil into the countryside. Traditional administrative boundaries and traditional loyalty to place would have to be reassessed. It was necessary to devise new regions well in advance of this situation within which constructive planning could proceed. Further some means would have to be found to preserve the best features of "town thinking" and translate its expression to fit the demands of this new urbanism.

Geddes's region becomes an ecosystem; a unit of common living and resource balance. It is here possible to determine strategic planning goals; to investigate and then balance out the varying demands for urban space, water, farming, industry; allow for policies of conservation and updating of industrial structures; all of which would maintain and enhance the health of the organic unit. In Geddesian parlance the region becomes the most meaningful area for geotechnic planning. In the process of change it is also an area for education towards regional thinking. The urbanite becomes aware of his dependence on the green fundamentals of the region, of the need to create regional balances as between for instance industry and amenity. According to Geddes such notions will, over time, help to create an awareness that present and future is shared between all users of land and forms of activity; a sense of regionalism indeed.

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To achieve the realisation of balance necessitates the vesting of considerable powers at the regional level. Geddes does not shirk this issue. He calls for the implementation of decentrist policies leaving only to central government those functions national in character; defence international relation national economic strategy and taxation whereas to the regions he gives effective tools for planning and the freedom to plan and act. His only stipulation was that regionalism was not inward looking; that it accepted that the need for balance within it reflected a similar need for balance without.

How were such regions to be determined? Geddes was no arbitrist. There was no simple answer here. His own ideal regions varied in size and extent from the Forth Valley - the sea to Ben Ledi, to the regional city of Tel Aviv Jaffa. He would have quarreled with the Greater London Council boundaries as post dating the area of settlement thereby limiting its effectiveness to integrate growth in just those areas where the greatest pressures are found. Population weighting alone would not suffice. The nearest approach to any definition given by him was in his appraisal of "problem". What are the roots of economic and social difficulties; what is a realisable and realistic frame in which they may be solved. A notable illustration was an insistence on the idea of "parish pump" where he strove to bring together city and rural hinterland, not simply as a concept of city and its region but one delimiting region with its city and lungs. Regional boundaries based upon existing limits of settlement which gave no opportunity to integrate present with future could only be outdated and were retrogressive.

There was another no less vital aspect to his regional thinking. The vesting of powers within the region implied regional administration. It could result in remote beaurocy which in turn would inhibit regional feeling. Some form of democratic process leading to consensus politics had to be incorporated within the regional political structure. The opportunity presented itself to Geddes in his reading of the manner in which the region would evolve internally. He foresaw that to satisfy biological and sociological minima and divert the trend of urban growth towards constructive ends the region would come to take on the character of a more loosely knit grouping of units. Geddes mental breakthrough came in his notion of releasing/

releasing the close mesh of town and conurbation into a more flexible settlement hierarchical pattern interspersed by green space. The real unit of living would become not the traditional town centre surrounded by houses but a community unit based on biological needs leading out to other communities and centres of service or industry. The new level for political representation would thus be at the grass roots where participation could be made real and effective. The link between regional authority and citizen thus could be forged. This is a long term end in the reorganisation of the regional structure. The feedback to the contemporary by Geddes, comes through his attempts to give new form to existing settlement. He intensifies his study of what a community is; he thins out the urban mesh by creating open space and links it to new garden settlements and he shifts some of the existing services into a modified hierarchical pattern. Perhaps the Palestine reports illustrate most clearly this process of the linking of settlement hierarchies set in green space.

This notion of a more locally orientated political process complementing regional powers is one relevant to contemporary circumstances but which also has implications for the reassessment of the role of planning as a developmental and educational media.

It is now fully realised that the existing urban pattern is suffering under the debility of suburban decentralisation. There is a loss of local finance and of potential community leaders. Towns suffer under the impact of commuting demands on transportation and other space. It is also accepted that a growing demand for water and recreation necessitates integrated planning at a level and at a distance hitherto unknown. The nature and expression of these and other regional problems is ever changing owing to an overall increase in mobility. Urban and suburban desire lines are becoming increasingly confused in a series of currents and cross currents of movement. Thus it has become commonplace to read of planning based upon a concept of the 'Greater city'; 'the city region' where each constituent authority shares in joint planning of services which transcend their boundaries. There are as yet few instances of a complete reorganisation of local authority boundaries accompanied by a new structuring of the political process. The Greater London Council in Britain is a notable pioneering/

pioneering venture and has been followed by the present attempt to reshape the structure of local government. Evidence submitted to the commissions in England and Scotland <sup>(10)</sup> bear heavily on the questions of local government finance and the efficiency of services. A number of submissions take a slightly different standpoint in arguing that for planning purposes the widest possible regional boundaries should be constructed within which future land use planning can become effective. These submissions attempt to direct attention to goals rather than concentrate upon each and every aspect of the problems which are involved. The mainstay of such arguments is that the start point must be the creation of a regional authority with powers, together with a level of participation in both local and regional decision taking. This approach is Geddesian. It is subject to criticism and this has been forthcoming on the grounds that town identity would be sacrificed, that existing services (public and private) have their own range of requirements which cannot be adapted with ease. An answer to these points is that reorganisation postdating changes in the environment by many decades must be shaped so as to anticipate changes in the foreseeable future. It is therefore all the more important that long term and comprehensive thinking be applied. It is in this aspect that Geddes has relevance. Additionally there have been a number of recent planning schemes in the Borders of Scotland and South Hampshire to create a form for new towns. Here the planners have attempted to integrate existing and proposed urban units within an overall regional strategy through a shift of balance in growth rates and by a positive policy of green space provision. This too is Geddesian in approach but the proposals have stopped short of advocating a tiering of such units into a formal regional structure of administration. Thus in Britain at least moves are afoot which go some way along the Geddesian path and as Geddes foresaw have resulted from pressures set up in the society. It may well be that there emerges in the future a model more closely reflecting his total organic view which accords the highest importance to continuity through the physical, social and economic aspects of life. This in turn reflecting the fact that life is dynamic and overflows across arbitrary lines of convenience.

The adjunct to the region in Geddesian thinking is the biological unit;/

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10. Evidence submitted to Royal Commission on Local Government in (1) England & Wales & (2) Scotland. HMSO 1969.



unit; the cell or the community. Geddes was appreciative of the adaptability of the individual which has been shown in man's survival and tolerance of pollution and noise in the urban environment. Geddes looked at the range of stimuli which affects man and came to the conclusion that the immediate environment could and did have an effect upon health and mental state. He was no determinist but aimed at minimising adverse affects as a basic priority. For instance, he wished for safety for children, achieved through pedestrian separation, to minimise the adverse affects of stairways on women carrying loads; to create the conditions for contact and yet opportunities for retreat. Geddes accepted the built environment as an artifact which having been created by man could be changed. In common with other Victorian social reformers he believed that many evils were a result of delapidated environmental conditions and that these worked to inhibit the full realisation of the human potentialities. Many aspects of his thinking have become mirrored in recent work especially in the field of bio sociology and health economics. It is still debatable precisely how different environments affect individuals and groups and this field of study is one which Geddes would have encouraged. However, he postulated that a diversified environment with a range of mental stimuli could only be an improvement on one which was stereotyped and monotonous. The Geddesian environment had biological qualities the precise form of which resulted from these necessities and which included space and diversity of architectural feature safety - items suggested in the much later Buchanan Study of Traffic in towns.<sup>(12)</sup> These needs could only be completely realised when civic design came to mirror art in its widest sense. It was necessary to create an open feature leading outwards by open space or artery to the wider sociological hierarchy. A range of facilities were to be made available - there was no keep off the grass philosophy here. This demanded an investment in new communities which could not be measured strictly in financial returns and for established areas purposive rehabilitation schemes. It necessitated a view that this branch of planning was as equally important and comprehensive as that of the regional level for here it worked as an agent of social and medical welfare; a true social service. In this area of/

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12. Buchanan Report - Traffic in Towns. HMSO.

of his work Geddes also has considerable relevance to the modern problems of an ageing environment on the one hand and creation of new communities on the other.

Planning has still to catch up with Geddes's synoptic appraisal that life needs are interconnected. Considerable advances have been made in the design of housing and neighbourhoods. These are often viewed as ends in themselves whereas Geddes saw them as only parts of a wider process of life orientated art. He rarely delimited any one architectural or design process which could meet all needs but he set his stall on a range of possibilities to stimulate curiosity and enhance the quality of the seen environment. Only detailed place studies could probe the subjective behavioural patterns and link them outwards to specific design form. Nevertheless his work pinpoints aspects of quality which might be realised with the minimum of effort. Geddes redefined the use of space by cutting out unnecessary street widths, clearing insanitary buildings and turning the space achieved for play not for cars. The informality he achieved in adventure play areas and pedestrian streets together with the addition of trees and shrubs were the lines along which his mind worked. Their results could not be measured in strictly monetary terms; other standards of costs and benefits had to be applied. However, Geddes expressed deliberately and forcibly a view that the best results could only be achieved through the people who live there in a process of self and place regeneration. That the next generation could exercise an influence on its own environment and that the full life requires such a possibility to influence events is the touchstone of the Geddesian regional planning model.

Participation in the Geddesian sense means drawing the citizen into planning not as a bystander but as an agent of decision taking and action. Automatically this also implies a political role. Geddes held the view that an ill informed and inarticulate citizenry helped to add to bad planning which thus went unchallenged and therefore became cumulative and entrenched. Indeed the rapid development in Britain for instance of the amenity society over the past decade is reflective of public unease as is the pinpointing by the press of issues where final planning decisions have been reversed through popular pressure. Notable instances have been the questions of the location of the third London airport and the Lower Clyde estuary development. For some/

some time independent bodies have tried to act in the public interest and a number, notably the civic trust and Fine Arts Commission, have scrutinised forms of development proposals. Britain has now moved to emulate and develop upon the American experience in writing into the most recent Town Planning Act a proviso that the public must be consulted on planning issues. Indeed to accommodate this requirement planning schemes are now reviewed under the procedure advocated by the Planning Advisory Group which stipulates a division between the processes of strategy formation and action implementation. The details of how such requirements are to work has not yet been clearly spelled out. In fact the report on how to achieve participation in planning; the Skeffington report post-dated the planning act by some months. The Geddesian idea of participation has come to be realised as a necessary element in the planning process but as in areas of his thinking the precise application has now to be worked out.

Many of these problems associated with achieving citizen involvement were faced by Geddes. Amongst these was the basic issue of how to create an ethos under which participation would become accepted and acceptable and to delimit the level at which it would be most effective. The base for action was in the local community. The method was educational. Exhibitions and lectures were one means of juxtaposing the known against the unknown and creating standards of judgement. A complementary process was education by direct action; school children, boy scouts or other organisations cleaning up a street or district making survey and becoming aware not only of place but the possibilities in place. He asked for co-operation between child, business man, artist and carpenter - pooling their respective views and their equipment, working together to enhance the local situation. Geddes envisaged the possibility of these small pebbles causing ever increasing waves to appear in the community leading to an overall face lift in civic amenity and design but additionally creating a knowledgeable body of citizenry. This is no mere pipe dream as evidenced for instance in the Operation Clean-up mounted in Lancashire in recent years. Geddes, however, was well aware that one major difficulty lies in continuity of such interest and in translating this to a higher level of involvement. Another issue he faced was that of group differences. He laid stress on the need/

need to involve all the people and not only those activist by nature or sufficiently committed to be persuaded by a more formal teaching process. He therefore worked at two levels. Through the tower he hoped to influence the educated and the interested who would come to a central point given adequate publicity. For others less inclined to listen he worked by precept in the closes of the slums of Edinburgh and India. He functioned here as a parish priest. The options were left open as to the precise form and development the process might take; Geddes only showed or illustrated what might be accomplished. His system offers a number of guide lines:

1. Planning must act with speed to eradicate basic evils. It can then initiate a wider educational process. There can be meaningful participation in this initial stage but it is the planners responsibility to ensure that minimum levels of life are achieved. It may well be that some degree of imposition of standards is necessary especially in welfare housing and health.
2. Planning must work towards education in place appraisal and towards regional understanding. The planner has a responsibility to isolate options and to present his findings before they have become hardened into rigid plan form.
3. Areas with discernible social characteristics form the best operational level for this educational process; for instance areas with marked socio-professional structures or those ripe for rehabilitation or redevelopment.
4. Planners must be themselves area conscious and become associated with the peculiarities of place not from a central vantage point but on the ground at grass roots. They must be known to the people they serve.
5. Any possibility to make contact and educate must be seized. If amenity societies exist they should be used. If no organisation is available then attempts must be made to create one. These must be independent of any planning or political authority.
6. Technical expertise should be made available to community groups to answer questions of a technical nature.
7. Attempts should be made to persuade educational authorities and schools to introduce civic studies into curricula (an implicit statement here is also that teacher training moves along these lines).
8. Certain activities at neighbourhood level lend themselves to co-operative/

operative action through which the planner can work; initiation of play groups for young children; local surveys by schools and organisations linked to their special interests; photography; gardens botanical; history; geography; commerce; tree planting; street improvement. This is amateur action but one which embodies considerable experience and often considerable expertise.

These are random examples but carry implications which involve the local political process. It follows that in these forms of activity there must be financial underpinning or encouragement to commerce business and the professions to contribute through machinery, raw materials and equipment. It also follows that to achieve this process the results of work done must appear incorporated in and in harmony with overall development strategy. Consultation is therefore a desiderata. It also becomes clear that in some of these fields of activity other interests of a welfare and developmental nature are involved especially social welfare organisations. Collaboration of planning per se with welfare and social work thus becomes comprehensive social service in the wider sense envisaged by Geddes.

A number of experiments along the lines advocated by Geddes have shown participation and co-operation between action groups and the local authority can achieve interesting results.<sup>(13)</sup> Grants now available to improve environmental quality; introduced in recent British legislation, gives an additional opportunity to mount rehabilitation schemes in which the citizen can be an active participant. Clearly in the early stages this will take time. The Skeffington report looks for a time limit being placed on the preliminary consultative stage. This is a realistic view yet in the early days of mounting this operation too narrow a time limit can only be self defeating. People in general as yet know little of what planning is about and to give this knowledge and evoke citizen action requires patience and time.<sup>(14)</sup> A possible precept as to how to introduce a more thorough process has arisen in experiments within the field of social welfare. A pilot scheme recently/

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13. Examples include those mentioned in Appendices 3-8, Skeffington, Report on the Park Circus area, Corporation of Glasgow, 1967. The Deeplish Study, HMSO 1966, Town & Country Planning Nov. 1964. Housing Rejuvenation & Area Renewal, Civic Trust for the North West, 1965.
14. e.g. P. Green, Drymen Village Growth & Community Problems. Sociologia Ruralis IV NO.1 1964.

recently introduced in Edinburgh brings together in action teams those most interested in welfare problems - the social casework specialist; the psychologist; the probation officer. It offers a pointer to the need for planning to create such ad hoc and even formal action groups when community participation is to be evoked. This association of planner and social worker is yet to be realised in the sense which Geddes advocated.

The results of a more purposeful and comprehensive action operation to achieve involvement can be of great benefit. The cost is relatively minimal if one compares this with the investment in time and money in facing lengthy public objections to development plans which, if successful, require revision of proposals. Additionally given participation as a normal process, development activity becomes based upon authority from below which can only generate goodwill and reduce antagonism. The Geddesian approach links the strategic planning of the region with its grass roots, which in itself can become corrective influencing both the processes of planning and politics. The sharpest difference between the Geddesian notion and the views of a number of current thinkers is in this wider implication. It is maintained in some quarters that in planning a wide spectrum of choice is possible but at the LOWER level decision taking is less a matter of principle and more one of convenience. Geddes's system aimed at creating a continuing educational process which places principle above convenience at both the regional and the local level. A fundamental condition was the successful involvement of the citizen in shaping his own environment of living.

Accepting the principles underpinning a regional structure inbuilt into which is representation and participation at grass roots one is now able to return to the question of the role of the individual planner. Geddes placed a high premium on the mental quality of those involved for the remit given to planning was of a high order. Planning was to safeguard the welfare of society against indiscriminate use of its resources; it was to be creative and constructive and measure its results against the criteria of betterment in the human situation. This was to be no mean task. To go along this road planners had to possess a number of attributes:

1. a disinterested scientific approach to analysis and prediction coupled with/

with a humanistic appraisal of values. Planning was to be rooted in man not machines or techniques;

2. a capacity to function at widely differing levels in the regional hierarchy which implied a capacity to adopt a broad synoptic view coupled with a capability to plan in detail;

3. planners had to follow a path which contained not static objectives and rigid systems but one which led to broad guidelines continually reassessed;

4. an awareness that the needs of society are difficult to predict with absolute accuracy. Mutations occur and make rational planning complex. Thus, at regional level appraisal of broad imbalances is possible but must be complemented by sampling at grass roots to measure shifts in the human response to changing circumstances. Specialist data from both levels of operation must become integrated and synthesised through planning. The only realistic constants on which planners can work are those concerning mans biological needs;

5. the planner is a servant of the community. Under the terms of his own professional ethic he works towards the abbreagation of his own powers through sharing the decision making process. He is responsible for creating the machinery by which this can be achieved.

The implications behind Geddes's ideas have only been partially realised in contemporary planning. In his own work he pointed the way towards an administrative and professional structure and the tasks he tried to accomplish alone have today become split into many separate operations carried out by many specialist fields. These sometimes come together yet more often work along separate lines. The central codification of disparate effort through planning has yet to be created. From Geddes it is still possible to draw lines of action towards this end. Being involved in the process of goal isolation planning is intimately bound up with politics and the processes of political representation. The current attempt to reassess the local government structure is an opportunity to forge a new more advantageous relationship between the two. Both processes require effective regional capability to devise strategic goals and at the same time the means to make more/

more meaningful contact with the citizen at grass roots. It follows that as planning is a major element in influencing and implementing political decisions it must be given the opportunity to work towards its objectives within a more modern administrative structure. An opportunity is afforded for such a reappraisal in the Geddesian notion of the central research unit as an adjunct to the regional political body. This provides the basic planning intelligence through which regional strategy can be assessed. It may also have a role to play at a lower level in providing field assistance to local planners in projects of particular complexity for instance central redevelopment. The criteria on which the central unit must be founded is that of independent of the political body per se and therefore non sectarian in nature. This would require a situation where politicians were prepared to accept that its independent role was indeed of general benefit to regional politics. Bodies of this nature have been created for specific purposes. Data for the Royal Commission on Local Government has been forthcoming from specially created intelligence units. These have found it necessary to commission research from Universities and other research bodies. Their function ceases with the publication of the Commission's recommendations. Central Government maintains its own research departments but apart from the research promoted by the Economic Planning Councils there are no examples of regional intelligence centres of the kind Geddes advocated. One must look towards the creation of this type of institution as a spearhead in regional planning in the future.

What of planning at grass roots? Given the creation of a central intelligence unit the current notion of the local planning office with a research function coupled with development control becomes outdated. The larger humanistically orientated role of planner as parish priest can thus be made possible. His efforts can become directed towards forging a more intimate link with the citizen, the promotion of participation and the integration of the planning function within the wider fields of social service and local politics. This is a task which becomes all the more significant the further one proceeds along the road of concentrating strategy planning at the regional level. This aspect of Geddesian thinking calls for a greater flexibility within the planning machinery; a possibility to inbuild a feed back mechanism/



mechanism to the regional level and to create ad hoc units in which architectural and behavioural specialisms together with planning are represented and which function alongside the community councils and political machine. Indeed such a situation to fully become realised requires a new definition of what planning should be and a willingness by public politician and planner alike to accept that it can have a positive educational role.

What has Geddes to offer as to the training of planners in this new situation. His own life offers some answers. He started from a secure scientific base which gave an insight into the interconnections between phenomena. He then moved to incorporate into his thinking studies which shed light on behavioural patterns. From this one may deduce that one means of acquiring an acceptable synoptic viewpoint is to follow a course of study which is itself generalist in form and which strives to fuse an understanding of science per se with an appreciation of human needs. Through his Tower Geddes mounted an education scheme whereby this approach could be given to those without any form of previous training. At all stages Geddes adopted a basic premise that planning is concerned with ethical values and that, as such, the planner is concerned with areas of investigation which are not fixed and quantifiable. Any scheme of training would become self defeating if it gave the view that techniques of analysis ; a machine could provide all the answers. The bedrock of a Geddesian course would therefore, rest on a study of civics and would be in essence an education in how a society functions. Elements would appear illuminating Technology and society (an investigation of the impact of technology and science in its discriminate and indiscriminate use); Contemporary social and civic history (an isolation of trends and technological possibilities; Elements of the behavioural and phenomenal environment (geography, ecology, sociology, economics, politics, psychology, administration, public relations).

It may also be suggested, based upon Geddes own teaching methods, that he would advocate direct involvement by the student in the field processes of a number of these studies. One is able to pinpoint social work and political/

political decision taking; short secondments in vacation periods would give a needed practical leavening.

The primary scientific input would arise from studies of the possibilities offered by various statistical computer and data processing techniques. It would follow that these studies would be underpinned by courses in logics and cybernetics. Much of this training could be linked to the work of goal assessment in regional research unity.

What of the other special training in planning. This would arise from practical project work and that largely bearing on problems of the moment. At the regional level, strategy planning; at community level; rehabilitation, conservation, central redevelopment could afford ideal examples.

The Geddesian system introduces elements different from those at present given weight in planning instruction and alters the balance of others. It takes out a present requirement that planners master specific techniques and become emeshed in overspecialised courses of instruction. It places a premium on the level of understanding and relating and delegating to others the mechanical work of line drawing. Geddes would have applauded the approach adopted for the Columbia new town where there has been an attempt to pose fundamental questions relating to the values which might apply in a project and their translation into practical reality. It is just this type of rigorous discipline which links the desirable and the realisable which Geddes himself imposed on his students.

Nevertheless this type of training is open to criticism especially on the grounds that it could become somewhat superficial and certainly would extend the time scale at present adopted in many Universities for a training in planning. Superficiality is always a danger when one is attempting to introduce many specialised disciplines into a short course of study. It is a problem not unknown in current training programmes for planners. A corrective is inbuilt in that attention is focussed upon real situations. In answer to the criticism that society has too few planners at present and cannot afford to allocate more time to training Geddes would reply that such a priority is inevitable if the profession is to respond to the more complex/

complex and different demands which are being made upon it. Ideally a foundation should be created in schools through civic studies but the planning profession itself cannot avoid its responsibility to give to its practitioners that level and type of education which its role demands.

One further question arises. Is planning an undergraduate or post-graduate discipline. Geddes worked towards the creation of a profession with its own rigorous discipline. This evokes a high order of synthesis. To break down the barriers imposed by specialist studies to achieve organic thought can prove difficult. This difficulty is found even in those students who have already followed courses of instruction which themselves are integrative; geography and architecture are notable instances. Although Geddes himself moved out from a specialism he never became emeshed in the narrow confined of a purely specialised academic training. As a teacher he fought to create a situation where the specialist was at one and the same time a generalist. It follows logically that Geddes would advocate that planning training should be undergraduate in nature. Does the specialist then have no role to play in planning. Far from it. There is a need for the use of specialist research if it is integrated and subject to a wider horizon. For some time to come this will be found at the regional level and a short post-graduate course which teaches something of what planning is about and how its needs can be met by the specialisms would facilitate an integration between the mainstream of planning and its support echelons. This is a different level of expertise and somewhat divorced from that required where planning has to be the most effective ; and play its greatest part in the local community.

As in the application of Geddesian thinking to the wider planning field his implication for planning education leads inexorably to a view that he offers ideas relevant to modern needs. We have moved some way along the paths Geddes advocated largely through the pressures generated by a changing world. A number of thinkers have already perceived that a more comprehensive approach is now required to gain an understanding of the complex inter-relationships between the phenomenal and behavioural environments. Such studies evoke issues relating to values and priorities. The implication for planning as a discipline is that it must strive to become more/

more life orientated and update its role as an agent of change. A Geddesian approach goes some way to suggest how this may be achieved.

## RESUMÉ

This study of Geddes has shown that of the modern pioneers of planning Geddes was one who perhaps ranged the most widely in his thought and activities. Indeed owing to the very diversity of his work it is virtually impossible to place him in any one major town planning movement. He intersects them all. His work is heuristic, futuristic and ad hoc; he is man and system orientated; he shares with the social reformers an attach on the slum; with the utopists, a vision of a new social form. Geddes took the whole world of knowledge and activity as his domain and if one has to pin labels on him one must pin them all. As a man of ideas he was not unique though the outpouring of his thoughts is amazing in itself. It is in the juxtaposition of borrowed ideas that his uniqueness is found.

The fact that he transcended subject boundaries brought antagonisms and yet some form of patronage seems always available to him. He was an optimist who saw the evolution of a balance between technology and science on the one hand and the aspirations of men on the other. His life's work was to create an ethos of thought in which this could become realised. He thus came to weave a coherent philosophy which rejected prejudiced laden philosophies and narrow sectarian thought; his only criteria seemed to be that in all philosophies were some grains of truth which could be harnessed to the realisation of man's creative possibilities. To know and then to act in the general interest was his standard. In all his activities he made contributions but perhaps his greatest significance was his influence on the minds of others. He tried to inculcate a desire to search for answers to basic questions about society; economic development and science to what ends; the social consequences of hasty action; how can the resources of the environment cope with the demands made upon it by change. He was a concept getter and whilst he could work in great detail his main contribution lay in the broad sweep of thought which could be applied and updated with the passage of time. Whilst Geddes worked at a considerable level of abstraction his feeling for place and people made him no mere unrealistic dreamer. He started with things as they were and had matured and tried to make the best possible use of his resources to avoid waste/

waste in the interest of lasting profits. His work in India epitomises this humanitarian element in his planning. India took a heavy toll on him. The loss of his wife and son, ill health and age brought him finally to France where he attempted a last fling through his Montpellier college. Branford records an admiration for a man of action even as late as 1930 -

"During his stay at Montpellier he was seized with the idea of buying a very beautiful bit of health land that happened to be for sale suburban to the city of Montpellier and making there a new kind of garden suburb - he crougth here great stacks of new diagrams which express his most recent thought and he wants to get them in order. He is much better in health but the Dr. here has diagnosed a touch of colitis still lingering in his intestine - also this Dr. finds him in a state of rather extreme anemia and has ordered him not to walk more than 20 minutes each day - a very severe deprivation for PG accustomed all his life to long walks daily."

Mumford has been critical of Geddes at Montpellier in that Geddes tried to express his philosophy in buildings not personalities. It is true that he became obsessed by a wish to create an international collegiate grouping and that his pen outstripped realities and yet here the whole objective of the exercise was to break down overspecialised thought amongst his students. As with Sweitzer students flocked to him. They came to a place carved out of dry soil; with an insecure financial base and yet one which carried on under the impress of Geddes own personality. He seized any kind of opportunity whether it was really suitable or not to give expression to his ideas for in this man each activity was a natural outbreaking of his latent energy guided and directed by his whole thought and philosophy. He could be wilful self absorbed and tyrannical and with a ruthlessness of a man wholly intent on his own ideas. It was these manifestations of age which brought him to disregard the independence of others. Such is often the character of strong men with a purpose to achieve. Yet Geddes was also a man of great soul who could inspire devotion and love. He had a feeling for man, and his foibles and weaknesses in no way detract from this.

Biographers have seen his life as one of failure after failure. He left jobs half finished, had episodic enthusiasms and gives the impression of a man who avoided carrying his ideas to logical conclusions by giving procedural form to them easily followed by others. Indeed Mumford has censured him for not being sufficiently radical for leaving the task of translation to others. Here Mumford appears to miss the point of Geddes work./

work. He gave ideas freely pointed out choices available but tried to avoid imposition of a rigid frame. Those most affected had to make this decision of how form could embody idea. This is a consistent aspect of Geddes belief in democratisation. Nevertheless it did contain the seeds of failure. There was implicit in this view that given objective analysis and option delimitation varying public interests would come together and be resolved and that competition would become translated into co-operation. His educational process was based on this outlook and planning as a discipline devised with exacting standards to promote this situation. The world seemed to deny Geddes some of the natural fruits of his labours and yet the offer of a knighthood is testimony enough that his talents and influence did not pass unnoticed.

Geddes had an incalculable effect on others. He possessed elements of the universal mind and by inclination was a teacher. He ranged widely over many fields and his capacity to give convincing interpretations of phenomena had a great influence on his contemporaries. He bequeathed the legacy to his successors which only great teachers can; an approach to life an influence as Abercrombie records which continues to spread its infusion without losing its vital elan. His direct influence is measured in the work of others - Pepler, Abercrombie, Unwin, Glikson, Mumford. Of these perhaps only Glikson experienced in full a realisation of the truth which pervaded Geddesian thinking that comprehensive regional planning is an expression of a special social idealism. Other planning experiments bear witness to this. The Dutch polders, the New Towns, the TVA, the Appalachia Project. Today Geddesian ideas are again on the march in a new search for values; in regionalism, counter drift policies, reaction to overspecialised academic training. The world has been catching up on Geddesian thought; he lived by learning and by learning he lived. He offered many answers but perhaps his best epitaph is that he asked the right questions; this is the beginning of sound planning and progress. The last word rightly belongs to Geddes himself -

"I am deeply impressed through life by the formalisation of the spirit of all good beginnings. Function forms structure but these soon inhibit further developments through fixation of the freedom of the spirit - let those who see further than we as yet do - waste no time in mere criticism unaccompanied by suggestions and endeavours but do what they can to move forwards their/

their comrades and colleagues, their teachers also and if they fail in this after dire patience and example let them start off as a new swarm to set better example to justify their personal ideal personal endeavour and collective influence as but they may let there be no rigid and inflexible rule wither monastic or temporal but a growing consensus sympathetic and reasonable in and towards progress."(1)

"What do I believe? In what do I believe. I believe in Life, in LIFE more abundant, hence not measured in mere externals of quantity but internally too, and in its varied quantities, its latent possibilities - so towards its powers, developing personality, evolving through community service and towards humanity. Like others I have had my opportunities of "success in Life" in its commonplace forms, pecuniary and leisured or of status academic to social with scientific and literary ambitions, but it has not been too difficult to put aside these attractive temptations since other and farther life ideals have beckoned; so towards hermitage for further observing, thinking and teaching and to educational and social endeavours in which the very difficulties often turn to opportunities. Hence from earliest sympathies and interests towards dreams of what one now calls syntheses and synergies which though of course short of attained are still going on in hope and daily a step further." (2)

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1. Memo undated from Professor Patrick Geddes to successors in continuing and conducting this college des Ecossais in its developments and co-operation and its relations to circumstances as they arise.
  2. What do I believe. Bombay 1924.



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