The Spatial Structure and Growth of Tourism in Relation to the Physical Planning Process
The Case of Greece

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ABSTRACT

This dissertation is concerned with the spatial dimensions of tourism and related physical planning issues, focusing on Greece. It explores relevant research in this area, analyses the structure of tourism at different spatial levels, and relates tourism's spatial structure to planning parameters.

Within the W.European context, tourism's growth and spatial structure reflects a process of leisure division (tourism demand and consumption differentiation) attributed to (i) marked inter-country differences regarding socioeconomic, supply-attraction and accessibility factors, and (ii) the international organization of the tourist industry: the influential role of tour operators and airlines in controlling market size, price of the tourist product (TP), and transport links.

Tourism's spatial structure in Greece is influenced by both endogenous and exogenous factors: (i) the country's socioeconomic development process, territorial structure and regional accessibility, and the organizational mode of the Greek tourist industry and relevant government policies (investments), and (ii) the way Greek regions are connected with the international travel system, and are affected by tour operations; the latter, building on existing locational advantages, and reinforcing development in "established" places.

Physical planning, confined within a legalistic frame of restrictive measures, is weakly related to economic and sectoral planning; negatively affected by administrative-institutional constraints (inadequate planning system, legal-statutory frame, planning organization); ineffectively integrated into a planning process characterized by limited political commitment to, and social awareness and acceptability of planning action. The ineffectiveness of tourism and physical planning to influence endogenous or exogenous factors, underlying tourism's spatial structure, is evidenced by the absence of any substantial rapport between the kind of physical development taking place, and concurrent planning practices.

The advanced "territorial profiles" and tourist policy proposals provide: (i) a methodological frame, conceptualizing tourism's organization on a territorial basis, for interrelating and integrating economic, sociocultural and physical dimensions in tourist development planning, and (ii) a planning guidelines-frame suggesting the main policy directions for TP and market restructuring, and for improving physical and tourism planning practice in Greece.

CHAPTER I

Introduction

There is a particular interest and specific motives and aims underlying the selected theme of study and the direction of our research work.

The interest in the field of study stems, mainly from the author's research work and planning practice experience over many years at the Centre of Planning and Economic Research (KEPE) in Greece; where he was involved primarily in physical, regional and tourism planning work, within the frame of KEPE's competence in five-year plans formulation at the national level.

The main motives of our research work and the aims of such an endeavor may be delineated as follows:

The first motive derives from our feeling that the growing complexity of issues pertaining to tourism's spatial structure and planning asks for a thorough understanding of the relevant tourist phenomena; asks for exploring and seeking answers to specific problems and questions: which are the factors involved in tourism's spatial growth at different spatial levels? Which is the nature, scope and influence of the planning process in Greece, and especially what is the relation of specific physical and tourism planning contexts and parameters to the actual tourism development process?

The second motive relates to our awareness that tourism in Greece is of great importance with reference to the country's socioeconomic life and to the use of environmental resources, and has reached a stage, in the course of its growth, in which the emerging problems and issues present for the planner a considerable challenge. How can a planner, or planning in general participate in the reconciliation and attainment of diverse demands of the (international and national) tourist market and socioeconomic development goals? Demands and goals which relate, e.g., to increasing tourism's contribution to the national economy while promoting regional development, to providing a fuller use of resources (to improve the country's competitiveness in the international market and serve various needs) while conserving and enhancing the

same resources that constitute the major assets and attractions of tourism.

Within such a perspective the thesis aims at contributing to the improvement of planning practices and at correcting present inadequacies in the physical planning process pertaining to tourism's spatial organization; minimizing conflicts and maximizing convergence within the domain of planning practice or between planning objectives and actual development processes.

In pursuance of the above aims we set out to explore specific research topics which are included in the study's instrumental objectives outlined below, as well as, in the introduction of each of the subsequent chapters.

1. Objectives, major hypothesis and research directions of the study

1.1. Objectives of the study

The first objective of the study is to search into specific factors which are thought instrumental in determining the spatial structure and growth of tourism demand. At the wider geographical level chosen (a group of 12 W.European countries including the USA), we consider either country - specific factors, pertaining to particular selected socio-economic characteristics of a country's tourist market, its accessibility and resources features, or, we consider certain factors which characterize the organizational structure of international tourism market and the related travel mechanisms and agents. At the national level (the Greek territory), the factors considered pertain to the country's socio-economic and territorial structure, to selected regional variables, as well as, to specific market factors which are thought to influence the spatial pattern of tourism in Greece.

The second objective of the study is to identify and evaluate the major parameters of Greek planning, focusing on the physical and tourism planning process. In the pursuance of this objective, we endeavour to review current objectives, organization and administration in Greek tourism and regional development planning; to explore and diagnose how and to what extent several of the factors outlined above have been, or may be affected through the planning process. The results of this endeavour could yield usefull insights into the parameters that should be considered in the spatial organization of tourism.

A third objective of the study is to put forward and advance certain ideas with regard to an appropriate planning approach and a frame of policy guidelines to the problems of spatial analysis and spatial organization of tourism. The purpose here is to synthesize the various conclusions of our research work and fashion out an approach which may have a wider applicability and could be of use to the physical and tourism planning practices in Greece.

1.2. Major hypotheses and directions of research

The first major postulate of our research work is that the spatial structure of tourism is formed through the interaction of a series of exogenous and endogenous factors pertaining to the following:

a. The organizational structure of international tourism and travel mechanisms and to the particular conditions (socioeconomic, accessibility, resources-supply, etc.) which characterize inter-country differences or determine inter-country relations,
b. The "inner" dynamic of a country's socioeconomic structure and development process; an inner dynamic which is also reflected in the particular behavioural patterns, actions and relations (communicative, bargaining) of domestic public and private tourism agents vis à vis the international tourism agents.

It is the above postulate which determined the two basic axes (national, international) of the analysis, and the particular research directions which were followed.

The second major postulate of this study is that the "capability" of planning in general, and of physical planning in particular to influence the above outlined factors, and hence the spatial structure of tourism, depends on two interrelated sets of parameters:

a. The kind of planning practiced in general, and specifically the content and focus of physical planning in particular; the way of its articulation within the entire planning process; its competence to understand the complexity of problems and propose effective measures,
b. The country's superstructural framework: The state's role, activities and practices; the capacity of its legal-statutory system its administrative-institutional organization to regulate or influence the forces that determine socioeconomic development and its spatial dimensions.

Research work in this study proceeds along four major directions:

Direction A

Work in this direction sets out to explore Greek tourism's wider context employing two analytical approaches:

The first approach analyses (employing specific quantitative methods and techniques) the pattern of tourist flows among a group of countries with which Greece is "touristically" linked. The analysis aims at assessing magnitude, direction, temporal variation, as well as, causal factors of such flows.

The second approach aims at delineating an alternative frame for the analysis of tourism's spatial structure; an interpretative-methodological frame drawing on "theories" and paradigms of dependency relations at a core-periphery level and advancing certain propositions and arguments in the form of "untested" (empirically) hypotheses.

Direction B

Research work in this direction focuses on Greece and deals, in two sections, with both descriptive and analytical issues of tourism's spatial structure.

In section one, the aim is to describe (identify and classify) the spatial characteristics of tourism in Greece and explore patterns of demand (tourist clientele) and the spatial distribution of supply (resources).

In section two, the analysis follows two methodological approaches: The first investigates (employing statistical methods and techniques) the influence of selected regional attributes (e.g., resources, accessibility, etc.) on the regional distribution of demand. The second explores tourism's spatial structure within a wider relational context pertaining to the country's socioeconomic growth process, territorial structure, and to the organizational structure of international tourism.

Direction C

Research work in this direction deals with planning issues focusing on the physical and tourism planning process in Greece.

Methodologically, the analysis of selected paradigms of planning practice at each spatial level (national, regional and local plans) proceeds by setting out the general context of the planning process at each level, and then by describing and critically appraising the nature or effect of planning practice.

The aim here is to discern and discuss major conflicts and convergencies that may exist within the domain of planning practice, or, between planning objectives and actual development processes.

Direction D

Work in this direction involves predominantly a synthesis of various conclusions reached in the preceding analysis and the advancement of an appropriate approach to problems of tourism's spatial structure and organization; an approach which considers both methodological issues and issues relating to tourism planning practices.

Thus, the aim here is twofold: a) to put forward a methodological-conceptual frame that could serve in the analysis and formulation of spatial problems and policies in tourism, b) to set out a guidelines frame for the orientation and elaboration of particular policy objectives and measures.

1.3. Spatial aspects

Elaborating on the first objective of our study it should be pointed out that the major focus in our research is on analysing the already existing spatial characteristics of tourism, as well as, their growth through the years. Such as analysis seeks to describe and explain tourism's spatial structure on the basis of specific hypotheses relating observed spatial patterns of tourism's distribution to various categories of selected variables. In addition, tourism's spatial structure is approached within the context of the international and national tourist markets and the industry's organizational structure, as well as, within the context of particular state or government-administrative activities and policies.

A fundamental difficulty in attempting an analysis of the spatial aspects of tourism activities stems from the fact that a theoretical ambiguity characterizes the field, which largely, is related, as it will be shown in this and in the next chapter, to the specific nature and characteristics of the tourist phenomenon. The difficulty becomes

even greater when one endeavours - as in this research work - to cover a wide variety of aspects, when one considers tourism and its spatial structure, to be a fundamental element, one dimension among many others, in a system in which interrelated variables act and interact in a continuous process of change and evolution in space.

Another major difficulty we face in the study of the tourist phenomenon pertains to the availability and quality of tourism statistics, or tourism information in general. Data on foreign tourism provided by international organizations pertain mainly to volume statistics (foreign tourist arrivals at the frontiers of each country, nights spent by different, as to nationality, groups of tourists, etc.). Unless one undertakes specific surveys to measure certain additional variables (e.g., tourist expenditures), the existing statistics do not allow a typology or segmentation of the tourist market according, say, to tourist income groups or to holiday styles and tourist motives, etc.

Data on domestic tourism, recreational travel, and holidays, is even more limited in the case of Greece. As against other European countries (e.g., France, UK, etc.) were national social surveys of participation in recreational travel and vacationing provide information to "classical" statistical approaches (in terms of socio-professional categories), or "styles of life" approaches (in terms of the tourism activities pursued).

With reference to the data employed in the study, we should notice briefly the following. Data presented and analysed in pursuing our objectives will relate to different historical periods from 1963-1984. A major part of our analysis and the relevant data employed concern the period 1963-1973, which we consider a very important period in the growth of tourism, either within the Greek context or within the wider geographical frame we have selected to analyse tourist flows. However, additional data will also be employed selectively in order to cover certain periods which would be considered necessary for completing, checking or elaborating on the results obtained, or, for exploring further certain issues emerging from the analysis. The rationale and specific reasons for the data choices will be presented in the appropriate chapters which follow.

Within the above general context of information "constraints" and in pursuance of our first objective, the factors selected for consi-

deration are related to and dependent on the type of information available: information on international and domestic tourism, on tourism market characteristics, on tourist services, resources and infrastructure. However, the factors which are thought to account for the spatial structure of tourism are numerous and diverse. Drawing on the relevant literature (e.g., see Noval, 1975) we present in Table I-1 a list of variables grouped into major factor categories. Table I-1 indicates the specific variables employed in the statistical analysis or discussed in each chapter. In particular, the significance of certain socioeconomic factors will be discussed at length in Chapters III and IV.

1.4. Planning aspects

The present research work has a "planning" orientation, in the sense that it purports to contribute to methods and practices dealing with tourism issues in the planning process. Elaborating on the second and third objectives, it should be noticed that our particular attention will focus on two major topics.

First, at a general analytical level and within the context of the country's socio-economic, administrative-institutional and territorial development structure, we seek to analyse and understand the nature of the planning process in Greece; we aim at identifying the major components which delineate planning's position for the development process. To this end, we attempt to explore the kind and content, the procedures and effect of specific planning practices, as well as, decision and actions of several planning actors involved in the major phases of the planning process: a) understanding or interpreting phenomena and analysing facts, b) evaluating and establishing policy objectives and means of intervention or regulation, c) implementation of decisions and action taking.

Second, at a more specific level of analysis, we attempt to examine selected paradigms of planning practice at different spatial levels: national, regional and local. With this type of analysis we aim at indentifying conflicts and convergencies that may exist between planning objectives and current actions, or decisions of different development agents.

Viewed together, the two research topics outlined above serve the purpose of identifying those parameters in the planning process which, acting as determinants or constraints, relate to and affect the spatial structure of tourism.

Table I-1

The Spatial Structure of Tourism

(Underlying factors and variables)

Categories of Factors	Variables	Variables' scope and function in the study
Population-demographic	. Population of origin or destination country	- Included in the analysis as an independent variable (a factor generating foreign travel) to explain tourist flows (Chapter III)
	. Tourist population (by nationality or country of origin)	- Included in the analysis as a dependent variable to explain tourist flows (Chapter III) and as a factor to describe the regional distribution of flows (Chapter IV)
	. Age composition of tourist population	- Discussion of their significance and suggestions for their use (Chapter III and IV)
Socio-economic	. Per capita (disposable) income or per capita consumption	Included in the analysis as independent variables (factors generating foreign travel) to explain tourist flows (Chapter III)
	. Price of tourists' goods or cost of tourist services (in absolute or relative terms)	
	. Exchange rates	- Not included in the analysis
	. Socio-professional, educational, occupational characteristics	Discussion of their significance and suggestions for their use (Chapters III, IV)
	. Socio-cultural characteristics (family, social groups, clubs etc.)	
	. Urbanization degree or sectoral composition of employment	- Employment variables included in the analysis as independent variables) to explain tourist flows (Chapter III)
Interaction-complementarity or differentiation	. Distance (physical, time, common borders), Transport costs; Accessibility indicators	- Included in the analysis as an independent variable to explain tourist flows at the international level (Chapter III) or at the national level (Chapter V)
	. Size, type, attraction and distribution of tourist resources (tourist accommodation capacity)	- Included in the analysis as an independent variable to explain tourist flows at the international (Chapter III) and national level (Chapter V); also included as a variable to describe-identify the regional resources profile (Chapter IV)
	. Physical size and geographic location of a country	- Not included in the analysis
	. Cultural affinity: common language, religion, cultural exchanges	Certain independent variables (e.g., common language, migration) included in the analysis to define the attraction profile of a tourist destination (Chapter III)
	. Economic transactions and political relations: trade and international-regional organizations	
	. Migratory flows - previous emigration	
Institutional-organizational	. State (public sector) planning activities and policies; tourism-specific and related policies	Included in the analysis as variables affecting the spatial structure of tourism — Chapters V, VI
	. International travel industry organization: Tour operators, travel agents, airlines	Chapters III, V
	. National travel industry organization	Chapter V
	. Travel information and promotional expenditures	- Not included in the analysis

2. General methodological issues and the frame of basic assumptions

2.1. The diverse nature of tourism

Tourism is assumed, within the context of the present study, as having a three dimensional character:

a. Tourism economic dimension manifests itself through a series of transactions between consumers (buyers) and producers (sellers) of products and services: resources of various kinds, even "free riders" (sun, water) assume an economic value; tourism is also considered as an activity of an export-service character.

b. Tourism's sociocultural dimension manifests itself either through certain activities (e.g., visiting museums, galleries, participating in festivals, local fiestas, etc.), which may involve differing degrees of interaction among social groups, or, through the elements and components of what constitutes the sociocultural milieu of a locality.

c. Tourism's physical dimension manifests itself either through certain recreational activities (skiing, sailing, etc.), or through various natural and/or man-made components which constitute the landscapes, the physical settings or attraction poles for those activities to occur.

Tourism in particular geographical settings is thus assumed to have a three dimensional character: economic, sociocultural and physical. Additionally, an environmental impact analytical approach of tourism is viewed from two different sides: a) from the side of the effect of certain activities (e.g., touristic) on the total environmental components of a certain spatial unit, and b) from the side of attraction or influence exerted by all environmental components on certain activities (e.g., touristic). Thus, we have a series of mutual influences or cause and effect relationships within a diverse set of activities and components of a sociocultural, economic and physical nature; impacts are considered as the end products of the interaction among such activities and components; or, more analytically, as the result of changes in the economic sociocultural, and physical structures of a spatial unit brought about by the whole set of activities.

2.2. Development and tourism's growth

A major methodological issue of significance to our research work pertains to the clarification of the notion of development and development changes, particularly from the point of view of its distinctiveness from the notion of growth. Such a clarification would help in the selection of variables to be considered and accounted for in developmental changes, particularly those related to tourism. We attach to the concept of development a multidimensional character similar to that argued and emphasised by many researchers (Baxter, 1972; Mlinar and Teune, 1978); as against considering the economic dimension alone as used synonymously with growth (an accumulation of quantity and not qualitative changes). We consider development as a process of change not so much in the sense of advancing from a static situation A to a formally codified situation B but more in the sense of a transition to higher forms of social organization and human integration brought about by forces working within specific historical contexts and social manifestations. It is thus assumed, that development involves a series of structural changes, e.g., in the pattern of production, in the employment structure, in institutions, etc.; changes which affect efficiency and responsiveness to satisfying demand and needs. Development is finally viewed within the context of the international system; where certain forms of interdependencies are examined. We can then briefly conclude by referring the three parameters of development: a) The multidimensional character, b) The whole range of structural changes involved in the process, c) The relative position of the country within the international system.

Tourism development then within the above notional frame implies those changes in the development process initiated and brought about by tourism or tourism's growth.

2.3. Spatio-temporal units of observation

A second methodological issue concerns the selection of appropriate units of spatial aggregation as well as units of time for observing changes. Spatial units may be considered either as manifestations of social, quantitative and qualitative changes[1], or, as constant spatial units and frames of reference (administrative units) for explaining changes occuring within them and viewed usually as aggregates of growth (Mlinar, 1978). The first case is especially valid when one does assume that socioeconomic structural changes transcend usually physical space, or, administrative boundaries and the dynamics of social development cannot be easily confined and explained within constant spatial units. It is also argued, within the same context that physical location in space loses its significance as against accessibility which gains in importance as development proceeds to higher levels. It seems, therefore, logical to accept that physical space is in a certain flux, that spatial units should be considered as subsystems of larger systems, and that macro- and micro-spatial frameworks of analysis are interdependent.

There are two major reasons for seeking to identify appropriate units for studying development and assessing various structural changes or the impact of certain actions. The first is that for policy objectives formulation and actions, it is very important to direct or initiate development and its spread effects to locations mostly needed. The second reason pertains to the need of defining a research strategy; for empirically identifying those levels where developmental dynamics are emerging and becoming dominant.

Two additional parameters entering into the discussion of appropriate spatial unit of analysis relate to the nature of development (economic development, social development) and to the sectoral (tour-

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1. Mlinar, Z., "A theoretical transformation of social ecology: From equilibrium to development" in Mlinar, Z., Teune, H., (eds.), The Social ecology of change, Sage publ., London, 1978, p. 25.

ism, agriculture, industry, etc.) activities structure. It may be assumed that economic development, as against social development, can be conceptualised at higher levels of aggregation, is more macroscopic in nature; also, further, that the size of spatial units may differ from sector to sector. The quality of life problems and challenges are micro in impact. The sociocultural and physical dimensions - most characteristic indicators of the quality of life - can be studied better at local-community level; particularly when there is a strong political decentralised culture which favors and conduces local control and citizen participation in shaping, conserving and developing sociocultural and spatial life patterns. This does not contradict either national or regional considerations and objectives. It simply reinforces the view that spatial units in the course of development (time) and on the basis of the type of development (sectoral) change their role, importance and dynamism. Therefore, an expanding (local-regional-national-international) and contracting (international-national-regional-local) context of tautochronous viewing of spatial units seems to be the most appropriate method for investigating developmental changes. In tourism for example we have, when studying sociocultural impact, a micro-level behaviour interacting with global behaviour.

With regard to methodological problems concerning the time element, i.e., assessing units of time for observing changes, an appropriate method of analysis would be that which enables both a) an identification and explanation of structural changes at one point in time, and b) an identification of temporal-diachronic changes of structures (cross-time analysis). From a developmental and theoretical point of view, structural changes are viewed diachronically as discontinuities, rather than as continuities. This implies that for an accurate recording of the evolutionary change of a phenomenon, cross-time data or data which covers those points in time corresponding to irregularities or discontinuities is the most appropriate.

2.4. General considerations and assumptions on planning for tourism

Different and numerous definitions and views of planning, of planning theory and practice, have evolved and have been expressed over

time[1]. Although there is no generally accepted concept of planning there is a wide acceptance of planning a) as a set of procedures or a process - more than as a contextual framework of physical space organization and b) of planning as a set of changing policies of differing nature - more than the setting up of plans. We believe that such evolving concepts and definitions of planning should be viewed in concert with the evolving concepts and developments in understanding and explaining the dynamic and complex nature of social phenomena as well as the complexity arising from the interaction of social, physical and natural systems within different environmental and geographical settings. Additionally, the different concepts and aspects of planning are related to the wide frame and context of various philosophical and political-ideological theses and positions held-planning as a means of social and political action[2].

In viewing planning as a politically significant activity which can influence socio-economic organization and development, the rationaleof tourism planning may then be seen under two perspectives : a) as a responsability and duty of the state to provide its citizens and all segments of the population with ample opportunities and possibilities to participate in tourist activities, and b) as a means to improve the economic structure of certain communities or regions, to enhance their physical and sociocultural environment - minimising existing divergences and conflicts between tourism and environment objectives - and to contribute to the overall performance of the economy, particularly with regard to the balance of payments.

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1. As examples of Anglo-American "views" one may selectively indicate:
   a. On planning theory:
      - Journal of the American Institute of Planners, Vol. 28, 1962, pp. 91-97, 103-115
      - Journal of the American Institute of Planners, Vol. 45, 1979, pp. 387-389.
   b. On systematic methods in British planning practice:
      - Town Planning Review, Vol. 49, Nos. 3, 4, July, October 1978.
   c. For a recent review on "rationality in planning":
      - Environment and Planning B: Planning and Design, Vol. 10(1) March 1983, pp. 1-122.
2. A case of "political planning", (scope and content) and experiences of W.German government "praxis" in planning is well documented in: Ehmke, H., "Planen ist keine Sünde", in Die Zeit, Nrs. 50, 51, Dezember, 1971.

Planning for tourism is considered in relation to planning for recreation and leisure. This implies that international tourism and domestic tourism (viewed in the broad context of recreation and leisure) are considered as integral parts of one planning approach, aimed at resolving a variety of conflicting interests and at satisfying diverse needs and preferences. Planning for tourism is also considered as a constituent part of the planning process of environmental resources management, a particularly important issue since tourism embraces many activities and makes use of a wide range of resources.

In the development planning process tourism at all levels of spatial consideration - national, regional and local - is viewed not only as a separate growth sector but also in its complementarities, consistencies or inconsistencies with other activities and sectors. It is assumed that certain causes of negative impact or planning ineffectiveness can be attributed to lack of complementarity among levels of policy or to the ineffective integration of policy pertinent to tourism at any one level. A comprehensive and coordinated approach to planning for tourism would aim at linking up the various levels of planning; incorporating in a national frame of policy guidelines for tourism, urban and regional planning aspects and also incorporating national policy strategies in regional and urban plans.

3. An Overview of Tourist Phenomena

3.1. Definitions of notions, and terms

The brief presentation of definitions undertaken here, is an endeavour aiming at presenting the study subject more clearly and delineating the main issues. It is not within the scope of our research work to yield detailed and in depth insights into the concept of tourism, its connection to the concepts of recreation and leisure, into a typology of tourist activities or into the relationship between tourism and economic growth or tourism and the society. The above issues will be examined in so far they support and clarify the areas of research chosen; namely the spatial structure and growth of tourism in relation to the planning process with particular emphasis to Greece.

A consideration of tourism within the notional frame of leisure and recreation raises certain issues which reveal the ambiguity and antitheses around such notions. Even if one attributes to tourism the character of a "freely chosen occupation or activity undertaken during leisure time", there is no clear operational distinction between leisure and work (leisure and work time)[1] or clarity and consensus as to the function and scope of such activities: i.e. leisure, recreation and tourism as producing satisfaction, or causing relaxation, diversion and personal development; or re-creating human vitality, a means provided to the worker in order to recover the vitality necessary for retaining or increasing certain desirable levels of productivity; or for gaining compensation from daily frustration and alienation brought about by the modern work-environment and work-social relations[2].

Tourism is given different interpretations depending on the context within which it is viewed. Such a contextual frame refers to the various disciplines within the broad field of social sciences (economics, sociology, geography, planning) and to the various ideological schools of thought. Very often, tourism is interpreted or defined

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1. See for example: Neuloh, O., "A new Definition of Work and Leisure under Advanced Technology", in Employment problems of Automation and Advanced Technology Stiber, J., (edit.), 1966 pp. 200-217.

2. For a historical review of leisure time concepts and leisure's role in society, see Totti, G., Il tempo libero (Greek translation from Italian) publ. Mneme, Athens, 1982.

as an activity, or a set of activities (particularly when viewed and related to the notion of touring and travel, recreation and holidays), within the context of an individual's or a group's behaviour during their leisure time. Tourism's "behavioural" interpretation suggests that tourist activities are diverse and assume different forms; depending on the characteristics and motives of the participating population and on the characteristics of the societal and environmental setting within which such activities occur. However, it would be difficult to accept and substantiate the assumption that people are "free to choose" from a wide variety of recreational or tourism options; or that within the existing socioeconomic system and its resources allocative mechanism, the distribution pattern of tourist activities is the outcome of free choice. Instead, it would be easier to suggest and support with empirical evidence that people have a limited range of choices, societally predetermined, or, have choices that are the outcome of the socioeconomic system itself and its particular resource allocative mechanism.

It is thus apparent, that one could think of a multitude of tourism functions each corresponding to either certain human needs or to "needs" societally induced (wants) or imposed as desirable and necessary consumption products[1]. The manner in which, however, an individual or certain social groups are satisfied by undertaking specific touristic activities seems to be determined by both the existing conditions (and the opportunities provided) in the society and their expectations, which in turn are constantly dependent and modified by the stimulus - condition of the environment, the individuals or groups are living in.

A formal definition of tourism is offered by the World Tourism Organization (WTO, 1975) whereupon tourism is considered as "an activity

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1. Tourism, according to Turner and Ash, is working at two levels: "as an institution giving meaning to non-work and as a product developed by an industry as another marketing opportunity". See: Turner, L., Ash, J., The Golden Hordes, Constable, London, 1975, p. 14.

embracing all movement whether across international frontiers or not, extending beyond twenty-four hours duration for all purposes other that permanent migration and regular daily work". Domestic tourism is then considered to be analogous to international tourism except that no international frontier crossing is involved. In the definition officially adopted by the International Union of Travel Officials[1] (IUOTO), international tourists are considered as all visitors staying at least twenty-four hours in a country other than their own and having the following reasons for travel: a) leisure (recreation, holidays, health, study, religion and sport) and b) business, family and mission, meeting.

Another conceptual definition of tourism is supplied by Burkhart and Medlik (1975) although with no exact time confines as the previous ones: "Tourism denotes the temporary and short term movement of people to destinations outside the places where they normally live and work and their activities at those destinations".

Two other frequently used terms are "visitors" and "holidays". The first term is used to describe persons visiting a country other than their usual place of permanent residence. It is a broader term than tourism, in the sense that it includes people staying less than twenty-four hours in the destination country (excursionists). The second term, is usually employed together with the term "package" to describe a particular type of vacations organization; arranged on an inclusive basis and embracing both accommodation and travel elements.

Apart from several specific terms and concepts which will be defined and explained in the appropriate chapters, it is in order here to define briefly certain terms, frequently employed in the present study.

The term pattern refers to the described character of the distribution of an activity or phenomenon among various spatial units; distribution denoting the manifested arrangement of an activity in space as well as the frequency with which it appears.

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1. Organization for Economic Cooperation and Development, International Tourism and Tourism Policy in OECD Member Countries, Paris, 1973, p. 7.

The term spatial structure expresses a procedural approach for a wide and general examination of patterns. It refers not only to static elements which characterize the distribution of an activity in space, but also to dynamic factors which describe and explain the distribution. Spatial structure, therefore, encompasses both static elements and processes, i.e. parameters and mechanisms which influence and bring about an observed distribution. As it is referred elsewhere "Spatial structure and spatial process are circularly causal. Structure is a determinant of process as much as process is a determinant of structure"[1].

Thus, as it is employed here, the term spatial structure concerns the economic, sociocultural and physical dimensions of tourism which correspond to particular kinds of space, and geographical distributions and involve particular spatial processes. For example, the designated, in various regional development plans, incentives zones (geographically delineated areas) to promote tourism investments and regional development, constitute and reflect a particular (economic) dimension of tourism's spatial structure. The term territory is understood as the spatial manifestation of the totality of socioeconomic and physical growth processes; a concrete spatial framework which reflects or may serve the comprehensive organization and integration of such processes.

3.2. The economic, sociocultural and spatial dimensions of tourism

The phenomenon of tourism considered as part of a certain constellation of phenomena within a dynamic process of change and development, assumes particular dimensions that exhibit certain characteristic properties. We purport here to outline briefly or "carve out" such characteristics with regard to economic, sociocultural and spatial dimensions of tourism.

3.2.1. The economic dimension

Tourism is very often defined as an industry, or more exactly as an export oriented service industry, apparently within the context of an economic system observed. This purely market orientation given

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1. Abler, R., Adams, J., Gould, P., Spatial Organization: A Geographer's View of the World, Prentice Hall, 1972, p. 60.

to the notion of tourism is predominant in most economic studies, or, in various development programmes and plans.

The overriding attention focused till now on the economic aspects of tourism - manifested in the large number of relevant studies, as well as, plans and policies undertaken by various public, academic or private agencies bodies and institutions - may be attributed, to a large extent, to the significance and fascination attached by governments and society at large to issues of attaining and sustaining high rates of economic growth, particularly in the post-war period; it may be further attributed to an unreserved belief that one can easily and rapidly attain and reap important economic benefits out of the tourist sector.

An economic analysis of the tourist phenomenon poses considerable difficulties of both conceptual and methodological nature; difficulties that pertain to and/or are due to the problems of defining assessing or determing the characteristics of either the demand factors (segmentation of the market, behavioural diversity of the tourist population, etc.), or the supply factor (the tourist product in general).

Macroeconomic research and studies deal mainly with problems of tourism demand forecasting and of the effects of tourism's growth on the national economy (on the balance of payments, income, employment, etc.). Demand forecasting studies (Archer, 1976) correlate demand variables with factors such as growth and size of population, income per capita, leisure time, education, etc.). They focus mainly on assessing the response of international tourism' demand to certain variables like income and prices-income and price elasticities of demand have been assessed on the basis of various analytical methods and techniques. However, the role and importance of tourism in economic development in general and to the balance of payments, in particular has been based on a rather superficial consideration of demand and supply conditions thought to prevail and characterize tourism. From the demand side, the world demand conditions cannot so easily be transformed or simulated into abstract model equations of certain quantifiable variables. Additionally, the structure of demand is not homogeneous and the same for all countries; a property related to the diversity of the tourist product. General demand estimates,

should be, thus, complemented with detailed demand studies to guide tourist product development. From the supply side, the economic nature of the tourist phenomenon is associated to the idiomorphy of the tourist product itself; its relative differentiation from traditional industrial or manufacturing products regarding the place of consumption - it is consumed in situ - its geographical immobility and its composite nature, i.e. the tourist product consists of many single items and services consumed separately, or, as "complete packages".

At the micro-level, the economic dimension of tourism concerns mainly particular areas or regions and the effect of certain development plans or projects. Tourism's role in the regional or local economy and in the economic life of rural communities - the extent to which tourism tranforms the economic base of such areas - are issues that will be discussed in the following chapter.

Certain other characteristics of tourism's economic dimension, pertain to its overall performance and behaviour observed within the context of several external factors and of characteristics internal to tourism. There are conflicting views and diverse discussions on such major characteristics as:

a. Tourism's labour intensiveness relative to other sectors; labour intensity being measured in terms of either cost per job created, or, employment-output ratios (number of workers employed in tourism relative to value added to the national income).

b. The vulnerability of the tourism to short-term cyclic fluctuations and the more general dependent character of tourism; on the grounds that tourist expenditures are particularly income elastic and consequently one item that could be reduced in recession periods.

c. The productivity of the tourism relative to other sectors, particularly from a capital investment point of view; rates of return of tourist investments related to hotel occupancy rates and the seasonality of demand.

3.2.2. The sociocultural dimension

From the macrosociological point of view tourism may be consider-

ed within the context of quantitative and qualitative changes in the collective social and cultural activities patterns of the population, or in tourism, recreational or leisure patterns in particular. Such changes may be discussed in relation to the effect certain factors have on the above patterns; factors pertaining to urbanization processes, mobility, leisure time, etc; or, factors pertaining to the international tourist market, the organizational structure of the travel industry and resulting types of tourist activities and behaviour.

The microsociological aspects of tourism, or sociological microstudies focus on issues of the social effects in certain geographical areas, that result from interaction processes (or encounters) among different types of tourists and the local population; or on changes in the social structure of a community within a broader context of cause and effect relationships that consider not only sociocultural parameters but also economic and political ones.

An important element attached to tourism is its search for "cultural" and "natural" elements[1], i.e., the folklore and traditional ways of life, the pastoral and antique landscape, the exotic and primitive emotions, etc. However, bourgeois' society attitude and practices towards this dimension of tourism, i.e., as an activity devoted towards understanding and/or obtaining experiences pertaining to the non material elements of life, raises diverse arguments.

The acculturation value of tourism and the commodization of culture have been discussed in several studies[2]. It can be argued in this connection whether tourist activities, taking place within the interactive setting of hosts and guests and a particular sociocul-

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1. "nature tourism" and "culture tourism" are discussed by Graburn. See Graburn, N., "Tourism: The Sacred Journey", in Smith, V., (Ed.), Hosts and Guests, The Anthropology of Tourism, Oxford, 1978, pp. 26-28.

2. See for example:
   a) Greenwood, D., "Culture by the Pound: An Anthropological Perspective on Tourism as Cultural Commodization", in Smith, op. cit., pp. 129-138.
   b) Cleverdon, R., The Economic and Social Impact of International Tourism on Developing Countries, EIU, Special Report No. 60, 1979, pp. 67-86.
   c) Nash, D., "Tourism as an Anthropological Subject", Current Anthropology, Vol. 22, No. 5, 1981, pp. 461-479.

tural milieu, contribute to a real understanding of either the indigenous culture or foreign behavior by guests and hosts respectively. The emerging question is whether the modern tourist is interested in a critical, dialectic explanation of local culture in such a way as to broaden his cultural horizon; or whether there exist opportunities and those preconditions conducing to a real understanding and explanation of foreign behaviour by the host population. However, in general and with reference to mass tourism and the Less Developed Countries (LDC) its has been observed (Edelmann, 1975) that "contrary to all good intentions and internationally nourished hopes, contacts between foreign tourists and the indigenous populations are mostly confined to a few chance meetings in some market or to a few words exchanged with the native personnel in hotels. Generally speaking, members of a foreign package tour hardly ever stray from their group, from the safe isolation of their hotels, the beaches set aside for their exclusive use or from their oft cited tourist ghettos".

The use of the notion "social tourism" has become a controversial issue. The term may apply to western capitalist countries or liberal economies where the state takes various measures in order to enable less privileged groups of the population to participate in holidays and vacationing. The engagement of public authorities in "social tourism" and the relevant measures taken do not only differ from one country to another but they also reveal differences of approach and attention given to the social aspects of tourism[1]. Further, the operational use of the term "social tourism" is regarded as questionable and instead the term "social" tourist policy is suggested as being more appropriate (Andreani, Barucci, 1977). In socialist countries the notion of "social tourism" is believed to have no meaning or real place (Markovic, 1977) since the state provides to its citizens equal opportunities for holidays; or, such provision is considered to be like work, education, etc., one of the fundamental duties of society, the community or the state.

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1. See e.g. English Tourist Board, Holidays: The Social Need, Report of the Social Tourism Study Group, ETB publ., London, 1976.

3.2.3. The spatial dimension of tourism's growth

The spatial dimensions of tourism's growth with particular reference to Greece is a central issue of our research work examined in the following chapters. Therefore, only certain general points are considered here in order to place the issue within the context of this introductory chapter.

Three of the most important spatial parameters of the tourist phenomena pertain to the attribute of location - i.e. places where tourist activities occur - the attribute of movement or spatial displacement - i.e. the flow of tourists from one location to another - and the attribute of time or temporal fluctuation of the incidence of touristic activities.

Tourism is considered as an activities complex with both a peripheral (distant zones and rural areas) and a central (urban and nodal) orientation or locational pattern. The socioeconomic conditions and differences among countries, the geography of tourist resources and attractions, the very nature and idiomorphy of the tourist product - the fact that it is not a single physical entity - and the organizational structure of the travel industry, particularly with regard to the transportation system, are thought to be the major and general factors instrumental to the location, at different spatial levels, of tourist activities.

Within the context of the world-wide organizational structure of the travel industry, tourism is, on a cross-industries basis, less concentrated with regard to being dominated by one or a few companies that dominate the world tourist market. (Turner, 1976). This relative "sectoral dispersal" may also be an additional causal factor to tourism's, relatively to certain other industries, smaller degree of spatial concentration. However, within such a context one should, additionally, notice the strength of certain tourism-generating countries and/or major tour operators of metropolitan origination to allocate resources (investment, managerial know-how and transportation links) and direct their clientele to locations favored by them. Also, with the growth of mass tourism and air transport the production of tourist services shows a tendency to concentrate in certain areas where the existence of several resource attractions and assets, as well as,

the existence of efficient infrastructure appear to satisfy the core's need for tourism's expansion.

Thus, drawing on the above one could view modern international tourist flows as "massive geographic displacements of seasonal or temporal nature" (Lundgren, 1975), effecting different spatial levels and appearing within a frame of pull and push forces, or, interacting cause and effect factors that pertain to the following:

a. A metropolitan based travel mechanism which initiates, controls and channels demand (tourist outflows) to chosen destinations; through a process of concentration and dispersal, organized efficiently in terms of economic profitability and management techniques in handling and transporting large volumes of people, and
b. The particular regional structure of the tourist product, its competiveness, attractiveness and ability to cope with and adjust to the changing requirements of the tourist clientele.

Distance, transportation and accessibility factors, expressed and measured in various forms and ways, play a very important role in the location of tourist activities. On the international level, such factors are viewed within the context of various interlinkages among groups of countries (trade, cultural affinity, etc.) thought to be instrumental to generation and/or attraction of tourist flows. On the national and regional levels, such factors are examined within the context of cause and effect relationships; where different types of outdoor recreational resources and tourist areas generate different types of demand for various activities and transport networks; or vice versa, different types of transport networks generate and offer diverse possibilities for the location of tourist equipment and activities. In other words, what has been termed "local accessibility" (White, 1975), seems to play a significant role in controlling the extent of tourism's growth in particular areas.

The question of differences displayed in the locational structures between outdoor recreational and tourist patterns has not been fully investigated. In certain studies (Rajotte, 1975) the observed dissimilarity of the two patterns is sketched very broadly; with the recreational facilities to occupy successively outward moving zones, surrounding the urban centres, while the tourist pattern exhibits a more

stable character, strongly linked to transport networks and nodes and following its spatial evolution. However, an important issue pertaining to comparisons between domestic tourist activities and international ones, with regard to their locational structures, deserves special attention. A final remark in sequence to the points made above is in place here. The dynamics of tourist facilities location is an issue that needs to be explored within a broader contextual frame. It should be linked to the urbanization process and land use changes taking place within a particular country; to the existing trends in the development of urban, peri-urban or rural areas, e.g. rural areas in the peri-urban zones gaining in importance with increasing energy costs.

4. Concluding points and organization of the study

In this chapter we have delineated and elaborated the study's instrumental objectives and have drawn the relevant major hypothesis and research directions to be followed. Further, in the chapter we have discussed the methodological issues involved in the analysis of particular problems related to our research objectives and we have outlined the frame of basic assumptions underlying our work. Finally, this chapter has presented an overview of tourist phenomena providing definitions of notions and terms employed in the study, and outlining the main characteristics pertaining to the economic, sociocultural and spatial dimensions of tourism.

The study is divided into eight chapters. Following this introductory chapter, in Chapter II we seek to analyse selected and relevant to our research objectives, themes and issues of theoretical and empirical research work undertaken in tourism. Chapters III, IV and V purport to explore specific of factors which are thought to describe and explain the spatial structure of tourism both at the international level and at the national level. In Chapter VI we analyse and discuss major characteristics of the planning process, focusing on physical and tourism planning practices, seeking to discern existing conflicts and convergencies within the domain of planning practice or between planning objectives and actual development processes. Chapter VII draws on the emerging findings and conclusions of the previous chapters to support and suggest an appropriate planning approach and policy guidelines for tackling problems of tourism spatial organization in Greece. Finally, in Chapter VIII we summarize the main findings and conclusions of our research work vis à vis the specific objectives set out in the beginning of this chapter.

CHAPTER II

Theoretical and empirical research background of tourism spatial development: a review of relevant issues with selected examples of questions to be examined.

Scope and thematic content

In Chapter II we review the existing theoretical and empirical research work pertaining to the spatial aspects of the tourist phenomenon. The purpose of the review is to fashion a conceptual frame in order to elucidate and further analyse, in the chapters which follow, several touristic issues; to cover specific questions which are considered to be of significance and use in understanding the factors underlying tourism's spatial structure and tourism planning. In the review of theoretical and empirical work we purport further to analyse and appraise the potential and limitation of several methods and techniques which have been employed in various studies in an attempt to approach specific problems and issues, or problems relevant to the theme of our study.

An understanding of the factors instrumental to the growth of tourism and particularly to the spatial dimensions of tourism's growth, constitutes a fundamental prerequisite for the planning of tourism at various levels: site or project level, urban and regional level, national level. Tourism planning practiced or undertaken by various countries and public or private organizations has various objectives. The major objectives being to maximise foreign currency earnings, income and employment opportunities; to promote regional development objectives, or, assist in redressing regional inequalities; to conserve and enhance tourist resources, i.e., natural and man-made resources which constitute the main attractions of tourism; to design, develop, and market appropriate and competitive tourist products within a changing international tourism market.

In the survey of literature we have selected to explore the following themes which are particularly relevant to the study's objectives:

- The first theme of our inquiry concerns issues of location and of the variables related to spatial distribution of tourism demand. Which place does tourism (or tourism as a socioeconomic activity) assume within the context of location theories? What is the theore-

tical and/or empirical background which has been developed in order to interpret the spatial distribution of tourist demand or flows?

- The second theme of our inquiry pertains to the development aspects of tourism, i.e., its overall "performance" in promoting development, viewed either within an international context, or at the national-regional territorial level. What kind of relations develop between "core" and "periphery" countries, and what role does tourism play in redressing regional imbalances and inequalities?

- Themes regarding the demand and supply aspects of tourism are approached through reviewing the pertinent literature on the nature of the tourist product, on the issues of tourist resources classification and evaluation, and on problems of assessing tourist preferences. The major questions emerging here are: Which are the factors that define the tourist product? Which classification methods have been developed, or which methods are employed for assessing tourist preferences?

- A final and, perhaps, the most important theme of our inquiry refers to the various aspects of tourism's impact. What has been advanced up to date in the study of tourism's multidimensional impact? How interelated are the various dimensions (economic, social, and physical) of tourism's impact?

1. Regional economic theory, location theories and the spatial pattern of tourism

In modern economic theory, the locational problems of economic activities began to be considered by von Thünen (1875) in a study on the optimum distribution of agricultural land use (concentric zoning of land use around a single market centre) in which he examined parameters such as market prices, technology, and place selection for locating production. Later, Lösch (1954) and Isard (1956) developed further the theoretical background with several models which attempted to explain or predict the spatial location of industry and other activities. The theoretical positions which were developed to integrate the dimension of space in economic theory, were based, originally, on three basic assumptions: a) uniform plane land (Eucledian geometry); b) uniform distribution of population and resources; c) uniform transportation costs.

Theories with such broad assumptions can only with difficulty explain or be applied to real environmental situations in which there is lack of uniformity in the distribution of population densities and in transportation costs. In addition, the models of traditional locational theories refer to an environment characterized by conditions of perfect competition; an environment in which no one firm can influence market price, capital and labour can move freely between sectors and there is perfect knowledge of the cost characteristics which correspond to all alternative locations. However, these models do not accurately explain the various conditions in the real world situation with regard to the behaviour and decision-making of a firm's spatial location. Of course, it could be argued that such theories do not aim so much at explaining the phenomenon but rather at suggesting a "rational spatial structure of the examined phenomenon" (Lösch, 1954); or, since they are normative in nature, they aim at facilitating a planned intervention with a series of measures and controls, in order to correct the imperfections in the real world situation. Furthermore, such theories provide a norm for comparison with the conditions which prevail in real world situations (Chisholm, 1975).

Locational studies have evolved along different directions. Stuies which develop a general theory of location, location studies fol-

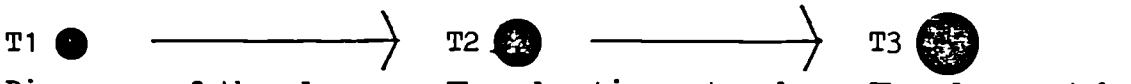
lowing separate roads of sectoral differentiation, and studies which focus on the location behaviour of individual firms by empirically examining real situations.

Among the location theories, of particular importance is the theory of central places introduced by Christaller and developed further by Lösch. The theory refers to an hierarchical patterns of settlements in which size, number, functions, spatial distribution, and their served hinterland are based on certain hypotheses and regulations.

The complexity of multidimensional space, the plethora of parameters which could influence and determine the structure, the relationship, and the evolution of various activities within a given space led, in the last 30 years, to the development of a large number of theories and models. Their purpose is to explain the empirically observed distributions, the relationships and the evolutionary processes which characterize the spatial phenomena. Many of these theories and models aim at explaining the various spatial phenomena either in their static form (pattern and layout), or in their dynamic form (in-between relationships and evolution processes), by using concepts and laws borrowed from natural sciences (Chisholm, 1975). In this chapter there will be inevitably a selective and synoptic presentation of certain theories and models which, either have been used in the analysis of this study, or are of special interest, due to their relationship with the spatial aspects of the tourist phenomena. The tourist activities, as a problem of explaining and determining their spatial distribution pattern, have been very little investigated to date. Locational theories and regional development theories have studied, to a very small extent, the spatial problems of tourism. Perhaps the reason for this is that tourism appears as a relatively new activity and, at the same time, exhibits an important idiomorphy.

The most characteristic studies in this area are those of Christaller (1964) and von Böventer (1967) which, although they lack a strong and coherent theoretical basis, are worth considering because of the difference in their approach. Christaller views tourism as an economic sector which avoids central places and is attracted to the peripheral zones of the urban regions. Although Christaller believes that tourists are attracted to the cities, because of only commercial and educa-

tional motives, at the same time he accepts (based on empirical observations) that the situation is different in the Mediterranean region; for example, Italy and, particularly, Sicily. Christaller's thesis is based on the assumption that the population of urbanized, densely populated, and industrialized regions seeks, during their leisure time, new experiences in distant-peripheral zones in order to escape from the everyday problems of the urban life. To support his thesis, Christaller uses statistical information which shows that the size and population density of urban centres are the determining factors of travel intensity (a term referring to the percentage of urban population participating in holiday travel). Apart from his major thesis, which he illustrates by siting examples from W.Germany and France, Christaller develops the following additional assumptions: a) the Average Length of Stay (ALS) per tourist increases progressively with distance from the centre of urban regions; b) the hotel infrastructure is located both in the central places and in the distant zones of urban regions; c) the development of tourism in the Mediterranean coast follows a differentiated pattern, i.e., it does not conform with the major assumption; and d) the typical evolutionary form of tourism development of a place follows schematically the following process:



Discovery of the place by certain social groups (e.g., artists).

The advertisement and the integration of the place within the tourist circuits and travel packages by public and/or private tourist organizations or agencies.

The place establishes its own fame, becomes fashionable, and attracts investment interests.

Commenting on the above thesis, von Böventer questions its validity on the grounds that two factors which he considers important - transportation costs and agglomeration economies - do not enter into Christaller's assumptions. The last factor, in particular, which plays an important role in the development of central places, influences, in the case of tourism, the size and range of various categories of tourist and recreational goods, and services which together, and in combination with other functions of central nature, constitute the poles of attraction for a part of the tourist population.

It could be added, in this respect, that apart from the production

functions and agglomeration economies referred to by von Böventer, the individual behavioural pattern could also explain the participation of tourist in various activities which correspond to various, spatially different, places. Nevertheless, the relatively new research field of behavioural studies, as it is applied to the disciplines of planning and geography and, more particularly, to tourism and recreational studies, does not offer yet conclusive or sufficient evidence which could support and explain tourist behaviour and, consequently, be of further use in models explaining the spatial distribution of tourist activities. In any case, Christaller's thesis - which has as an explanatory basis the motive "escape to nature" - cannot have general applicability when other different theoretical assumptions are examined. For example, the assumptions which consider that the individuals during their leisure time choose recreational activities which are similar, or correspond, to those of their daily life environments - theory of familiarity (Hendee, 1969). Perhaps a broader assumption could be more appropriate here; one according to which the urbanite seeks, apart from "natural environment", also facilities which are part of his everyday life and habits, facilities which by their nature and function assume nodal positions and an urban orientation in their spatial distribution. Elsewhere (Cosgrove, Jackson, 1972), it is argued that Christaller's thesis - tourism being an activity of the periphery - is substantiated only in the case of the present day aristocracy, or high income groups of the population.

In the scale of the urban region, it has been assumed that population density is the major factor which determines the spatial distribution of recreational equipment (Mitchell, 1969). Two other important factors, namely, recreational resources, attraction, and distance, are not considered to be constant since different population groups perceive both resources, attraction, and distance, in a different manner depending on the population density. However, such an assumption, in spite of its interest, has not yet been tested empirically. This may be due partly to the fact that the two factors - attraction and distance or, more specifically, cognitive distance - have not as yet been determined and measured satisfactorily (topics to be discussed later in this chapter).

A theoretical interpretation of tourist space development at the

regional level is provided by Miossec (1977). According to the author, tourist development follows four phases. In the first phase, an isolated tourist "station" is implanted. During the second phase, several stations are developed in different locations and the tourists progressively follow specific transport networks. In the third phase, every station organises its own "environment" and a kind of hierarchy develops between the different stations. The last phase is one in which specialisation of each station and a connecting network are fully established, and saturation already starts becoming evident.

Concluding the analysis in the section one should point out the following:

First, it seems that tourism has not been figured promptly in regional economic theory, or in location theories, as against other activities - for example, manufacturing and commerce. Further, most of the locational models which are normative economic models, draw on the micro-economic theory of the firm and the relevant concept of profit maximization. In this connection, it can be argued that the concept of tourism within such an analytical context assumes a rather limited scope. As will be seen later, when we attempt to describe the tourist product, tourism is rather a complex assembly of heterogeneous elements.

Secondly, the research work on location examined by the various tourism location models is more of the descriptive rather than the explanatory type. In addition, certain models have been subjected to a very limited testing. For example, Miossec's theory is substantiated only on the basis of tourist development in Côte d'Azur.

Thirdly, location theoretical models in general, and tourism location interpretations in particular, do not seem to have envisaged, or, have generally overlooked several significant in our opinion features of to-days world economy, or important with respect to our specific case features of the international tourism organizational structure: mass production and mass consumption, the resulting expansion of the scale of operations, the formation of tourism MNCs, technological innovations in transport and in information systems, etc.

From the above it is within reason, therefore, to conclude that locational theories per se and related studies do not provide as yet

sufficient backing for analysing tourism's spatial structure, or for formulating and supporting relevant spatial tourism policies. However, it can be generally concluded that tourism as a sector - or a bundle of diverse activities - assumes both a central and peripheral spatial orientation, depending on the types of tourist clientele and resources. Also, it may be assumed that the different spatial forms of tourism are dependent on the particular, territory-specific socio-economic and physical characteristics and conditions pertaining to each country, or region. These issues and assumptions, however, will be explored and discussed in this and subsequent chapters.

2. Explanatory models of tourist spatial demand. Geographical patterns of tourist flows.

2.1. The frame of general assumptions

The largest number of economic and geographical studies which deal with problems of the spatial dimensions of demand and supply refer to recreational activities rather than to tourism, *per se*. The focus of such studies is on solving the interrelated problems of demand assessment and forecasting and, additionally, on those problems which refer to the value and benefit of recreational resources and services. Usually, the value or benefit resulting from the use of a specific recreational resource (a park, or an organized beach) is equated with the value that this specific resource has for the consumer; value which can be measured provided there is information regarding different expenditure patterns, as the costs different population groups are willing to undergo for the use of the resource. Most of the studies in this category which refer to spatially well-defined areas, such as reservoirs, lakes and parks, rely on detailed data regarding visitation rates and expenditure and employ the travel cost method of Clawson and Knetsch (1966). According to this method, a demand curve results from correlating alternative demand quantities with alternative costs (travel cost and resource use cost, as well as, very often, a measure cost related to time loss due to traffic congestion, etc). This method which has been employed by many researchers (Smith, 1970; Cesario and Knetsch, 1976; Mc Connell, 1977) can be expressed in the form of a simple function[1] with two variables, or, in more complex forms, with the introduction of additional variables corresponding to the characteristics of population (income, education) and resources (size and attraction). The consideration of some broader assumptions and major points made in all these studies is now in order.

1. The location and size of demand for recreation is influenced by both the place and the characteristics of the consumer-user and the place and the characteristics of the recreational resources.

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1. $V=f(C)$ or $\log V=\log A_0+A_1 \log C+\log e$ (where V is the size of demand or number of visitors and C is the total cost).

2. The very nature and characteristics of demand (differentiations as to the spatial distribution and economic, as well as, demographic, composition of population) and supply (differentiation as to the spatial destribution size and attraction of recreational resources) explains the double spatial orientation of demand:

a. Resource oriented demand, i.e., demand directed towards the resources.

b. User related demand, i.e., demand which depends on the consumer and the place where he resides (residential area, neighbourhood, town).

3. As the site where an industrial unit is established influences the distribution cost and the firm's profits, similarly, the site where a recreational service or facility is established influences visitation rates (number of visitor arrivals) and turnover. In addition, as the markets of similar categories or commercial-business activities form discernible geographic patterns, so does the tourist market.

The above mentioned assumptions, provide the theoretical basis which various models employ to explain the spatial recreation patterns; they, additionally, contribute, in the planning process of selecting rationally either the optimum sites appropriate for the establishment of a predetermined range of tourist activities, or, alternatively, the optimum composition and range of recreational equipment and services in a priori selected, or given sites.

Also, it should be pointed out that most of these studies are based on the consumer surplus concept; they estimate the benefit for the consumer, or for a group of consumers, and not the social benefits at large. Furthermore, in spite of "technical improvements" in estimating factors such as distance, cost, travel time, and congestion (or, more generally, the distance function parameter), as well as, factors relating to resources attraction and competing opportunities, still the consumer-user's behaviour cannot be fully explained since factors such as social, and psychological significantly influence his behaviour.

2.2. Linear models

Linear models aim either at determining the total levels of future

demand or at assessing the relative importance of the different demand variables. In either case, the effort is directed towards the formulation of some theoretical explanatory basis which justifies the appropriateness of the independent variables and towards the assessment of their statistical significance. Evidently, the critical appraisal of these models is related to the extent that their underlying basic assumptions are accepted; namely, that the locational choices made by the consumers - tourists are influenced by the per capita incomes in the country of origin, transportation costs, prices of goods and services, and certain environmental characteristics of the destination country. Another point of criticism raises the issue of their forecasting value which, apart from the "technical imperfections" of the applied statistical techniques, concerns the hypotheses regarding the future behaviour of certain independent variables; more specifically, whether the presently observed relationships will remain constant in the future.

2.3. Spatial interaction models - Gravity models

A significant number of theoretical and empirical studies, in the areas of travel flows and models of spatial interaction, refer mainly to the transportation sector and, particularly, to shopping and work-business trips and, to a lesser extent, to recreational and tourist travel. The basic objective of such studies is to explain and forecast spatial patterns of population movement, different forms of interaction and relationship between places, or centres of population, and places where certain economic activities (e.g., a commercial centre) are established.

Most of the spatial interaction models which have been developed are of the gravity type. They relate Newton's law of gravity ($F=G\frac{M1\ M2}{D2}$) to geographic factors of tourism: where the power F expresses the between two countries flow of tourists[1]; the masses M1, M2 correspond to the characteristics and the ability of the origin and destination countries to generate and attract tourists; the distance factor is expressed as a physical measure (kms, mls) or in re-

1. Tourist flows are described and meausured by the total number of visitor or tourist arrivals at the frontiers of each country, or alternatively, by the nights spent or foreign tourist expenditures.

lation to travel cost and time; and the gravity constant G is expressed with a geographically variable multiplier. Similar, or belonging to the same broad category of gravity models two other type of models can be considered, namely, systems theory models and entropy maximizing models (Wilson, 1974).

Gravity models differ from the linear models with respect to: a) The degree of emphasis given to the distance factor; b) the character of interaction which refers to pairwise relationships between geographical units of observation; and c) the importance attributed to the spatial dimension, although such a dimension has been expressed vaguely and with some abstraction. In the gravity models, which have been critically analyzed elsewhere (Ellis and Van Doren, 1966; Thompson, 1967; Noval, 1975; Archer, 1976), the objective is to explain and determine the existing and/or the future levels of flows between different geographical units, as well as, the relative importance of various factors which are instrumental in the generation and/or attraction of flows. The key to the analysis of tourist flows seems to be the proper identification of attraction and generation factors, and the assessment of interaction forms between these two categories of factors. Although these models have been successfully employed in the empirical analysis of flows, one of their basic weakness pertains to their underlying assumption concerning the metric, Eucledian space. According to Lesceux (1977) the factor space should not be considered homogeneous and continuous; an assumption employed in several models to explain the differing intensity and geographical concentration of flows. In such models the factor space may not reflect the real spatial conditions and may render the models less functional or operational.

The type of gravity models used more often are concerned with flows to outdoor recreational areas and take the following form:

$$N_{ij} = KPi^{a0} A_j^{a1} T_{ij}^{a2} \qquad (1)$$

or, instead of A_j and T_{ij}

$$N_{ij} = KPi^{a0} C_j^{a1} D_{ij}^{a2} \qquad (2)$$

where

N_{ij} = Number of persons from region i visiting recreational resources at region j

P_i = Population of region i
A_j = Attraction index of the resources at j
C_j = Capacity index of the resources at j
T_{ij} = Travel distance-time between i and j
D_{ij} = Distance (in kms or mls) between i and j
K = Constant
a^0, a^1, a^2 = Exponents

The major difficulty in solving equations (1) and (2) seems to be how to determine the independent variable attraction of a particular resource and attraction of a country, in general. This variable has been estimated by some researchers as the product of two indices pertaining to the quantity and quality of resources in the destination country, while a more elaborate function has been used by Knetsch and Cesario (1976). However, the most representative gravity models employed in tourism studies are thought to be those of Armstrong (1972) and of Crampon and Tan (1973) which take the following form, respectively;

$$N_{ij} = A_j \frac{P_i^{b1} G_i^{b2} L_{ij}^{b3} T_{ij}^{b4}}{d_{ij}^{b5}} \qquad (3)$$

$$N_{ij} = K P_i^{b1} Y_i^{b2} d_{ij}^{b3} S_{ij}^{b4} A_j^{b5} Q_i^{b6} L_{ij}^{b7} \qquad (4)$$

where

P_i = Population of country i
$G_i = Y_i$ = Income per capita in i
d_{ij} = Distance between origin country i and destination country j
L_{ij} = Index value which expresses probable geographic proximity - common boundaries, or, existence of common language between i and j
S_{ij} = Cost per km to travel from i to j.
Q_i = The ability of country i to generate travel
b1.....b7 = Elasticities corresponding to each variable.

Finally, with respect to the attraction factor and to the potential-accessibility factor (both factors will be discussed later), the work of Klaasen (1974), and Nijkamp (1977) is of relevant interest. Nijkamp develops an environmental attraction profile with which he attempts to explain the impact of two different kinds of flows-migration and tourism.

Concluding the analysis in this section, one should first refer to the problem of data accuracy and reliability. Certain studies (Armstrong, 1972; Edwards, 1979) recognize the fact that most of the tourism demand forecasts are based on imperfect, or inappropriate statistical information and on a large number of assumptions which are not justified (e.g., those referring to consumer price indices that have been adjusted to exchange rates and used as substitutes for the real travel and vacation cost). Thus, it is argued that the level of existing information is such as to pose considerable problems with regard to the operational use of such models. Apart from that, and to a lesser degree, the suitability of the employed statistical analyses and the theoretical background which supports the selected variables, constitute additional reasons which weaken the reliability of the demand forecasts.

A further problem in connection to the above seems to be that of selecting an appropriate unit for measuring tourism demand. The number of tourist arrivals, at the frontiers of each country, and the tourist expenditure, have been employed as the major measuring units in several studies. However, each of these two measuring units seems to be suitable for particular purposes. For example, tourist expenditures is perhaps the most appropriate quantitative measurement unit in economic analyses for determining the impact of mainly economic variables (e.g., income, prices) on demand. On the contrary, this unit does not seem to be very suitable, as against tourist numbers, for describing the geographical pattern of flows. Also, it underestimates certain categories of tourism (e.g., tourism between neighboring countries) and it does not offer itself to further, apart from economic, analyses of tourism's impact.

With reference to the two types of models we have reviewed, the following can be concluded:

In the linear models, income appears to be the most significant explanatory factor. Although in most of the studies, in which high income elasticities were evidenced, a significant amount of multicolliniarity between the income variable and one, or more other independent variables (mainly travel cost), was also evidenced. Further, it has been observed that the relative prices of tourist services in the destination country play an important role, as an independent variable,

influencing tourist expenditures. In this case, price elasticities vary in several studies; a variation which, perhaps, could be attributed to the methodological problems in the estimates, and/or to the fact that they refer to different categories of tourism. Thus, holidays and vacationing tourism may evidence larger price elasticities than professional-congress-health tourism (Gerakis, 1965).

In the gravity models, the travel distance factor, first, and income second make up the most significant explanatory factors of tourist flows. The importance of the distance factor seems to change according to the type of travel (e.g., travel of short or long duration, week-end travel, or holidays abroad). An additional point worth observing here refers to the argument developed by Noval (1975) according to which the observed relative smaller volumes of tourist flows directed to the more distant regions cannot be explained by the distance factor alone, but should be broadly considered as a result of the demand and the supply mechanisms. According to this argument, the different intensity and volume of flows should be observed within a tourist market in which certain conditions of spatial balance in demand and supply ensue from a combination of two opposite trends. From the demand side, prices of tourist goods and services are aimed at such levels as to compensate for the higher travel expenditure the consumer-tourist in subjected, in order to reach more distant regions; the assumption here being that the prices of tourist services are the result of free, competitive bidding. From the supply side, it is the lower prices of tourist services, formed in the more distant regions, that influence negatively (discouraging the prospective tourism investors) the overall volume and size of goods and services supplied.

3. Inequalities in spatial development and the growth of tourism. The spatial growth of tourism within the theoretical frame of regional development, spatial inequality, dependence-interdependence, and core-periphery relations.

3.1. Spatial inequality and development: an outline of major issues.

The problems of development, particularly those focusing on spatial inequalities, have been studied extensively from different theoretical and ideological perspectives. In spite of the methodological problems and the dangers which are inherent in a typology of research in this area, it is useful to sketch an overall classificatory picture on the lines followed elsewhere (Hindernink and Sterkenburg, 1978) which can serve as a frame of reference for the analysis made in this section; analysis which aims at examining the place that tourism, and its spatial growth, assumes in developmental studies and within the literature dealing more particularly with dependence-interdependence and centre-periphery relations.

In one category of studies regarding the problems of unequal spatial development, the emphasis centres on the analysis of spatial differences with regard to, mainly, socioeconomic factors. Space is examined and explained as an administrative frame of delineated, geographically, statistical units. Usually, certain representative indices (e.g., income) are examined and their deviation from an average (e.g., the country's) is measured. Spatial inequality is attributed to the unequal distribution or spread of economic growth, modern technology in production, and communications. Inequality is, therefore, thought of as an inevitable, or typical condition of the initial phase in the development process. A phase during which an accelerating economic growth is directed and concentrated on a few only points, or places which benefit due to their favourable location and the prevailing external economies and backward-foreward linkages (Hirschmann, 1958). In this category of studies, the different views expressed and the critical discussions (for an analytical review see Williamson, 1965; Gilbert and Goodman, 1976) developed around three major issues: a) How and to what extent a few growth centres or poles generate and diffuse growth over the entire region; b) what are the capabilities, or prospects, of decreasing progressively interegional

inequalities after some efficient level of economic growth at the national level has been reached; and c) whether and to what extent (on the basis of empirical evidence) the decrease of interegional inequalities is correlated, or brings about a parallel increase in intraregional inequality.

In a second category of studies, space and its properties is viewed as the main factor causing inequality. The physical space and the built-environment-analyzed through the various urbanization, transport, and communication patterns and networks-assume major significance as impacting (constraining or conducing) agents instrumental in the creation of inequality in the supply of goods and services and in the diffusion of innovation. In several studies of this category (Hirschman, 1958; Johnson, 1965; Hägerstrand, 1967, Berry, 1972), the spatial differences in development are correlated with the unequal accessibility to urban markets, with the various concentration and accumulation processes in already developed areas or "growth poles" and with the manner according to which innovation is carried to the hinterland; or, the opposite - when innovation is not carried while the hinterland is depleted further of its resources. Regional inequality is analyzed in these studies within the conceptual and spatial frames of growth centres, the evolving centre-periphery relations, or relations between the so called "problematic, backward, border and transitional" areas on the one hand and the central regions, or areas, on the other (Myrdal, 1957; Friedmann, 1966).

In a third category of studies, space itself is the variable which has to be explained. The social structures, their evolution examined and analyzed over a long historical period, are considered to be the main causes of inequality. Naturally, history cannot be reduced or simplified into a certain time frame of organizing and comparing statistical data. The physical-spatial parameter is not considered as the major cause of inequality but, instead, the political-socio-economic one,which determines the nature, form and function of a physical unit. The analysis of economic and social relations in the production processes, and the related processes of social stratification, constitute the focusing point in the historical politicoeconomic analyses undertaken at different spatial levels; either at the national (Smith, 1974; Slater, 1975) or the international (Galtung, 1971; Wallerstein, 1975).

In a fourth category of studies, one may include studies which employ specific concepts and related theories to explain regional disparities or uneven spatial development. We consider here concepts such as core-periphery and dependence-interdependence relations as well as unequal exchange and the interregional transfers of surplus value.

The centre-periphery, or core-periphery concept is employed to characterize and describe different types of relations (e.g., political, economic, commercial, etc.) developing between different kinds of spatial units. Usually, this concept is employed to denote relations of dependence between developed, industrialized countries (and/or their metropolitan regions) and less developed countries, or those countries and regions where the primary sector is predominant.

Dependence is considered as a situation of economic dominance and control to which one country is subjected by another (Santos, 1970); or, as an asymmetrical social relation whereupon one unit, A, exerts control over another unit, B, accumulating value to the detriment of unit B (Hveem, 1973); or constraining and directing the development of the second country in such a way as to serve its own benefit. However, usually the concept of dependence is not considered and employed in isolation, i.e., in only one area (e.g., the economy) but is approached broadly as a penetration process; a process which brings about changes into the whole structure of a country (production systems and processes, technology, public and private institutions and agencies, cultural activities, political parties and collective organizations, consumption patterns, etc.) (Sunkel, 1972).

Dependence and external control have been, also, considered within a sectorial (e.g., manufacturing) and regional development context at the micro-analytical, or enterprise level. For example, in a relevant study in this area (Firn, 1975) the author analysed the degree and type of external control in key sectors of the Scottish manufacturing industry, emphasized the importance of understanding the role of this factor in the regional development policy and discussed the implications that the specific situation may have for regional development.

Unequal exchange and interregional transfer of surplus value are viewed, generally, as types of spatial flows of "value" which conduce to specific accumulation rates, favoring certain developed sectors and/or geographical areas, while impeding or retarding development of other

sectors or areas. Among the numerous studies in this field we have considered Marelli's work (1983) as particularly relevant from a regional development point of view; although the author considers his approach to be more sectorial than regional. In the above-mentioned study, it is argued that the phenomenon of regional disparities and uneven development can be partly explained by assessing the type of specialization and the spatial division of labour which develops and differentiates one region from another, as well as, by assessing the resulting inter-regional transfer of surplus value. Employing input-output techniques in the analysis of regional data the author shows that surplus value is transferred from less developed regions (mainly those in the South of Italy specializing in agriculture, construction, trade and government) to the more developed regions in the North.

3.2. The place of tourism within the context of development studies

The preceding outline of major issues serves to map out the diverse approaches followed in the exploration of spatial development processes. Also, it serves to delineate the overall context within which the development aspects of tourism may be considered. What follows is a review of relevant tourism development issues within such a context. Certain issues regarding the role of tourism in promoting national-regional development will be discussed in the section dealing with tourism impacts.

With reference to the international scene, Lundgren (1972) describes the growth of international tourism on the basis of a centre-periphery relations paradigm. The author views the centre-periphery relations as a result of a process with which modern tourism or travel mechanisms have gradually placed the destination countries - the periphery - into a disadvantageous position as against the origin countries - metropolitan centres. The interdependencies in tourism between origin and destination countries are analyzed, theoretically, within the context of the historical evolution of the transportation systems. Transportation systems are regarded as the most significant factor and as having the greatest spatial impact on the development of tourism. Such interdependencies, which apart from the international, could also be considered at the national-regional level, are explained in connection with the "technological and economic superiority" of the metropolitan centres - tourism origin countries - and with the "willingness" of tourists-receiving countries to adopt metropolitan values and solutions in order

to meet and satisfy the requirements and needs of the metropolitan visitor.

We may therefore, consider international tourism as having both a metropolitan origination, with regard to demand, and a metropolitan dependence as to the supply; since the latter, in response to foreign demand and preferences, has to be linked and adjusted to uniform international standards, thus replacing or modernizing local-indigenous inputs (resources, services), or even importing foreign ones.

International tourism has been further viewed, from the way it has developed, as incorporated into the international labour division system between developed and less developed countries, i.e., between countries producing high technology and cost industrial products and countries in which their economy is based on one or a few sectors (usually raw materials production) and in which the natural resources are suited for the growth of tourism (Edelmann, 1975). Such a division of labour is thought to contribute to an increase, in the less developed countries, of their tourist sector's dependence, since the demand for tourism in the industrialized countries is influenced by cyclical fluctuations in their economies. This kind of dependence conditions (which seems to be out of control of the less developed countries) varies among countries, depending on the kind of tourism developed and on the extent to which tourist infrastructure and related commercial enterprises are owned and controlled by foreign tour operators and firms.

As a sector of development, tourism is considered to be the one most dependent, or subject to dependence. This is more true for the less developed countries, or the ex-colonies (Caribbean and African countries), in which tourism seems to act as a factor reinforcing economic and cultural ties between the ex-colonies (and their ruling urban class) and the metropolitan countries. Such a strengthening link depends on the types of tourism developed which, in turn, are related to the whole political and economic structure prevailing in the destination countries. Another argument developed, in the analysis of the dependent nature and structural duality of the tourist industry in the third world countries (Davis, 1978), refers to such principal consequences as inter-, and intra-class fragmentation, and the exacerbation of regional disparity which, in turn, is thought to impede national development (Davis, op.cit.).

Although the fact cannot be ignored that the "export" of tourist goods and services contributes to the balance of payments and to the overall development effort in developing countries, one should also mention the following. In the long run, tourism's contribution can be best achieved when the structure of the economy of the tourists-receiving countries is progressively improving through tourism and when this improvement is a result of capital formation and the gradual decrease of foreign exchange leakage out of the country. Foreign exchange leakage needed to serve the tourist market may lead, in less developed countries, to a decrease (up to 60-80%) of the total tourist expenditures remaining in the country (Turner, 1976). As to tourism's relation to other sectors of the economy, the question centers on tourism's contribution (comparatively to that of certain industrial branches) to the growth of other economic sectors. Such a contribution is usually evaluated - by employing input-output techniques of analysis - with regard to tourism's intermediate inputs (percentagewise) to the gross total value of production. However, tourism's role as a factor conducive to strengthening or destabilizing and disintegrating the basic productive sectors (agriculture, industry) has not as yet been conclusively assessed, or studied in detail; equally difficult to determine is to what extent such a role differs between countries and how tourism contributes to solving structural economic problems in peripheral countries or regions.

To complete the picture, two final points must be mentioned with respect to tourism's overall performance. The first point concerns certain inherent, or endogenous characteristics of tourism such as a) the seasonality of demand, and b) the limited ability to improve work productivity, i.e., the introduction of modern work and production methods and techniques is possible to a lesser extent in tourism than it is in other sectors. The second point concerns characteristics of an exogenous nature such as a) tourism's sensitivity to political and economic crises, and b) the oligopolistic organization and strength of foreign tour operators in regulating prices of tourism services offered at the destination country. Some of the above characteristics occur in an acute, more or less, form (from the point of view of the restrictions they impose) in developing countries, or peripheral regions; very often the local indigenous inputs to the whole tourism system of the country are not considered, by tourism administrations,

or agents involved in tourism, sufficient to serve the international and metropolitan clientele. In that case part of the local labour force and logistical potential is replaced by foreign, with higher efficiency.

What are the conclusions, that emerge from the review of literature in this section ? Against a rich background of a large volume of research work which has been undertaken in the various categories of developmental studies, research work to explore the development dimensions of tourism is either limited, or of a descriptive nature. Of course, there is a considerable volume of research pertaining to specific tourism impact studies, a field of inquiry to be examined later in this chapter. However, deep and perceptive analytical research (at a theoretical, or empirical level, and at a micro- or macro-level) which relates the phenomenon of tourism growth to the (spatial and sectorial-economic) development process seems to be still quite lacking. Such a "deficiency" of knowledge about the contribution and role of tourism in the development process implies that policy recommendations should be as a general rule, country-, or region- specific, relating types of tourism to the stage and characteristics of a country's development.

4. The Tourist Product, tourist preferences and resources capacity

4.1. The Tourist Product (TP): An outline of its major characteristics

Discussions in tourism research on the character of the TP have emphasized its composite and complex nature, its distinctive or different characteristics, as against other sectors of production and consumption. Definitions and conceptual clarifications reveal differences among disciplines and ideological schools not only as to the emphasis attached on various elements the TP is consisting of, but also, on broader issues pertaining to the overall character of tourism as a traded goods, or non-traded goods sector, as a productive or non-productive sector (in terms of national income created and redistributed). Arguments for the latter being that tourism is, predominatly, a consumption sector in the sense that no products, or goods are produced directly by the sector per se; but instead various goods and services produced by other sectors (agriculture, manufacturing) form within a particular spatial setting the TP which is marketed, sold and consumed in the form of diverse holiday programmes and packages.

Economists have stressed the production and consumption aspects of the TP considering it generally as an "amalgam" of products and services bought by tourists for their trip and their stay at certain destinations; comparing it with, or differentiating it from, other branches of production and in some cases (Kosters, 1976) arguing that no ready made TP is macroeconomically the same (TPs are composite and different from one another), and, therefore, only in microsituations one can refer to a Tourism Product.

In geographic research the emphasis is given on space considered as the ground basis of a TP, and conceptually being associated with the tourist region in its geographical totality. The focus in this research field is on particular elements which form the complex TP like "the natural landscape with its distinct features, the cultural - geographic component with its settlements characteristics and cultural landscape and the native people that activate local resources" (Lundgren, 1979).

In spite of differences among disciplines, and the still existing conceptually unresolved issues in this area, it is in place here to delineate major characteristics of the TP that might be considered important in our further discussion.

The first characteristic is that the TP is not homogenous but is a mix, or conglomerate, of diverse elements (economic, sociocultural, physical) pertaining to a tourist region (destination place). Such elements form an entity with spactially definable parameters.

The way the TP is produced and consumed differs, or contrasts to the way traditional industrial, or agricultural products, are produced traded, and consumed. The TP as a non-homogeneous entity is made of different goods and services which are produced and marketed either locally, or internationally, by a wide range of producers (tour operators, travel agents, hoteliers, property owners, etc.). The design and assembly of different parts making up the TP is accomplished either in the destination country or, very often, in the tourism generating country. Unlike industrial, or other consumer products, the TP cannot be displayed, or exposed at the points of sale; it is purchased in advance and sold en bloc (whole packages), or in parts.

The TP is spatially immobile, in the sense that most of its constituent elements cannot be physically transported, or exported to other places and are therefore consumed in situ. It has, thus a unique, or from a locality dependent character; although in the process of tourism's growth, different tourist products assume a uniformity and resemblance due to a progressive transformation and internationalization of many of their constituent elements.

The TP has, finally, very often a temporal - seasonal character in the sense that it is produced and mainly consumed during certain periods of time - or exhibits peak intensities of consumption and use - depending on geographic - climatic and societal conditions.

Certain reports (e.g., STB, 1975) and planning documents strongly support, within the frame of policy measures proposed, the need to diversify the TP. Elsewhere (Irvine, 1982), such a diversification ("small scale TP", "new third world TP") is approached and advanced within the frame of an "emergent alternative tourism" that "would resolve the contradictions between tourism and development"; that would play an "intrinsic role in the wider movement towards alternative development strategies both in the industrialised North and the impoverished South". Such a "hypothesis", however, is short in conceptual-methodological clarity and theoretical background since it is not

shown how "alternative tourism" can be explained, or integrated within the capitalist system where international tourism is the dominant type in both the North and the South.

4.2. Tourist preferences and attraction value of tourist resources

People take holidays in order to satisfy certain personal needs, certain socially induced wants, or because of other motivating factors. An individual's, or a group's choice of trip destination is considered in various studies to be affected by several factors.

One set of factors considered to effect trip destination pertains to the market conditions, or, in more general terms, to the prevailing socioeconomic environment, or system. Research work relating to the generation of travel in general and to the analysis and assessment of travel demand is based mainly on the assumption of an individual's rational decision-making in an economic context. Within such a context the different modes of travel destinations are considered as commodities having their own process among which the consumer chooses so as to maximize some measure of satisfaction. The problem then appears to be one of maximizing some utility function (subject to a budget constraint) regardless of whether the consumer derives utility from the commodity proper (stay in a hotel), or its characteristics (a park surrounding the hotel), or the whole recreation-holiday experience. As was discussed earlier, the assessment of tourist demand poses certain comlex problems which are primarily due to the inherent complexity of the notion "tourist demand", the complexity of the tourist "product" offered, and the whole range of motivational factors (behaviour-phychological and social) behind the demand of this "product". Even if tourism is considered as an industry, it is certainly a multibranch sector of the economy, a conglomerate of services and products. The complex nature of tourism relates to the duality of its characteristics. Some characteristics of tourism have a market orientation, e.g., an individual making a trip to buy certain goods at a market price, certain other characteristics are of a non-market nature, e.g., tourists interacting with other persons in the place they visit.

Another set of factors which are considered to affect trip destination pertains to the role of tour operators and travel agencies in shaping people's choices regarding holiday destinations. This is an area with very little research work at the theoretical and/or empiric-

al level. What is mainly assumed within this context is that the levels of information available to the tourist are, to a large extent, affected by the tour operator's activities and the whole spectrum of holidays alternatives programmed and marketed by them. Although decisions to travel and holidays are being made by the tourist (and even if public awareness of the options, opportunities and costs open to the holiday maker increases through the mass media) it is argued (Dobbie, 1976; Armanski, 1980) that such decisions are influenced by the tour operator, on the basis of the information he provides, or on the basis of a list of holiday destinations (or travel commodities) he chooses according to his own selection criteria. The tour operator, acting as a middle man between the tourist and the holiday "product" is offering, through his packages and programmes repertoire a particular spatial frame for tourist demand, or preferences allocation.

A third set of factors though to influence trip destination concerns individual, or group behaviour regarding travel; they refer particularly to motivations (e.g., social recognition, prestige, maintenance of personal, or social ties, etc.) and individual, or group perceptions, attitudes and preferences regarding tourist resources, or attractions. This is relatively a new area of research in tourism, or leisure studies in general, with which we are concerned in this section.

The formation of preferences, as well as, attitudes and perceptions seems to be a complicated process. Also, problems relating to the assessment of recreation and tourism attraction values, which refer either to different locations (attractions of region R1 in relation to region R2) and/or to various recreational resources (attraction of resource A relative to resource B), pose considerable difficulties.

A major difficulty in this area is to assign values that express, or conform to the perception each community group (in the case of tourism all segments of the tourist population, domestic, or foreign) has regarding a particular location and/or resource. Since it cannot be assumed that all individuals, or community groups from different parts of the country, or visitors from different countries, perceive in an identical manner, have the same preferences and, assign attraction values in a uniform way, it is important to

determine, in a given situation, the preference structure of all groups involved. Research findings and conclusions in this area have important planning implications. Measures of preferences or resource attractiveness, the quantification of priority values given to different locations and/or resources by different groups of the population, images held by various groups as to the attributes of recreation or destination places, all seem to conduce towards the following:

- A classification of tourist resources and the delineation of regions or spatial units for tourist planning purposes,
- A typology of the tourist population or an accurate assessment of market segments in tourism; thus assuring a better or more rational design and development of the most appropriate range of services and equipment to satisfy varied needs and activity patterns,
- A formulation of appropriate marketing policies, travel package designs, and allocation of resources needed for that purpose.

In planning and landscape evaluation studies preferences are derived from planners judgements (on the basis of criteria sets selected, scaled or rated by them), or, from public opinion surveys by employing various techniques. Reviews and discussions of the methods employed and of the findings (Arthur, Daniel, Boster, 1977; Lowenthal, 1979) question the reliability of many such studies and point out the need for further research towards certain directions. The methods employed so far by various researchers for tackling the problems in this area, can be grouped into two major categories.

In Category A, belong methods of a direct approach character, i.e., those which employ a direct approach of conducting opinion surveys among tourists or recreation participants. Among the techniques employed are interviews on the basis of questionnaires, visual-photographic displays (which simulate real environments) presented to a sample of individuals to express their preferences, observations and recordings of real life situations and overt behavioural patterns. Methods of this category assume: (a) that there is no difference between the opinion expressed by tourists (the respondents) and their actual preference, (b) that visual characteristics can be measured and quantified

and that individual preferences can be determined solely by such visual characteristics and, finally, (c) that the interview or observation is free from built-in biases and subjective perceptual sets of the interviewer or observer.

Further, some research studies (Shafer, Hamilton, Schmidt, 1969) show a positive correlation of the ranking scores (results) between (a) quantified measurements of environmental quality (assessed on the basis of certain techniques) and (b) public preferences expressed for that environment. The issue of the relationship between stated preferences for, and participation in recreation activities is an issue of assessing or measuring the association (consistency or inconsistency) between perceived dimensions (perceptual responses), with regard to certain recreation activities groupings, and overt behaviour, regarding the same activities groupings. Research in this area (see e.g., Chase and Cheek, 1979), although limited, shows a positive correlation between these two dimensions.

In Category B, belong methods of an indirect approach character, i.e., those methods which base their analysis on the judgements of representative groups of tourism and recreation experts or representatives of different interest groups. The assumption made here is that certain persons are more accessible to the researcher because of their eligibility to experience and appreciate environmental qualities; since these persons have, apart from "emotional and perceptual sensibility", scientific knowledge and understanding of the inherent properties and functions pertaining to a particular environment. In the case of tourism it is argued that experts representing a wide variety of backgrounds, viewpoints and geographical settings and having, additionally, experienced through long observations the actual tourist behaviour, are best equipped and capable to speak for the tourist. The major criticism of such non-egalitarian[1] approaches centers on the issue of subjectiveness and overgeneralization. Further, when the judgements of experts are translated into scores and used as a basis

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1. An egalitarian approach is considered to be one which takes into account public opinion or one in which the evaluations reflect the standards of people using the resource (see also Wright, "Appraisal of visual landscape qualities in a region selected for accelerated growth", Landscape Planning, vol I, 1974, pp. 307-327).

for taking major investment decisions, possible judgement biases or "losses" in translation may increase the dangers of reliance on such a method.

Research issues which pertain to consumers' perceptions concerning selected international travel destinations have been explored in certain studies which employ multivariate analysis techniques (e.g., Andersen, 1974). In these studies a limited sample of specified respondents (e.g., travel experts, students, etc.) were used to assess (with different ranking scales) the importance of tourist destination regions with respect to various attributes attached to them such as climate, beaches, etc. Results from such studies help in understanding and defining market segments in tourism; the market segmentation being based, in general, on the idea that tourist goods are chosen singly or in combination to yield characteristics which provide utility and satisfaction to the tourist, and that different tourist groups assign different values or seek different characteristics. Tourists' typology into segments is then based, generally, on the combination between elements pertaining to the structure of their visit (travel time, cost items, size of the participating group, etc.), and elements, or attributes, of the visit.

In evaluating tourist resources, certain researchers employed both of the above described methods. Thus, Ferrario (1979) calculated a set of "tourist potential" indices which cover a wide variety of tourist attractions or places, using a formula comprised of two variables: a) tourist demand (equated to preferences) measured by means of visitor surveys and b) tourist supply (resources) evaluated by a selected group of so called "community influentials", on the basis of certain criteria set by the researcher. A similar approach was developed earlier (Zins and Ritchie, 1977) in order to measure the relative contribution of different sociocultural elements on the "cultural attraction" of a tourist region.

Still more elaborate approaches in this category of methods (Hoinville, 1974), extend the widely used opinion and attitude surveys, by introducing special electronical and/or visual devices, in order to determine the priorities attached by the respondents or recreation participants to several sets of variables. Such techniques (verbal

employ verbal responses, aim at establishing the respondents' manner of choosing among competing alternatives, conflicting preferences, or, for example, trade-off travel packages. Within these approaches it is often postulated that the decision to select a specific destination for a chosen recreational trip is a trade-off between the attractiveness of the destination and the difficulty of travelling to it. Another interesting technique, which aims at exploring commonality or similarity patterns of perceptual response, uses the so called Visitor Employed Photography technique; a landscape assessment method with which the perceptual responses of a sample of users (or recreation participants) are documented through their operation of cameras to capture scenes within particular environmental corridors and travel routes (e.g., Cherem, Driver, 1983).

4.3. Tourism resources capacity and classification issues

The concept of tourist capacity may be given various interpretations. From a "narrow" point of view, capacity may be considered to imply certain standards or ratios between users and units of resource measurement (e.g., 500 persons per 1km of beach length); From a wider point of view, tourist capacity may be considered as a dynamic and multidimensional notion susceptible to change, depending on the limitations imposed by the resources' properties, management practices, and by local, or regional economic and sociocultural components. Thus, within a broader frame of reference, the basic interdepending parameters of capacity refer to the targets and objectives of the planning agency, the users' behaviour and perception (e.g., tourist perception of crowding), the actual demand or pressures exerted upon resources and the prevailing conditions with regard to local receptiveness to tourism and the management of resources.

Local receptiveness to tourists has also been suggested (Brougham, Butler, 1976) in a case study of Sleat (isle of Skye in Scotland) as an important capacity parameter that should be considered by those planning and developing tourism.

Many capacity studies were undertaken either within the frame of tourism development plans and projects, or, within that of ecological or natural resources protection studies, where attention is focused on the impact of certain recreational activities on the environment.

Within the latter category the major aim is to determine levels of "carrying" capacity of different ecosystems, or levels of crowding which impact on such parameters as interaction and encounters among participating parties. The difficulty here lies in measuring such interaction and encounters. In a few recreational studies (e.g., Shelby, Colvin, 1982), the techniques applied used recordings made by trained observers, who are present at the encounter, and reports or diaries by visitors themselves, completed during, or after their participation in the recreational activity.

It would be difficult to find, in social sciences and geographic literature, criteria of optimality for the various classification methods developed. The inherent degrees of "weakness" in leisure, outdoor recreation and tourism classification systems, relate to limitations in data base (resource inventories, tourism participation data) to the way of recording resource characters, or tourist behaviour, and to the shortcomings of classes producing methods.

On the demand side, classifications of recreation or tourism participants into "user groups", or "market segments" are based on various visitors and trip-related attributes: for example country of origin (nationality), the socioeconomic characteristics of participants (e.g., age, sex, educational and professional status, revenues or income), the motivations and purpose of trip, the organizational-institutional context which influences tourist participation.

In certain studies (e.g., The Irish "Planning for Amenity and Tourism" Study, 1966) of national or regional scale, visitors are classified according to broad categories of country of origin and purpose or type of visit (e.g., holiday makers, business and professional, etc.), while visitor groups are further distinguished in more detail on the basis of average expenditure and length of stay data aquired by specific sample surveys.

Classification criteria based on the purpose of trip and forms of travel organization have been employed in anthropological and sociological studies of tourism. In this case, characteristic examples are those of Graburn and Cohen. Graburn distinguishes various types of tourism (historical, ethnic, ecological, recreational, etc.) each having "its own special scale of values and its hierarchy of prestigions places" (Graburn, in Smith (ed.), 1977, p. 28). Cohen's tourist

types (Cohen, 1972) are based on motivational criteria and forms of travel organization and arrangements of tourists (e.g., organized mass tourist, the explorer, the drifter, etc.).

On the supply side, classification methods vary with regard to the topics emphasized and the geographical scale considered. At the national scale, Ferrario's (1979) classification, encompassing a wide range of tourist resources and services, is based on information derived from tourist guides. In contrast to the above, several methods developed in the USA and Canada pertain predominantly to outdoor recreation rather than tourism. As examples of such area-specific or detailed methods we should mention the "Recreation in Wisconsin" series of studies based on a comprehensive landscape inventory analysis (see relevant review by Lewis, 1964) and the methods of land classification for recreational use developed by Taylor and Thomson (1974).

However, within the context of European-Mediterranean tourism and from a tourism planning point of view the typologies proposed by White (1975) and Pearce (1981) are worth noticing and selectively outlining here.

White distinguishes different types of tourism development, either with reference to the observed situation, or with regard to the potentiality of different areas for tourism development. In the first case, White (op.cit., p. 384) focuses on coastal tourism and distinguishes three different spatial categories: i) areas previously totally unused, ii) areas with certain forms of human activities (e.g., agriculture) which, nevertheless, do not relate functionally to coastal locations per se and iii) areas with pre-existing settlements and activities connected with the sea (e.g., ports, fishing, etc.). In each of these areas, according to White, the growth of tourism exhibits different physical forms and involves different planning problems and approaches. In the second case, White (op.cit., p. 447-449) proposes three types of tourism development, a spatial classification based on the existing situation, the potentiality of an area's resources and planning objectives for tourism development. The typology be proposes includes: i) Areas with complete lack of local population, usually remote or inaccessible areas, where type and scale of tourism development (he suggests large scale of development and operations serving mass tourism) should serve the objective of maximising the economic benefits of the region, or the country involved, ii) areas with an

existing pattern of local communities and a specific production structure, where the growth of tourism, the scale and type of operations, should be dictated by the communities' ability to support particular types of tourism; or, where tourism should develop in such a way as to promote the area's economic social and demographic viability, and iii) areas with scarce or limited human and economic resources, usually rural communities with acute demographic problems, where the types of tourism advanced should aim at mitigating or redressing existing problematic situations.

Pearce (1981) in his review of several relevant studies, observes the "ideographic" and region-specific character of resort or tourist development typologies as against a typology not restricted to a particular environment, but generally applicable. Pearce (op.cit., pp. 13-22) suggests a twofold classification which, he believes, could be applicable to any environment and should be based on the division of responsibility in the development process; a division which determines both the nature of the development process and the locational and physical form of the resulting resort development.

Pearce's first type of tourist development is based on the concept of integrated resort development. The kind of "integration" he specifies is characterised by financial and managerial unity (one promoter or developer) which, in his opinion, could permit a balanced (between different uses and parts of a project), rapid (in terms of construction time and return on invested capital), functional (physical integration of various facilities and functions), isolated (secluded from local milieu) and a high status (attraction of high class tourists) development.

The second type of tourist development process, called by Pierce "catalytic" is a much more diverse and dispersed spatially resort development. According to Pearce, the initial, first phase operation and large investment projects are undertaken and financed by a single principal developer. This first phase development, which takes place within, or in the proximity of existing settlements and/or other production activities, stimulates and attracts additional or supplementary tourist facilities and activities. What follows in the second phase is an expansion of the resort in terms of the range of accommodation facilities offered, participation of local entrepreneurs and diversification of the tourist clientele visiting the area.

5. Impact Studies in General, and Impact Studies in Tourism

5.1. An overview of general issues methods and techniques

There is a growing volume of research and studies in economics, human and economic geography, and physical planning on issues of impacts evaluation, at different spatial levels, of different activities, projects, or investments, as well as, of governmental measures and policies. Research and studies in this area are not only focusing on methodological problems of impacts evaluation but extend to cover a broader critical evaluation of various theories of regional development, regional development strategies, explanatory factors of spatial inequality, etc.

King and Clark in their paper (1978) on the spatial impact of governmental macropolicies (sectoral, macroeconomic), and the relevant problems of regional development, reviewed several research findings in this area within the context of links, or relationships between macropolicies, regional impacts and regional development. Their review focuses on arguments regarding the appropriateness of neoclassical economic theories in analyzing regional development problems, on the effectiveness of certain governmental policies, (eg investment allocation programmes) to redress regional imbalances, on questions pertaining to the role of the state in the functioning of space economy. Two issues of their analysis are worth mentioning here. The first refers to the possibility of trade-offs, in policy formulation, between national efficiency (maximization of national growth) and regional (spatial) equity - an issue still unresolved. The second issue concerns the criteria or normative statements that should be considered in evaluating the impact of certain governmental macropolicies. The above writers suggest that statements, or criteria must refer to:

a. The level of absolute change in the welfare measure (e.g., those relating to certain indicators) for a given region.
b. The comparative level of change in the welfare measure over a number of regions.
c. The change over time in the level of interregional differences on the welfare measure.
d. The expected future levels of the welfare measure for a given region or set of regions.

Another issue concerns the placing of the impact evaluation problem within the context of the broad scope and aims, set to promote regional development. The particular problems and difficulties in assessing and measuring the effects of regional policies evidenced in certain studies (Moore, Rhodes, 1977) revolve around methodological and technical procedures of disentangling a plethora of cause-effect related variables, which pertain to either an overall regional policy, or sectoral policies and particular individual instruments of such policies. Another difficulty lies in the fact that most of the regional development policies, due to their very nature, are policies the results or effects of which tend to appear (at least at their ecophysical dimension) over long periods after policy actions and measures are taken. However, apart from methodological problems, it is argued (Holland, 1976) that the effects of regional policies cannot be discussed separately from the very nature and political basis underlying such policies. It is argued, e.g., that sectoral expenditure patterns or investment allocation programmes reflect the strength of the central core of the space economy, or, the strength of certain politico-economic groups in the centre to ascertain and retain their comparative advantages. Additionally, it is questioned whether expenditures in depressed areas or regions, constitute attempts to improve welfare only and not to restructure the national economy.

Methods and techniques developed up to date to cope with problems of effects or impacts[1] assessment and evaluation are many and diverse. Consequently, the overview of such methods that follows focuses on tourism and is far from being exhaustive.

1. The Input-Output method is a method which like all other macroeconomic methods aims at assessing the economic impact of a particular sector on the national level, as well as, the effects on different sectors of the economy. This method[2] has not an evaluatory character in the sense that it tries to formulate and assess desirable or feasible directions and policies of development. It may be used mainly for

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1. A distinction of the notions effects and impact can be found in Catlow and Thirlwall (1976).

2. Input-output models show the flow of certain transactions through a given national or regional economy for a specific period of time, usually a year.

"diagnostic" purposes after the decisions have been made; decisions which refer to resources already committed to tourism (or any other) development.

2. The Cost-Benefit Analysis (CBA) is a method which seeks to delineate and assess a comparative frame regarding the feasibility of various projects or allocation of investments in a region on the basis of several, mainly economic, criteria. The problems encountered in this method can be summarized as follows:

a. Major difficulties center on defining or delineating the exact geographic boundaries of the area investigated, and on whether costs and benefits or effects can be limited to that area; the question of leakages is a major one here, since what constitutes a benefit for an area could be a cost for the immediate adjacent one.
b. Usually no clarifications and provisions are made to introduce in the method, link goals and objectives (e.g., those referring to the nature and role of tourism development in an area or to a particular project) with the quantitative criteria used and weighted in the CBA.

3. The Optimal Goal Achievement method is a method developed by Hill and Shechter (Hill, 1968; Hill, Schechter, 1971), where several indices are used to measure the attainment of goals with regard to:

a. National economic benefits (total consumer benefits).
b. Regional economic benefits (both direct as in case a) and indirect, as a result of regional production and additional incomes accruing to the community, or to the residents employed in the tourist sector.
c. Distributional equity index-attainment of equality in the distribution of recreational resources among all members of the community taking into consideration population densities, distances to resources, and mobility (car ownership).
d. Quality, in the aggregate, of the tourist area in terms of existing range of choices offered for recreation participation and tourist activities.
e. The extent to which it is anticipated that the population of the area will participate in several activities and make use of the resources offered.

f. The extent to which the area preserves its "physical" character (nature preservation index).

4. The Multiplier Effect method: A method attempting to differentiate the economic effects of different types and forms of tourism on the incomes in a given area. It is a method indicating the relative feasibility of attracting different categories of tourists in an area through the use of the income multiplier coefficients. Application of this method presupposes that appropriate statistical information is available; information referring to expenditure and consumption patterns by each category of tourists in an area, allocation of earnings of those employed in the tourist sector, and the consumption pattern of the local population.

5. The Ecologic-Economic analysis method: A method developed by Isard (1972) to determine and assess through the use of input-output techniques the relationships between ecological and economic variables. It is mainly a method of measuring ecological changes - as a result of various processes - and assigning economic values to such changes. Further analyzes several interelationships among resource categories (e.g.,land resources effect on water resources,etc.).

Within this field of research,a central item of argument and dispute relates to the appropriateness of different evaluatory methods to cope with the increasing complexity and multidimensionality of environmental problems. It is this complexity and multidimensionality, and the need to incorporate such analyses in the planning process, that led to the development of broader in scope and more comprehensive Environmental Impact Assessment (EIA) systems. Several reviews of EIA methods (Clark, Chapman, Bisset, Wathern, 1978) techniques (Skutsch and Flowerdew, 1976) and European practices (Lee, Wood, 1978) help in the assessment of their potential scope and usefulness as instruments within the planning process; as "instruments of approval and implementation of policies, plans and programmes of different kinds at all levels of government". In outlining its major parameters, one could state that an EIA approach covers the following topics:

a. Recognizes and deals explicitly with a multiplicity of social goals and objectives. The EIA views the effect of a project,or a programme,on the level of economic development in terms of its

contribution to the achievement of a set of social goals and planning objectives.

b. Considers in its evaluations the consequences of structural economic changes that may accompany the undertaking of a project or programme.

c. Takes into account the organizational structure of the economy - administrative machinery and institutions.

d. Takes into account the various environmental concerns (views, reactions, responses) held by various groups of the impacted population.

Regarding the last topic, we should note that such environmental responses reflect and register a community's value systems on such issues as territoriality and community control, social interaction and maintainance of a community's cultural identity, attractiveness and maintainance of the character of the natural environment.

It is the author's belief, that the aim of any evaluatory method should be to validate measures of effect or impact as follows:

a. Considering sound evaluation procedures (technical, managerial, administrative) incorporating both objective and subjective judgements.

b. Developing methods of conflicts resolution or, if one views conflicts as the result of clashing values (Mathews, 1975), build such values into an EIA system by incorporating behavioural responses of a community's population (e.g., through public participation procedures).

5.2. Impact Studies in Tourism

Impact studies in general, and research work on the impact of tourism, have been centered mostly on the economic side and less on the physical-environmental and social ones. It is widely recognized that the economic impact is easier to assess, since it can be easily quantified, hence, there exists a substantial block of research and studies in this area (e.g., Bryden, 1973; Archer, 1973, 1974; TRUU, 1975).

5.2.1. The economic impact of tourism's growth

Although it seems that research on economic impact assessment has

made considerable progress, the various methods and techniques used[1] still lack comprehensiveness,with respect to the full range of cost benefit issues consideration,and to the extent or the exact boundaries of spread effects (the question of the impacted zone delimitation).

An issue of particular importance, although somehow neglected, seems to relate to the cost side of tourism development; how to assess the whole spectrum of negative externalities arising or resulting from tourism development? Such externalities could be classified in the following broad categories:

- Physical resources-negative externalities: pollution of coastal water, external costs imposed by tourism to local communities, littering of beaches, damaging land and property,etc.,
- Socio-cultural resources-negative externalities: the social cost of providing full employment only for the peak season, the social costs of reduced amenity value of the resources through overcrowding, overuse,etc.,
- Functional negative externalities: strains on the proper functioning of public services and networks; low return level of public capital invested in infrastructure works for the benefit of seasonal clientele.

From the literature review of research work on the economic aspects of tourism's impact one should note the following:

a. National level studies or tourism's impact upon the national economy:

The major macroeconomic considerations and categories of effects discussed refer to foreign exchange earnings and tourism's contribution to the balance of payments and to the income and employment generation. Less studied are tourism's effects pertaining to governmental costs (cost of infrastructure, grants and incentives, administration advertising,etc.) and revenues (in the form of taxation),as well as, the effects on the economy's structure on production and consumption;

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1. To date the most widely used are income and employment multiplier models (linking different tourist expenditure patterns to the economy characteristics and functioning) and CBA methods.

the latter problem has been studied and discussed with reference to certain island economies (Renaud, 1972; Varley, 1978).

The effects of tourism on the balance of payments is perhaps, of all macroeconomic issues, the most frequently discussed; although much of the work undertaken is rather of a descriptive nature-foreign exchange's position in the structure of the balance of payments. The major problems here pertain to defining and assessing the whole spectrum of effects, with focus on determining the import content of tourism's earnings; the whole range of leakages to service the tourist sector. An interesting approach suggested by Airey (1978) "attempts to identify the various ways in which the effects of tourism activity are felt and recorded in the balance of payments accounts and to outline the approaches to presenting these effects and the ways in which they are expressed". In this approach the effects from both international and domestic tourism are distinguished into three categories:

- Primary effects: actual foreign tourists' or visitors' expenditure at the destination country,
- Secondary effects: either of a direct nature - i.e., all payments incurred by the host country for importation of goods and services to supply its tourist sector - or of an indirect nature - i.e., those payments made (e.g., for importing goods and services) not by the initial providers of tourist services but by other suppliers of goods and services: e.g., those in the trade who import building materials or specific equipment for hotels,
- Tertiary effects: are associated with additional expenditures incurred for supporting tourism activities: e.g., those of domestic tourists pertaining to their consumption of imported travel or recreational goods, or tour operators' payments abroad to service the country's residents foreign travel.

b. Regional and local level studies or tourism's impact upon regional and local economics

The regional aspects of tourism's economic impact, as well as, the whole spectrum of benefits, or disbenefits (economic and social) of tourism's growth for host communities and regions, is an emerging field of inquiry. Central positions hold issues such as income ge-

neration, local employment creation and tourism's effect on other economic sectors of the local community - mainly the effect on agriculture. Major items discussed within this context focus on certain questions as follows:

- Economic duality: to what extent is tourism demand for commodities and services being met and/or could be met by local inputs?
- Expenditure and multiplier: how extensive is the spread range of economic effects? How does it relate or depend on the structure of the local economy and the different types of tourists?
- Contribution to economic and employment diversification: to what extent, if any, is tourism contributing to the transformation of the economic base of some rural areas? From an agriculture of subsistence to a leisure agriculture (agritourism), from a monoactivity employment to a multiactivity one; relative issues concern the compatibility of certain tourist activities in the rural environment with "pure" agricultural activities like, e.g., farming.
- Nature and effect of external economies, or diseconomies: What are the gains to the local consumer from a reduction in the cost of providing goods and services, when a larger volume of tourism demand results in economies of scale for the supplier? What are the diseconomies resulting, for example, from congestion, or from the importation of highly priced goods to serve the tourist clientele?

Various studies which were undertaken during the 70's in the U.K. by academic researchers, or private agencies and sponsored by statutory bodies, covered predominantly rural areas where tourism was considered an important growth sector[1]. The main research objective of such studies was to measure the economic impact of tourism in terms of local income generation and employment creation - by surveying visitors, establishing their expenditure pattern and assessing its effects on and or leakages out of the local economy.

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1. See, e.g., Studies of Anglesey (Sadler, P. et al, 1971), Gwynedd (Archer, B. et al, 1974), Cardiganshire (Wheeler, B., Richards, G. 1974).

In reviewing tourist impact studies, apart from the general positive effects of tourists' expenditure on the local and regional economy assessed in detail, one should also note the following:

- The uneven distribution of tourism's economic impact over a region; i.e., the high spatial concentration of the tourists' economic impact on the locality where they stay and spend money.
- The existing variations in the size of the impact that relate to the types of tourists and modes of travel used, as well as, to the type of accommodation; e.g., the highest income multiplier was found to be in the family type of accommodation (bed and breakfast).
- The incidence of a large part - more than 50% - of the direct income and employment generation outside the accommodation sector of the tourist industry.
- The relative prominence of tourism's on the creation of female employment opportunities.
- The difficulty in making cross industries comparisons as noted elsewhere (TRRU, 1975): "the absence of a standard procedure for preparing multipliers poses considerable difficulties in any attempt to compare the multiplier effects of different industries".
- The lack of emphasis in impact studies or lack of relevant information regarding the opportunity cost involved in employing regional resources to promote further tourism's growth as against and in comparison to developing other alternative economic activities.

The structural effects of tourism's growth is a less studied issue, although of great importance for assessing tourism's role in regional development. With regard to one sector, i.e., agriculture, and in places where tourism was expected to stimulate the agricultural sector by creating new markets of by expanding the already existing ones, the results, in general, seem to be negative; there was a further decline of the agricultural sector. Only in few cases, tourism successfuly assisted the agricultural employment and this, mainly, in places where small tourist bussinesses were created with a large participation of local interest (Austria). Perhaps, strictly from the agricultural point of view, tourism and highly efficient agri-

cultural development are mutually exclusive since, as it is held (White, 1975), the additional income provided by tourism effects, with diminishing returns, the further development process of agriculture and rather assists in preserving traditional small agricultural units, etc.

White (1975) has analyzed, on a locality-regional basis, the effects of tourism's growth on employment creation in other sectors of the economy, by employing correlation techniques; a series of coefficients determined in his analysis were thought to indicate the rates of employment change in different branches as a result of tourism's growth. However, it is believed that apart from employment in tourist services proper (e.g., hotels) it is difficult to isolate and consider tourism's growth as a separate causal factor and determine the extent of its contribution to the employment change in other than tourism branches of the economy.

5.2.2. The sociocultural impact

The major body of sociological literature on tourism, or the literature from other disciplines (geography, economics, planning) referring to the social aspects of tourism, has been developed over the last 10-15 years. This may be due to or reflect an increasing interest in and concern for the problems created by the rapid growth of tourism in the sixties and early seventies; interest among academic researchers, international agencies and by the public or society at large. Recent reviews (Thurot, Camuset, Gay-Para, Baretje, 1976; Noronha, 1979; de Kadt, 1979), indicate the predominance of specialised microstudies or case studies undertaken in various localities.

The various views expressed up to date in relevant studies can be grouped into two categories. One category views tourism as an agent of progress and modernization - especially in traditional societies. According to this view, tourism is considered to bring income and employment to the local residents. In this sense then, tourism is considered as a stabilization factor of a region's population, as well as, catalyst for economic growth. Additionally, tourism is thought to be contributing inter alia to increases in the standard of living, in the level of education, and in the mobility of the population, especially in peripheral areas with limited resources and developmental potential.

Further, it has been argued that the social interaction between local people and tourists broadens local interest in international affairs, thus bringing a better understanding of the behavior and the habits of people of other countries (Peters, 1969).

On the other hand, a second category refutes some of the above assertions on the basis that tourism has a multiplicity of negative consequences on traditional societies. For example, studies made in the Basque region of Spain (Greenwood, 1972; Neto, 1976), in the tourist areas of Austria and Italy (White, 1975), in the Caribbean (Bryden, 1973; Young, 1977), and in the Greek islands (Packer, 1974) have shown that an unprogrammed and uncontrolled touristic development brings about an internal friction among local social groups, the abandonment of traditional means of productive employment, a turn towards unspecialized,opportunistic employment and deterioration of the natural environment.

The most significant negative consequences of tourism's growth have been observed in areas where ownership and the management of the tourist product has been passed on to non-local people, from the initial phase of tourism's growth. Usually, this results into the creation of a parallel tourist economy, which develops independently of the local economy. In these cases the characteristic features are:

a. The majority of the products or services necessary to satisfy tourist needs, are imported from other regions or even foreign countries.
b. Investments in tourism are made predominantly by non-locals and enterprises use increasingly imported better trained labor while locals are employed in low-quality, unspecialized jobs.
c. The growth of tourist enterprises, shops, etc., as well as labor distribution tend to evolve into two separate compartments: one servicing the tourists, the other servicing local residents.

In several studies, the determinative influences of tourism on traditional societies is associated with,and considered as depending on, factors such as the relations of the local people with the "imported" labor in the tourist enterprises, the type of tourists who visit the area (from the socioeconomic status point of view and the type of accommodation they are using) and, more important, the nature and

structure of the local economy during the early stages of tourism's growth.

Thus, within the above context, tourism's sociocultural impact is viewed as closely linked or resulting from changes in the economic structure of a community; changes in employment and production associated with the social status attached to touristic employment, the replacement of local labor in the tourist service sector with a more "efficient" one from outside the area, the technological change altering traditional techniques, etc. Equally important to notice is the relationship of sociocultural impacts to those changes of the physical structure in a community; i.e., changes in the land use pattern and the built environment. Here impacts are viewed as the effect of conflicts between local and non-local interests with regard to land transactions, control of land and building development, land prices and speculation; or still further, as the effect of inplanting within the rural environment a particular touristic physical structure reflecting values and tastes of an urbanized domestic or foreign, metropolitan based, industrialized society.

In the discussion of the sociocultural dimensions of tourism certain interrelated issues of a broader character and relevance to planning are thought to deserve particular reference, even if such reference, inevitably is made in a rather schematic and far from exhaustive way.

One significant issue with social, as well as, spatial and economic implications concerns the role of tourism and recreation activities at large, within the context of the urbanization process and the urban-rural syndrome. In several studies which examine the impact of tourism (as well as, vacationing in general and second housing) on rural communities, tourism, considered as a phenomenon of urban origin, is assumed to be instrumental in tranforming the rural society's centre of interest; a factor which contributes to replacing it by another of a different nature. What is implied here is that the rural employment milieu as the centre of interest, which commands the organization of the society and determines social relations and institutions, undergoes changes and disintegrates through tourism which acts as a transformation agent (Rambaud, 1967).

A second issue of particular significance for host countries, mainly LDCs, concerns the "transnationalization" of the tourist product and/or the "commercialization" of culture. Regarding the first item, one could observe it within the frame of a process, whereupon the evolution of a country's tourist product is affected by certain factors. One such factor, international tourism, or particular types of it, is conducing to a gradual homogenization of the initially distinctive regional features that constitute and add to the image of the tourist product offered. Some local-regional elements of the tourist package provide only a folkloristic flavour. In essence, this becomes of marginal importance, since the whole package is designed according to the taste of the international visitor; local inputs are modernized to conform with international standards and meet the requirements necessary for a link up with the international organization of travel mechanisms.

The discussions on the "commercialization" or "commodization" of culture focus their attention on different aspects of the subject matter. One aspect pertains to traditional artifacts and objects per se; to the extent that tourist demand is affecting quantitatively and qualitatively traditional local products; to the changes, improvements, or deterioration (growth of pseudo traditional art) that have occured in the characteristics of local handicrafts. A second aspect examines the evolution of cultural events (e.g., folk dancing) as a result of tourism's growth. A third important aspect deals with the repercussions of having or introducing purely tourist oriented (commercial) criteria in cultural choices and policies; the arguments here pertain to the implications for a country's cultural policy at large and its societal needs from directing and using cultural resources and services predominantly for the benefit of tourists and perhaps the country's cultural elite.

The problems in studying the various effects of different types of tourists on various social groups of the host country (e.g., the younger members of the community who may exhibit a greater "adaptability" and changes in attitudes) lie in the difficulty in isolating, defining and assessing the tourist variables which are instrumental to the observed changes. There is a plethora of factors pertaining either to the interacting groups (direct contacts and encounters), or to the

total environment and relations (indirect influences) created and brought about by various tourist agents; e.g., tourist TNCs or certain types of tourist enterprises and organizations promote particular tourist consumption and behavioural patterns, while certain local social groups adopt them and, acting as "transmitters", transfer them into their wider social environment. The role of the so called "demonstration effect" principle, or paradigm, referred to in several studies cannot explain, in our opinion, impact situations; it might be employed to describe certain situations or, one can ascribe to it, as has been done elsewhere (Hveem, 1973, Hymer, 1979, Kobrin, 1979), the role of a functional mechanism for controlling, influencing or sustaining dependency relations of a country, in general, or its tourist sector, in particular, when this sector is viewed within such an analytical frame. Tourism then, functionally linked to the world transportation and communications system, assumes the role of a vehicle shaping images and behavioural modes of the host population on the lines of more or less homogeneous and stereotyped behavioural patterns of W.European visitor groups.

Viewing the sociocultural dimension of tourism within a particular geographical setting - the effect of massive tourism connection between the metropolitan cores of N.W. Europe and its southern periphery - it is argued (Boissevain, 1979) that there is a "growing cultural and psychological dependence" of the N.W. European worker on the southern Mediterranean periphery. However, what has not been explained is whether such a "dependence" is associated with, or evoked by the inherent cultural characteristics of a particular host region, or, by the awareness and real understanding of local culture that results from a critical dialectic confrontation with it; or, whether such a "dependence" is simply created and imposed by the western industrialized society and the way it is organized. As to the latter, one could argue that tourism has become a consumer's item, an element of the consumers civilization within the capitalist system, an expression of the system's ideology of "free time" and holidays. Within such a context the cultural package of tourist consumption may be seen as part of the reproduction phase of labour force. It would be therefore more appropriate to view such relationships along the lines expressed elsewhere (Lundgren, 1979) namely that the "relative cultural

homogeneity between N.W. European regions and Mediterranean have contributed to a smoother relationship between visitors and locals".

5.2.3. The physical-environmental impact

Tourism resources are to a large extent socio-cultural and physical-ecological resources. Many tourist, or outdoor recreational activities, take place on locations, or use and consume terrestrial and aquatic resources, with extremely diverse physical characteristics; which variably affect the capability and adaptability of the natural resource base to sustain different types of tourist uses.

The fact that there are considerable environmental problems as a result of tourism development or development in general is thought (Brown, Emerson, Stoneman, 1976; Hjalte, Lidgren, Stahl, 1977) to be due to the misallocation and mismanagement, through the market mechanism, of such resources; such problems are also considered (Knetch, 1971) to "stem primarily from a failure of economic incentives to guide resources to their best uses from the point of view of everybody". The validity, however, of such general statements should be tested and analysed with reference to concrete cases, or situations in different countries or regions.

The short and long-term effects of tourism on the physical environment, or the various categories of environmental damage caused by tourism, were approached analysed and classified in different ways. In the classification offered by the OECD (1980), and suggested as a frame for policy formulation in tourism, the various effects are grouped into the following categories: a) effects of pollution (air, water, noise), b) loss of natural landscape; agricultural and pastural lands, c) destruction of fauna and flora, d) degradation of landscape and historic sites and monuments, e) effects of congestion, f) effects of conflict (foreign visitors - local residents), g) effects of competition (squeezing out local (traditional) activities and practices).

Although, as it appears above, there exist several kinds of physical impacts, as a result of natural environmental changes caused by tourism, the main impact categories usually considered correspond to two major components of the physical environment: (i) the natural environment and (ii) the man-made built environment. The discussion therefore which follows deals, predominantly, with impacts of tourism

on these two categories of the physical environment.

The macro-analytical aspects of tourism's physical impact that may be, for example, considered pertain to tourism's physical development in relation to broad aggregates of physical structure (settlements, agricultural land, coastal, natural, environmental areas, etc.) within particular territorial units or regions.

For example, within the Mediterranean region, and with regard to the effects of coastal tourism on the settlements pattern, one may observe the following: The bulk of tourism demand for resort holidays areas along coastal zones brings about a sprawl of tourist activities and facilities along the coast; thus, conducing to a corridor type development transforming the existing settlements pattern and built fabric. White's typology of tourist development, which was presented earlier, could provide a base for empirical analyses and case studies to explore tourism's growth and impact, through planned or unplanned action in three types of zones:

a. Coastal zones previously unused.
b. Coastal zones where agriculture - farming predominates and the settlement pattern makes little use or no use of the sea and related sea-coast activities.
c. Coastal zones where settlements are port locations strongly linked to sea and related activities.

The impact of tourism on the urban physical environment, and specifically on its built-heritage, or traditional fabric, is an issue frequently discussed within the context of cultural development and conservation policies promoted in particular towns or countries. An example worth mentioning here refers to a series of observations made (Coenen - Huther, 1981) with regard to the influence of urban tourism[1] on culture in two major tourist resort towns (Ghent, Segovia). In the relevant report, the following concluding general points and arguments are drawn:

a. Although various steps taken to conserve a town's cultural heritage

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1. According to the author "urban tourism is defined as being tourism of a 'cultural' or 'educational' type, predominantly individual but increasingly attracting groups and mainly transitory".

are increasing its attractiveness (restoration of monuments, new museums etc.), and hence benefit the inhabitants, they, nevertheless, have certain drawbacks: certain steps conflict with the interests of residents in old areas, who often have to move away because of rent increases as a result of restoration works.

b. The protection of a towns' heritage and the promotion of cultural activities (e.g. festivals) affect differentially the town's residents; many residents scarcely visit heritage attractions, or, only certain groups (cultural elite) seem to participate in cultural events.

c. Although investments, allocated for the development of heritage, or the development of additional touristic facilities needed, have a positive effect in the economic or sociocultural field, such investment choices favour certain only interests (as against others with different demands) and may prevent investments in other fields.

Another point, worth raising within the above context, concerns a possible divergence in perception that may exist; i.e. differences, as to the value attached to the protection, and development of cultural heritage, between certain people in charge of cultural affairs, or certain professional groups (architects, sociologists), and the local people. It could be argued that if people are better off financially, and the whole family remains in the home town, such fiscal consideration may "distort" their perception of cultural loss (i.e., tourism's negative impact on the local built fabric); or the fiscal parameter may induce the residents to oppose decisions taken elsewhere to conserve the built-heritage resources of their locality. Similar points, as those outlined above, are also discussed in a case study of the Greek island of Mykonos (Loukissas, 1977).

The impact of various types of tourism on rural areas, on the natural landscape and on land use changes is discussed in many studies and reports; one should therefore select and outline a few only examples.

In an article on "The organization of tourism in Sicily" (Campagnoli, 1979), the impact of various types of tourism (e.g., large luxury hotels constructed along the most scenic parts of the coast, second homes, built near existing villages, or grouped in complexes far

from established towns) is related to certain underlying factors such as: a) the interest of large tourist enterprises and real estate societies based outside the region, b) the failure (due to the lack of funds, political interest, and zoning laws) of policy measures to control development, c) the particular way "the financing of the tourist industry is controlled by well-defined and well-organized groups, which have every interest in favoring the transformation of agricultural areas into building zones; in fact the financing of agriculture is very difficult to come by and is only given to large landowners, thus preventing the small farmers and businessmen from operating in the tourist industry".

In the case of the Maltese islands, the effects of tourism on the natural environment are considered variable in a report prepared for the Council of Europe (Saliba, 1981). Analysing the impact of tourism's growth within the overall context of national development, the author argues that "no major environmental damage has occured". Specifically, parallel to certain negative aspects of tourism's growth (e.g., those affecting the local population like overcrowded beaches, the visual alteration of the coastline, due to urbanization and local buildings, the depletion of the marine environment of certain fish species), this report emphasises two positive aspects of tourism's growth: a) the fact that touristic development is being combined with nature conservation in several localities and b) the contribution made by tourists - "who originate from countries with much more advanced nature conservation practices" - to the increase of environmental awareness among the local people.

An attempt to analyse "the impact of tourism induced environmental degradation on tourism" gave rather inconclusive results. The relevant survey undertaken by the OECD consisted of concrete case studies in a number of Member countries; studies which "were designed to throw light on the relationship between variations in income from tourism and changes in the environment". According to this survey, which was bound with difficulties[1], there were "case studies where

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1. The same OECD report (1980) analyses extensively the difficulties and limitations (e.g. methodological) pertaining to this survey.

the tourist numbers declined or changed composition due to longer - run environmental degradation". Specifically, the major conclusions according to the report are the following:

a. "In areas where there was a single environmental attraction, the environmental degradation at the time of general tourist recession has definitely lead to a significantly greater decline than in an environmentally highly attraction place".

b. "When tourist density reaches a high degree of saturation, which is intolerable to certain tourists, tourist numbers will not necessarily decline but tourist revenues might fall off because of the change in the type of tourist".

A large number of studies and reports cover particular aspects and issues of tourism's physical impact; for example issues dealing with problems of managing and controlling development in areas with varying intensity of touristic and recreational use; or issues dealing with concepts, methods and techniques for analysing the natural resource base or for measuring and assessing impact situations. In this connection, among the various studies, one should mention:

a. The Ireland (An Foras Forbartha) Study (1966), where visual vulnerability categories were identified and proposed as a basis to assess the impact of new developments.

b. Certain reports of the Scottish Tourist Board (STB, 1975) and the STARPS programme[1] which set guidelines for tourism's impact appraisal within a broad methodological schema for deriving tourism and recreational strategies.

c. The OECD Environmental Tourism Study (OECD, 1980) in which various indicators (e.g. nuisance, aesthetic, etc.) relate tourist parameters (e.g. tourist numbers, traffic flows, etc.) to levels of use or changes in the level of use and quality of environmental resources.

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1. The Scottish Tourism and Recreation Planning Studies (STARPS) programme was designed to produce outline planning strategies for tourism and recreation in each Region and Islands Authority area of Scotland.

Research work on tourism impacts has been both descriptive and explanatory, seeking to answer questions of what and how, and attempting to analyse problems, conflicts, effects of interacting tourism factors within particular (economic, social, environmental) settings. Concluding this section, and with regard to the various reviewed issues, we think two major comments are in order here.

First, one should note that, although a close and important relationship between socio-cultural and economic dimensions of tourism's impact has been widely recognized and emphasized, a method to determine, or measure such a relationship has not been, as yet, developed. Also, it seems that it is not an easy task to make an empirical distinction of the socio-cultural impacts of tourism from the socio-cultural impacts attributable to other impacting activities in our society (e.g., mass media, cultural exchanges, trade, etc.). Thus, there are still considerable conceptual (drawing demarcation lines, or boundaries) and methodological problems to be resolved.

Second, commenting earlier on the overall impact methodology, we have indicated that the validation of impact methods (and of their results) should depend on the soundness of the evaluation procedures being employed and on whether certain behavioural responses (e.g., of those persons being involved in the impact situation under study) can be incorporated and registered. Thus, we believe that it is within such a context that the study of tourism's impacts should be viewed and develop. The soundness of specific methods to explore, e.g., "How different types of tourists impact on the physical environment of a region, "would greatly depend, in our opinion, on how well defined, or classified are e.g.; the types of tourists, or the environmental variables being studied. This type of issue was given little consideration in many impact studies. Additionally, and in connection to the above example, impact studies should envisage and incorporate certain mechanisms for registering and assessing community responsiveness to simple questions such as "Who benefits from tourism, or, from different types of tourists, in the host region under consideration.

6. Conclusions

In the preface of this chapter we have included two major purposes in our review of the literature: a) to examine the body of research undertaken which deals with specific themes and questions we have selected and which are though of significance for pursuing the research objectives set out in the previous chapter, and b) to identify and analyse the various methods and techniques employed in different kinds of tourist study. Thus, the concluding comments which follow below are made under two main headings. First, the conclusions related directly to the questions posed are further and briefly discussed (there was already discussion at the end of each section) and certain topics are indicated for further research, or topics we intend to pursue in the following chapters. Second, we discuss the nature of various methods and techniques employed, their potential, or limitations, the "range" of their application at large and in connection to our research objectives and methodological approaches.

We think it is pertinent to begin with certain (general) preliminary remarks concerning the overall nature of research in tourism. In this respect, one should notice first that concepts and analytical methods in tourism studies vary considerably. Each branch of social sciences seems to provide a particular perspective, attempting to integrate the study of tourism with its own body of theories and methods. The fragmentation and in some areas limited nature of the body of knowledge and research concerning tourism may be attributed, perhaps to the complexity of the tourist phenomenon, the diversity of the elements making up the TP, the variety of the tourist market, or the tourist population characteristics.

Apart from conceptual and methodological "difficulties" besetting tourism research, a fact worth noticing is the lack of statistical data, or appropriate tourism information systems in general, that handicap research in many areas. This lacking, or defects, in tourism information should be overcome through mainly, specific surveys and studies undertaken by international organizations (e.g., the World Tourism Organization) and national tourism administrations to acquire, or complete data on: a) foreign and domestic tourist behavioural patterns (e.g., expenditures, "life styles", etc.), b) available and potential tourist resources, and c) the national-regional-local network

of tourism services available (e.g., public and private agencies, tourism planning organizations, etc.). However, one should also attempt to use from existing information what could be considered as "true and useful"; in the sense that in making certain choices and value judgements the criteria of "level of certainly" and "practical utility" are being employed.

6.1. Concluding remarks regarding the major themes reviewed

The theoretical and empirical research background to interpret the spatial dimensions of tourism can be distinguished into three categories.

First, locational theories and, mainly, specific models developed to assess tourist demand and flows (at the international, or national-regional scales), cover the major part of relevant research. As was explained in previous sections, such aggregate models are usually based on the utility-maximizing theory of consumer's behaviour. Second, several studies have been undertaken to explore individual, or group perceptions, attitudes, and preferences, regarding tourist resources (attractions), or, the social and psychological aspects of tourist spatial behaviour in general. Studies in this area, have different theoretical underpinnings, drawing, obviously, on various social and psychological theories. However, research in this area seems still to be inconclusive and to have advanced, relative to other areas, little beyond the stage of formulating and discussing various assumptions.
Third, within a broader, holistic (intergration of historical with social, economic and political elements), or political economy, framework we can include several attempts to describe and discuss issues of dependency in the development of tourism. What is perhaps needed in this area is the development of more systematic, methodologically, approaches to study specific situations from which to derive concrete concepts and theories.

In reviewing the models explaining and forecasting the special patterns of demand, or flows, one of the most important conclusions reached pertains to the difficulty to construct and employ one specific model of general applicability. Difficulty which may be perhaps attributed to the very nature of tourist demand. Tourism is one of the most dependent on, and linked with other sectors, economic activity. Additionally, and equally significant, tourism has a particular and unique property which

pertains to the dynamic conditions of relations created between two or more geographic units; relations which develop as a result of movement, spatial displacement, temporary residence, and interaction of different (as to their characteristics) population groups within different environmental settings. It is, therefore, pertinent to conclude that findings and measurements resulting from applying various models, should be considered as approximate and, perhaps, indicative. This may be more valid when one is concerned with making long term forecasts, or when proposing long term tourism policies.

In the literature review of developmental studies we have observed that there is still a "deficiency" of knowledge about the contribution and the role of international tourism in the development process; particularly when tourism is viewed within the frame of the organizational structure of the international tourism market, of the various tourism agents and relations involved and developing within such a frame. This would imply, in our opinion, that policy recommendations to promote international tourism should be, as a general rule, country-, or region- specific, relating types of tourism to the stage and characteristics of a country's development. We have observed further, that issues of dependence-interdependence and core-periphery relations have been given limited attention in the various studies of international tourism. In contrast, these issues have been discussed extensively in studies of economic development, international relations and trade. It is our belief that, due to the very nature and mode of international tourism's growth, the study of relevant theoretical and methodological issues could provide useful insights into understanding cause-effect relationships of tourism's growth within particular spatial contexts. Thus, an attempt will be undertaken in Chapter III to examine such issues, in concert with the overall objectives of our research Direction A.

The difficulties besetting the inquiries on the TP are mainly conceptual. From our review, it may be concluded that there is still conceptual ambiguity concerning the elements that compose the TP. Our discussion of the complex nature of the TP suggests the need for further research in this area, in order to acquire a thorough knowledge of the diverse interacting elements of the TP. Our relevant discussion offers, also, a guidelines frame, as to the major parameters we should consider in the examination of the Greek TP; a task pursued in

Chapters IV and V.

In examining tourism capacity issues we have seen that it is important to view them within the context of the whole range of parameters which form the TP of a country, or a region; the TP being defined in this case as an economic, sociocultural and physical entity with spatially discernible differentiations. With reference to capacity studies, and from the planning practice point of view, it is worth noticing here certain "technical requirements", described elsewhere namely that "in the overall landscape analysis the physical presence of tourist-related matter (visitor volume and attributes) is weighted against local, or regional components crucial to place character. These local components are important in sociological-demographical terms, in the context of the cultural-historical environment, as well as, in relation to how the various pressures are felt in the more prominent parts of the ecological system" (Lundgren, 1979).

The review of impact studies, which attracted most of the attention in this survey chapter, has shown that in spite of considerable progress in certain areas (e.g., methods and techniques of EIA, especially economic aspects) there are still unresolved issues in other areas. For example, as it has been noted elsewhere (WTO, 1983) "the difficulty of quantifying social and cultural impacts remains a stumbling block of real progress in this field of research". Additionally, one would agree with certain observations made in other relevant surveys (Williams, Goodier, 1981) and would remark that relatively less consideration was given, in the various tourism impact studies, to exploring the role of the state, or the effect of concrete decisions, practices and policies of several private and public actors and agencies. Finally, it is worth noticing that many of impact studies in tourism are quite specific, i.e., they focus on analysing one dimension of tourism's impact (economic, social, physical) without attempting to explore existing interrelationships among them.

6.2. Concluding remarks regarding models, methods and techniques employed in the reviewed studies

In this review chapter we were concerned with various models, methods and techniques, particularly in the sections discussing the themes tourism spatial demand and flows, tourist preferences assessment and resources evaluation, and impact studies. Generally, one may

distinguish two broad approaches with regard to the models applied and methods and techniques employed in tourism research: a) comprehensive, or macro-view" approaches related with quantitative research methods and b) "micro-view" approaches focusing on particular areas, or groups of "population".

Quantitative research methods employed in macro-models (macroeconomic demand analysis, gravity, or interaction models, etc.), are influenced by systems analysis thinking, and their application requries the identification and quantification of input, or output, variables and measures. Such methods use statistical analyses to test hypothesized relationships between the two variable categories, and they have been widely applied in models such as those critically discussed earlier in the sections of tourist flows analysis and impacts. Certain criticism has been already raised in discussing the models of this category. Generally, their limitations may be related, or attributed to the aggregate and mechanistic way with which they treat human (tourist) behaviour; failing to incorporate dynamic factors of social change, or overlooking the extent to which behaviour can be constrained by the conditions of the structural context (society) within which it occurs.

Social surveys and qualitative-analytical methods have been employed by both public and private agencies and academic researchers in order to obtain appropriate data material and formulate and test specific hypotheses, or, micro-models. Micro-models usually generalize from observations of individual tourist behaviour and develop hypotheses applicable to particular market segments. Questionnaires and interviews are typical methods used in opinion surveys and attitudinal studies in order to explore behavioural aspects of different segments. On the other hand, observational methods and field techniques have been applied predominantly in anthropological studies of tourism to observe, e.g., types of tourist-resident relations. Within the travel industry, research methods have developed as an integral part of the marketing process; as a result of the interest of package tour enterprises to develop existing and new products. Here, the focus is on understanding how the consumer (potential tourist) perceives various destinations, how the consumer's demand variables relate to specific stimuli (i.e., products, or holiday destination). From the planning point of view social surveys (e.g., tourist preference surveys) may offer quite reliable approximations for drawing inferences on specific behavioural

patterns (e.g., tourist consumption patterns); for understanding and defining market segments in tourism, and additionally, for evaluating and classifying various resources and tourist landscapes.

Which are the particular merits of each type of methods reviewed, and what is the major research problem emerging with regard to methods applicability in future tourism studies? First, it seems that the merit of each method would greatly depend on the objectives which have been assigned to a particular research task. Second, we have already indicated that in spatial and regional development studies, EIA methods can cope efficiently with several environmental factors related to tourism's growth; provided there is an adequate data base to support assessment procedures. Third, and this applies to spatial tourism studies in general, what seems to be needed is perhaps further exploration and advancement in theories, models and appropriate methodologies for interpreting tourism's growth processes; in a manner which promotes interdisciplinary coordination, and most important, in a way which links up micro-level research findings with comprehensive, or aggregate models. Regarding the last point, one should attempt to liaise and integrate effectively, for example, gravity models with micro-level studies of tourist travel motivations, or tour operators behaviour, i.e., studies which could add to the understanding of tourist spatial flows, or tourist mobility.

In the above concluding remarks we have attempted to trace the progress which has been already been made and the various problems facing tourism research. To the above delineation of major conclusions which emerge in this chapter, one further note that should be added concerns the connections of the methods reviewed to our research objectives and methodological approaches outlined earlier in Chapter I. Following research direction A, in the Chapters III and IV we attempt to interpret the spatial patterns of tourism demand, at both the international and national levels, employing similar to the reviewed linear and gravity models to test specific hypotheses. Also, in both these chapters we complement our quantitative analyses with more comprehensive, or holistic approaches, attempting to acquire and employ qualitative data, as well as, drawing on, and exploring further, certain of the concepts, and methods discussed in this chapter. Chapters IV and VI are, generally descriptive. Here, the methods employed are largely determined by the available data. For example, the only avail-

able "regional" statistics on international tourism in Greece refer to the different nationalities of foreign visitors (nights spent in various accomodation establishments). Thus, the international tourism market is segmented into nine visitor groups corresponding to the nine major nationalities visiting the country. Obviously, other, or similar to those reviewed methods of analysis may be employed. This is, however, dependent on specific data requirements which are either not available or would require, in order to obtain them, specially designed surveys. The selection of factor analytic methods pertains to their expediency to sketching out and identifying, according to our major aim, the major interregional differences, or major dimensions of tourism's spatial growth in Greece. Impact studies provide useful insights into the way of approaching and exploring the territorial aspects of tourism's growth. The relevant methods analysed, suggest the range of issues, or the multiple data sources, that should be considered and brought together. Most important, the reviewed methods suggest the way of putting together and developing a comprehensive methodological schema for analysing, formulating, or evaluating tourism impact situations and policies; both tasks to be undertaken in Chapters VI and VII.

CHAPTER III

The wider context of tourism's spatial growth in Greece: The pattern of tourist flows in Western Europe

Scope and thematic content

Chapter III, dealing with research objectives of Direction A, relates tourism's growth in Greece to the wider spatial frame of tourism's growth in W.Europe. In this chapter, tourism is viewed within the context of both country-specific relations (expressed in terms of quantified physical tourist flows)[1] and relations which transcend national boundaries and assume predominantly a qualitative character. Thus, this chapter deals with two major questions: a) which are the characteristic elements of the tourist flows patterns and the major factors which influence such patterns? and, b) what kind of relations exist, or, develop in tourism between certain countries and how such relations affect the process of tourism's spatial growth?

Research work in this chapter employs two analytical approaches to deal with the questions stated above. In the first approach the analysis undertaken aims at:

- Identifying the nature of tourist flows among a group of countries with which Greece is linked, i.e., explore the spatial structure (size, direction and spatial concentration) of tourist flows and hence, determine existing difference, or similarities among countries on the basis of flows.
- Examining how tourist flows evolve over time, i.e., assess possible similarity and/or stability of flows over a given period of time out and into each country.
- Explaining the differing degrees in intensity of tourist flows, i.e., investigate the role of certain factors assumed to be instrumental to the variation of intensity in the spatial distribution of flows.

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1. Flows usually refer to the movement of people, or commodities along certain routes and are measured, or analysed through different techniques: e.g., linear programming, gravity models, etc. The tourist flows of a particular country refer to the number of foreign tourists visiting that country (inflows), or to its nationals visiting other countries (outflows).

The last of the above aims is approached by employing cross-sectional analysis to explore selected factors which are thought to underlie the spatial differentiation in the intensity of flows and to identify inter-country differences. The selected factors considered in the analysis are the following:

- The transport cost, as an economic variable which affects either separately (individual tourism), or in combination with other cost variables related to travel package, the tourist flows to specific locations.
- The per capita income and private consumption assumed implicitly to influence the propensity to travel abroad, or, to indicate the tourism consumption power of actual, or potential tourists.
- The cost of tourist services (absolute, or relative values) in both the tourism destination and origin countries, indicating the attraction of a particular country, or its competitiveness within the market.
- The population of the tourism origin country and employment in all but the primary sectors, both variables assumed to influence the volume of tourist flows.
- The tourist infrastructure, or accommodation capacity, employed as an index of a destination country's attraction.
- Migration, cultural affinity (common language), geographic proximity and heliotropic movement, employed as variables which constitute the attraction profile of a country (see Table 10, Appendix A).

Apart from the above factors, we consider and discuss the significance of certain additional socioeconomic factors (age composition, socioprofessional-occupational characteristics of the tourist population, etc.). However, data on such variables is not readily available to be included in the statistical analysis.

The methods of analysis and the relevant hypotheses put forward will be elaborated in section 1 of this chapter. However, following the description of the aims set above, we should outline here the four major groups of hypotheses underlying the first approach. In all advanced hypotheses we are primarily concerned with making comparisons (i.e., identifying differences, similarities, or associations)

between the examined countries. An implicit assumption is that all spatial relations and interactions considered in the advanced hypotheses and models take place within a closed spatial system[1].

- In the first group of hypotheses, we introduce exclusively the distance factor (in its various forms) as a variable which is thought to influence the generation, or attraction of tourist flows out of, or into each country.
- In the second and third group of hypotheses, we first consider the volume of tourist outflows (demand generation) as a function of selected characteristics of the origin country (population, average per capita income, or consumption, employment, cost of tourist services) and of the distance between this country and the rest of the observed countries. Then, we develop two indices as general measures expressing the generation and attraction potential of each country. The different volumes of tourist flows observed in and out of each country are related to these two generation and attraction indices.
- The fourth group of hypotheses represent variations of the general gravity model. In the advanced hypotheses, the tourist flows, considered as an outcome of interaction between pairs of countries, are related to specific variables which characterize both countries (population, per capita income, cost of tourist services, tourist accommodation capacity) and to the distance separating them.

In the second analytical approach, tourism is viewed within the context of a core-periphery system which pertains to the European territorial structure (geographic space) and is determined, or characterized by certain dependency relations. Drawing on particular assumptions and theoretical work pertaining to the core-periphery relations and dependency paradigms, we propose an alternative theoretical and methodological approach that can be employed as analytical tool for the interpretation of tourism's spatial growth, and for discern-

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1. Closed systems are considered those "with clearly defined boundaries across which no movement, or exchange of material, or energy occurs". See Hurst, M., A Geography of Economic Behaviour, Prentice-Hall, London, 1974, p. 397.

ing the structural dimensions underlying such growth. In this analytical approach, we advance and discuss certain hypotheses, according to which the existence and formation of dependency situations in tourism is determed within the frame of interacting factors; pertaining to the particular way tourism's national and international structure relate, and to the role of tour operators as market controllers. The advanced hypotheses are elaborated in detail and discussed in the following section 2. Additionally, in the same section we undertake to analyse, within the methodological frame advanced, particular aspects of the tour operators' behaviour and the organization of the tourist industry in W.Europe.

With reference to the data, International Tourism statistics employed in this chapter derive from the OECD series "Tourism in OECD members countries". Most research work on international tourism is based on such, or similar (World Tourism Organization, United Nations) formal sources of information. The period selected for the statistical analysis (1963-1973) constitutes a significant and the formative period of Greek tourism's spatial structure. However, we also consider post-1973 international tourism data (time series of the 1974-1984 period) in order to observe and draw the possible implications of the newer data for the relevance of the 1963-1973 analysis. Additionally, we check and discuss our findings and conclusions vis à vis those of other researchers in relevant studies. The selection of a specific group of countries, to be considered in all our hypotheses of Approach A, was based on the availability of tourist arrivals statistics, which could make possible cross-country comparisons, and mainly on the fact that most of the selected countries constitute, from the point of view of Greece, either its major "sources" of tourism (tourism-origin countries such as USA, UK, W.Germany, etc.), or, its major tourism competitors (e.g., Italy, Yugoslavia, Spain).

1. Approach A: The place of Greece within the pattern of international tourist flows

Conceptual frame and methodological approach

The methodology concerning international tourism and the pattern of tourist flows depends primarily on the statistical data available (i.e., limitations and adequacy of present data in terms of scarcity, and homogeneity) and on the direction the particular research objective assume.

Empirical research in International Tourism and in the area of tourist flows analysis has been based, generally, on two methodological approaches:

- Econometric methods which consider and explore several combinations of variables, (e.g., income, population, prices) in order to explain the number of tourist arrivals or tourist receipts (dependent variables measuring demand).
- Spatial interaction models of the gravity type which assume pairwise relationships of tourist movement between country pairs. In these models actual tourist flows data (or recreation flows, since they have been used more often in recreation research studies) is used to calibrate the model equation for predictive purposes.

International flows of tourists involve movement of people from various countries (origins) through a transport network of routes (road-, air-, and sea-) and modes to several other countries. Such a complex network is interpreted and reduced to the simple level of graphs: an array of points (countries) connected to one another by lines (various transportation networks linking the countries). The methodological procedure employed in the analysis of flows uses several graph theoretical concepts aiming at revealing the spatial structure of major associations and the structural characteristics of networks.

A major task here is to quantify the degree of association between country pairs in a manner that allows identification of strongest associations within the network; associations in terms of interaction that take place directly between two countries, or, indirectly, through one or more intermediary countries. The magnitude of the association is measured by certain indices already used in geographic-

al research, indicating either the degree of contact between country pairs, or that of geographical concentration.

The concepts generation, attraction and interaction are used separately in conjunction with different linear or gravity type models. It should be noted that tourism is considered as the activity which denotes spatial interaction par excellence. The major factors which cause certain elements of the two spatial units to act upon each other can be grouped into the following broad categories:

- Factors relating to complementarities (complementary links) between two spatial units, due to existing differences in resource endowment, e.g., different climatic conditions between Mediterranean and Scandinavian countries.
- Factors relating to differences in accessibility of various countries, i.e., to differences in spatial distance and the related inequalities in travel time and costs.
- Factors pertaining to socioeconomic and cultural conditions (income, size of population, degree of urbanization, common language) exerting different degrees of influence and causing tourist flows out of, or into each generating or destination country, of varying intensity.

1.1. Size, direction and spatial concentration of tourist flows

1.1.1. Nodal flows. Direct and indirect connections and relations of dominance - dependence

The analysis of the pattern of tourist flows which follows is based on certain assumptions, which, we believe, characterize the pairwise relations (tourist exchanges) among countries in the examined system. On the other hand, the concepts dependence and dominance, which are used in this section are quantitative only measures related exclusively to the following assumptions on which the analysis is based.

Direct connections

The first assumption[1] examines the largest in-or outflows as they

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1. The assumption was originally made when, following a preliminary

appear in the original matrices in the group of 12 countries, or a network of import nodes (tourist destination countries), export nodes (tourist origin countries), and routes between nodes. According to this assumption, if the largest[1] tourist outflow is made from a country i to a country j, which receives a larger than country i total volume of tourist inflows, then country i is considered a dependent country (with respect to its tourist outflows towards j). More analytically, if MAX Xij = Xkl (where Xkl refers to a specific tourist flow from country k to country l) and if, in addition, $Yk < Yl$ (where Yk and Yl equal the total number of tourist inflows to countries k and l respectively), then country k is considered to be dependent on country l or, that country l dominates country k ($k \longleftarrow l$).

In addition, if the largest tourist inflow to a country j is made from country i, which has a larger total volume of tourist outflows in relation to country j, then country j is considered to be a dependent country (with respect to its inflows from country i).

For example, if the largest number of foreign tourists who enter Austria originate from Germany (which also implies that Austria "exports" the largest volume of tourist services to Germany) and if, concurrently, Austria shows to have smaller than Germany total volume of tourist outflows (or "import" of tourist services), then Austria is considered to be dependent upon Germany with respect to its tourist inflows ("export" of tourist services).

Based on the above mentioned assumption, the results of the analysis are presented in the form of graphs[2] in Maps III-1, 2. The main

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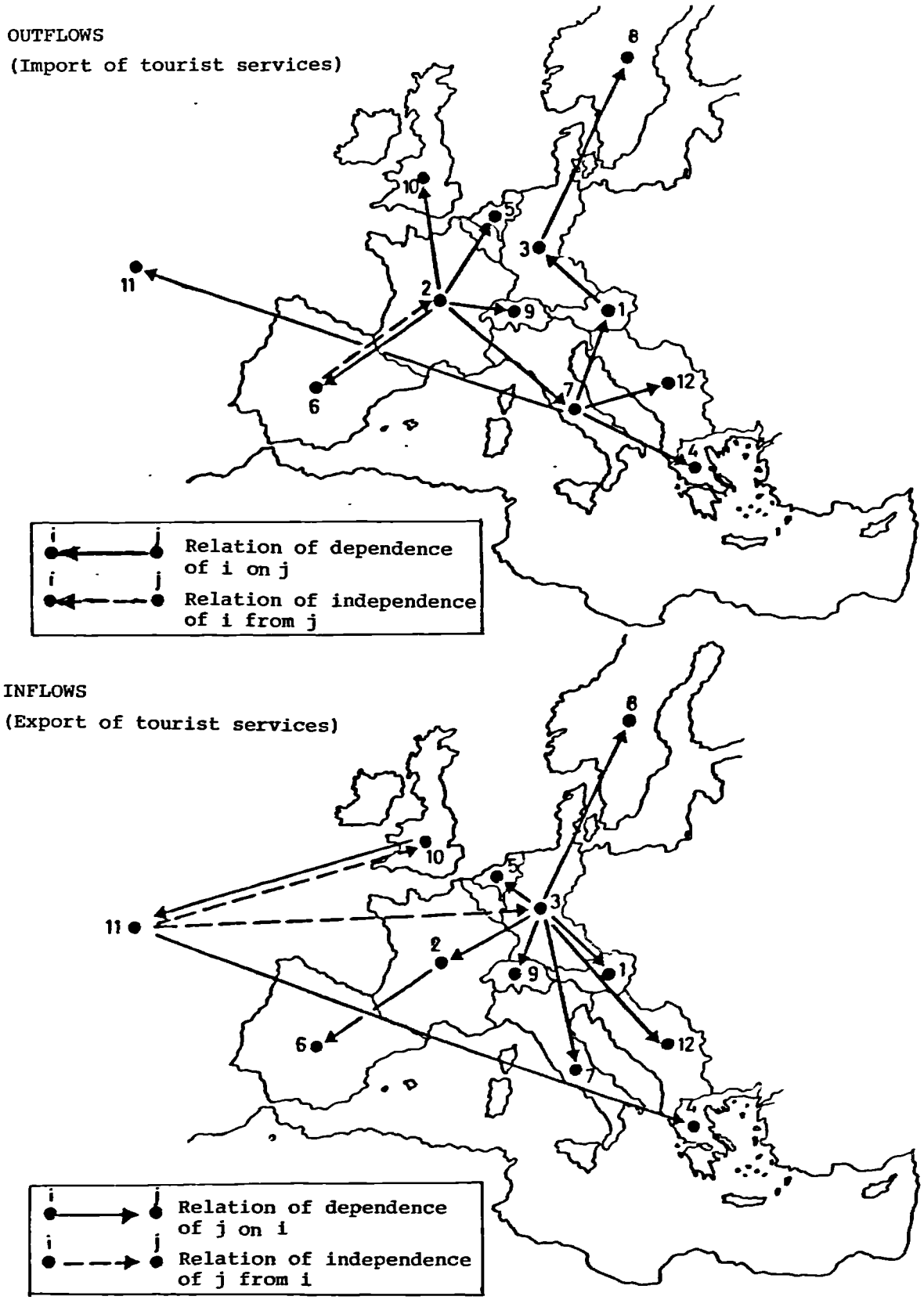
examination of the tourist flows for the years 1963, 1965, 1968, 1971 and 1973, it was found that there were not only distinct volumes of flows among countries but, also, for each country corresponded another one towards which, or from which, originated the largest relative volume of tourist in-or outflows (see Tables 1-5, Appendices - Chapter III).

1. As has been elsewhere referred (Nystuen, Dacey, 1961) "the term largest implies an oriented relation because a flow between a pair of cities may be the largest in terms of one city but not necessarily in terms of the other city".

2. The lines in the graphs represent functional relationships between two points, or nodes, where it is assumed, that the tourist population (each country receives or sends from, or towards other countries of the system) is concentrated.

Map III-1

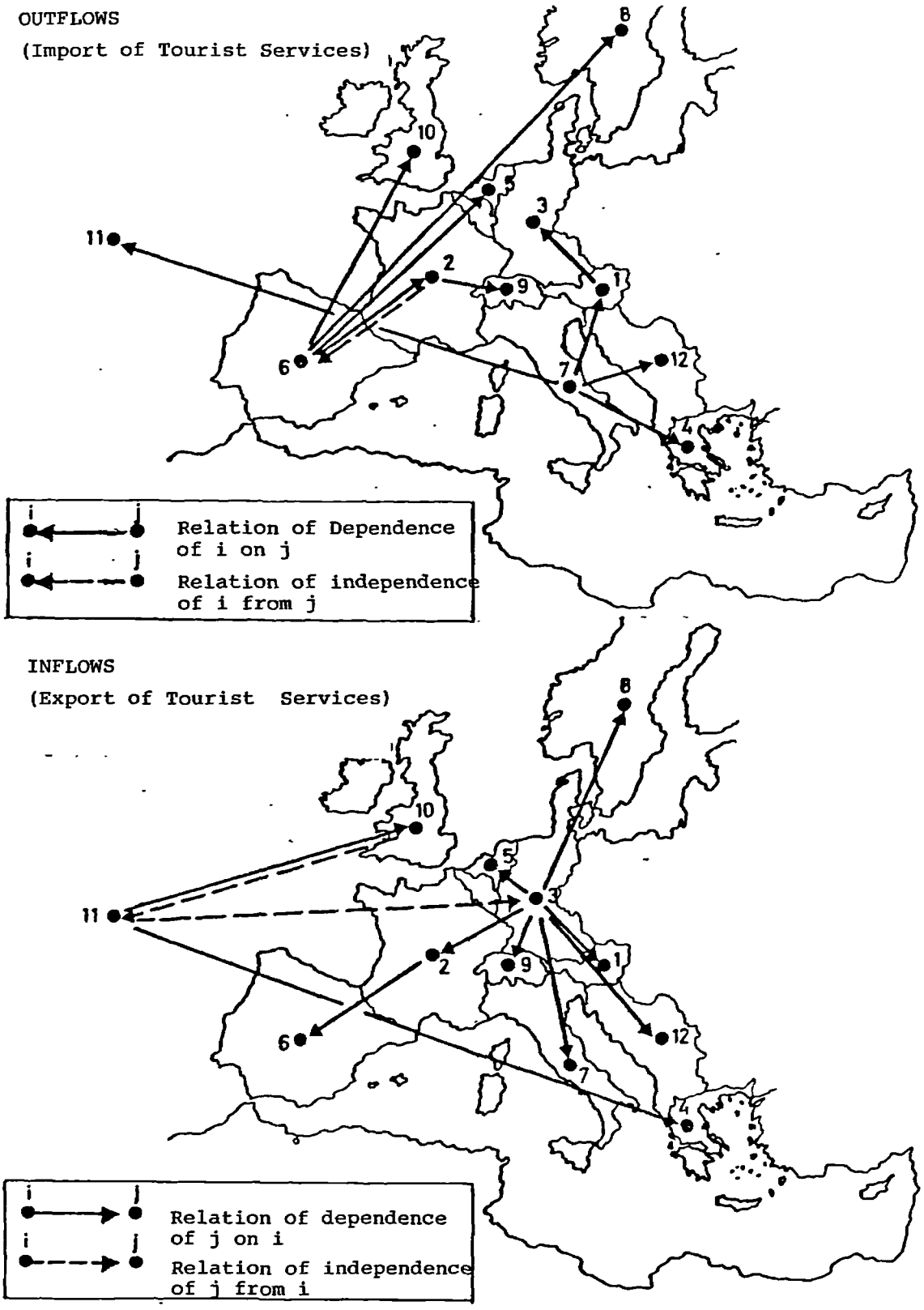
Major Tourist Flows (1963)
Relations of Dominance-Dependence



Map III-2

Major Tourist Flows (1973)

Relations of Dominance-Dependence



findings can be summarised as follows:

- In general, a relative inertia is evident to the change in the size, the direction and in the spatial concentration of tourist flows. In other words, it seems that once certain flows towards, or from a number of countries are established, their size and direction remains rather stable over time. Comparing, therefore, the years 1963 and 1973 the following can be observed:
- With respect to outflows, there has been a basic change only in France and in the Iberian countries. Thus, whereas in 1963 Holland, the United Kingdom and the Iberian countries depended on France, regarding their outflows (import of tourist services), in 1973 Holland, the United Kingdom, France and, in addition, the Scandinavian countries, depended on the Iberian countries.
- Regarding the inflows, W. Germany maintained a dominant position both in 1963 and 1973.

Austria, Yugoslavia, Holland, France, Switzerland, Italy and the Scandinavian countries depended on W. Germany in both years for their tourist inflows (or for export of tourist services). More specifically, examining the relations which exist between pairs of countries, certain observations can be made as follows:

The United Kingdom depended, for its tourist inflows, on the USA for both 1963 and 1973;

The dependence of Scandinavian countries on Germany for tourist outflows which existed in 1963 is absent in 1973; yet, the dependency is maintained in relation to tourist inflows (export of tourist services) from the latter to the former.

As for Greece's position in the system, it is found that during the period 1963-1973 it maintained the same position. For tourist outflows (import of tourist services), Greece depends on Italy and, for tourist inflows (export of tourist services) it depends on the USA.

Direct and indirect[1] tourist connections

The total number of connections among pairs of countries in the

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1. The indirect connections refer to those connections between two

examined system are determined, as in another similar case (Nystuen and Dacey, op.cit.), by the equations $Bij = (1-Yij)^{-1}$ and $Yij = Xij/\max\sum_{j=1}^{12} Xij$ where the element bij of a new matrix B represents the total direct and indirect influence from i to j and Xij refers to a tourist flow from country i to country j, i.e., to the values of the original matrices (see Tables 1-5 in the Appendix A). Based on the new matrices of direct and indirect connections and using the procedure employed previously, the structure of the main flows in relation to the total connections was determined. It is apparent that the new structure hardly changes, except for the outflows relations between the Iberian countries and France (dependence of France on the Iberian countries, 1963) and the inflows relations between France and Germany (independence of France from W. Germany in 1973). The data presented in Table III-1 (which result from the summation of rows and columns of the new matrices) show the total connections of each country and allow a hierarchical arrangement of all countries according to their connections in terms of outflows and inflows and on the basis of our assumptions.

1.1.2. The total structure in the spatial organization of the tourist flows: A Factor Analytic examination

The statistical analysis undertaken in this section attempts to examine the relationships which exist among countries of origin and countries of destination, from the point of view of similarities and common characteristics of their dependent variables.

In this case, the dependent variables are either the outflows which are thought to indicate a country's tourist access (i.e., its ability to generate tourism), or, the inflows which are considered indicative of a country's degree of attraction (i.e., its ability to participate in

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countries i and j, which are made through other (except the direct ones) modes and lines. The indirect connections are determined following a specific manipulation of the tables of double entry (matrices) which is based on the characteristics shown when a matrix is raised to a power. For example, matrix Y^2 corresponds to a figure where all sequences (sequence is the order of transition from one point to another) have a length-value of 2. The length of a sequence is the number of the lines which are included in the sequence (for the specific analytic technique, see paragraph 1.2.2 of this chapter).

Table III - 1

Tourist Flows

(indices of direct and indirect connections)

Countries		1963	1965	1968	1971	1973
01	a.	0.128	0.126	0.126	0.104	0.100
	b.	0.563	0.582	0.583	0.562	0.511
02	a.	0.842	1.181	1.443	0.999	1.311
	b.	0.688	0.696	0.553	0.569	0.520
03	a.	1.222	1.214	1.213	1.203	1.190
	b.	0.413	0.431	0.375	0.323	0.267
04	a.	0.027	0.031	0.033	0.030	0.025
	b.	0.041	0.051	0.042	0.073	0.096
05	a.	0.261	0.282	0.296	0.282	0.271
	b.	0.140	0.145	0.142	0.120	0.118
06	a.	0.090	0.101	0.095	0.106	0.106
	b.	0.714	1.820	1.553	1.295	1.681
07	a.	0.232	0.264	0.277	0.259	0.229
	b.	0.843	0.823	0.793	0.644	0.547
08	a.	0.211	0.247	0.253	0.215	0.204
	b.	0.126	0.146	0.151	0.130	0.134
09	a.	0.184	0.181	0.181	0.159	0.156
	b.	0.575	0.553	0.490	0.403	0.331
10	a.	0.578	0.587	0.543	0.535	0.517
	b.	0.118	0.145	0.178	0.228	0.213
11	a.	0.580	1.347	0.607	0.602	0.562
	b.	0.027	0.037	0.049	0.050	0.064
12	a.	0.019	0.029	0.050	0.050	0.037
	b.	0.126	0.161	0.208	0.227	0.224
Total		4.374	5.590	5.117	4.624	4.706
01-12		4.374	5.590	5.117	4.624	4.706

a: Outflows

b: Inflows

the tourist market of the system). In the statistical analysis we employed the R and Q techniques or factor analytic modes which are applied in Numerical Taxonomy (Sneath, Sokal, 1973), and Quantitative Geography. In the first case, we examined the similarities among countries of origin, in relation to the countries towards which their tourists are directed. Origin countries were pairwise correlated (correlation coefficients were computed) with respect to their tourist outflows to all other destination countries. In the second case, we examined the similarities of destination countries in relation to the countries from which their tourist clientele originated. Thus, inflows of destination countries are correlated, in pairs, with regard to all origin countries.

The factor analysis suggested a series of common factors corresponding to each case. In the first case, the common factors refer to the dominant tourist demand in a group of countries; or, to the similarities among certain destination countries, with respect to the reliance of their inflows on the tourist access of a group of countries, among which, the tourist clientele of one country is dominant. The loadings presented in Table III-2 show the weighted effect of each dependent variable (the inflows in each destination country) upon the common factors. In the second case, the common factors refer to the attraction which certain destination countries have or, to the existing similarities among origin countries, with respect to the demand of their tourist population for certain destination countries. The loadings presented in Table III-3, show the weighted effect which each dependent variable has (tourist outflows from an origin country) upon the common factors.

Diagram III-1 presents a quantitative and dynamic dimension of access and attraction degrees of major origin and destination countries. The figure shows, within the spatial frame examined, the evolution and differentiation in the position of dominant countries, with respect to their ability to generate or attract tourism to or from other countries. The score for each country indicates how, diachronically, each time the first country contributes to the fluctuation of its corresponding factor. As it can be seen from the diagram III - 1 , during the period 1963-1973, whereas the dominant countries,

Table III - 2

Tourist Flows

(tourist access - factor analysis)

Common Factors	Variables (tourist flows into countries 01-12)*											
	01	02	03	04	05	06	07	08	09	10	11	12
F_1 1963	0.954	0.536	-0.392	0.422	0.888	0.098	0.654	0.912	0.758	0.262	0.218	0.802
F_2 "	0.034	0.244	0.777	0.827	0.280	0.240	0.602	0.316	0.313	0.909	-0.011	-0.134
F_3 "	0.124	0.695	0.268	0.188	0.281	0.092	0.182	0.219	0.317	-0.237	0.928	0.056
F_4 "	-0.010	-0.303	0.059	0.130	0.079	0.951	0.332	-0.059	0.419	0.186	0.266	0.160
F_1 1965	0.953	0.466	-0.422	0.328	0.847	0.082	0.582	0.909	0.739	0.211	0.265	0.812
F_2 "	0.041	0.056	0.723	0.846	0.352	0.936	0.731	0.242	0.473	0.938	0.015	-0.021
F_3 "	0.138	0.725	0.337	0.218	0.328	-0.076	0.198	0.245	0.337	-0.154	0.892	0.211
F_1 1968	0.955	0.527	-0.333	0.385	0.852	0.076	0.719	0.920	0.785	0.299	0.270	0.751
F_2 "	-0.006	0.169	0.829	0.823	0.350	0.221	0.572	0.244	0.364	0.834	-0.007	-0.179
F_3 "	0.110	0.667	0.220	0.147	0.269	0.104	-0.016	0.221	0.202	-0.257	0.893	0.189
F_4 "	-0.020	-0.371	0.034	0.127	0.107	0.953	0.288	-0.047	0.386	0.189	0.287	0.035
F_1 1971	0.945	0.726	-0.269	0.378	0.821	0.055	0.607	0.918	0.765	0.289	0.419	0.862
F_2 "	-0.002	0.189	0.813	0.813	-0.443	0.264	0.694	0.297	0.497	0.917	-0.096	-0.106
F_3	0.102	0.101	0.073	0.200	0.276	0.869	0.208	0.161	0.315	-0.047	0.794	0.153
F_1 1973	0.942	0.792	-0.286	0.374	0.876	0.021	0.640	0.928	0.789	0.292	0.537	0.895
F_2 "	0.017	0.135	0.780	0.796	0.306	0.237	0.640	0.292	0.457	0.882	-0.092	-0.050
F_3 "	0.119	-0.069	-0.002	0.112	0.315	0.944	0.277	0.140	0.334	0.113	0.617	0.144

F_1 : Inflows' dependence on the access (outflows) of GROUP A countries among which the W.German clientele is predominant.

F_2 : Inflows' dependence on the access of GROUP B countries among which the U.S.A. clientele is predominant.

F_3 : Inflows' dependence on the access of GROUP C countries among which the British (1963,1965,1968) and the French-British (equally 1971,1973) predominate.

F_4 : Inflows' dependence on the access of GROUP D countries among which the French clientele predominates.

* The underlined values show the most significant relationships.

Table III - 3

Tourist Flows

(tourist attraction - factor analysis)

Common Factors		Variables (outflows from countries 01-12)*											
		01	02	03	04	05	06	07	08	09	10	11	12
F_1	1963	0.865	0.151	0.205	0.958	0.312	0.077	-0.167	0.618	0.572	0.342	0.812	0.822
F_2	"	0.124	-0.007	0.265	0.026	0.885	0.936	0.904	0.361	0.706	0.793	0.440	-0.094
F_3	"	0.015	0.058	0.759	-0.016	-0.245	0.180	0.048	-0.551	0.160	0.278	0.193	0.522
F_4	"	0.003	0.976	0.116	0.184	0.045	-0.179	0.038	0.221	0.017	0.376	0.159	0.065
F_1	1965	0.145	-0.044	0.224	-0.013	0.892	0.945	0.913	0.364	0.716	0.737	0.100	-0.141
F_2	"	0.890	0.076	0.026	0.957	0.297	0.013	0.173	0.684	0.520	0.294	0.090	0.647
F_3	"	-0.022	0.989	0.083	0.141	0.097	-0.129	0.009	0.324	0.101	0.458	0.982	0.024
F_4	"	0.120	0.051	0.825	0.108	-0.153	0.155	0.010	-0.364	0.258	0.326	0.040	0.674
F_1	1968	0.884	-0.021	0.143	0.947	0.188	0.122	-0.122	0.384	0.559	0.078	0.796	0.786
F_2	"	0.125	-0.135	0.092	-0.063	0.738	0.933	0.871	0.178	0.607	0.387	0.208	-0.104
F_3	"	-0.031	0.930	0.077	0.150	0.494	-0.075	0.062	0.813	0.288	0.831	0.287	0.029
F_4	"	-0.119	0.108	0.888	0.113	-0.081	0.193	-0.075	-0.189	0.300	0.263	0.274	0.579
F_1	1971	0.174	-0.170	0.069	-0.074	0.712	0.945	0.884	0.129	0.654	0.340	0.256	-0.164
F_2	"	0.851	0.003	0.071	0.953	0.028	0.185	0.112	0.267	0.400	0.022	0.778	0.787
F_3	"	0.011	0.941	0.166	0.111	0.618	0.001	0.000	0.901	0.460	0.844	0.279	0.051
F_4	"	-0.156	0.127	0.919	0.016	0.022	-0.008	-0.003	-0.077	0.272	0.266	0.208	0.512
F_1	1973	-0.002	0.952	0.210	0.134	0.705	-0.039	0.062	0.931	0.820	0.889	0.313	-0.162
F_2	"	0.861	0.009	0.053	0.923	-0.017	0.184	-0.134	0.214	0.385	0.048	0.750	0.709
F_3	"	0.171	-0.163	0.076	-0.075	0.636	0.937	0.907	0.049	0.634	0.257	0.212	-0.241
F_4	"	-0.176	0.114	0.900	0.050	0.044	0.006	-0.021	-0.028	0.277	0.202	0.200	0.489

F_1 : Outflows' dependence on the tourist market of GROUP A countries among which the attraction of Italy (1963,1968), France (1965,1971) and Iberian Countries is predominant.

F_2 : Outflows' dependence on the tourist market of GROUP B countries among which the attraction of France (1963,1968) and Italy (1965,1973) is predominant.

F_3 : Outflows' dependence on the tourist market of GROUP C countries among which the attraction of Austria (1963) Iberian Countries (1965,1968, 1971) and France (1973) is predominant.

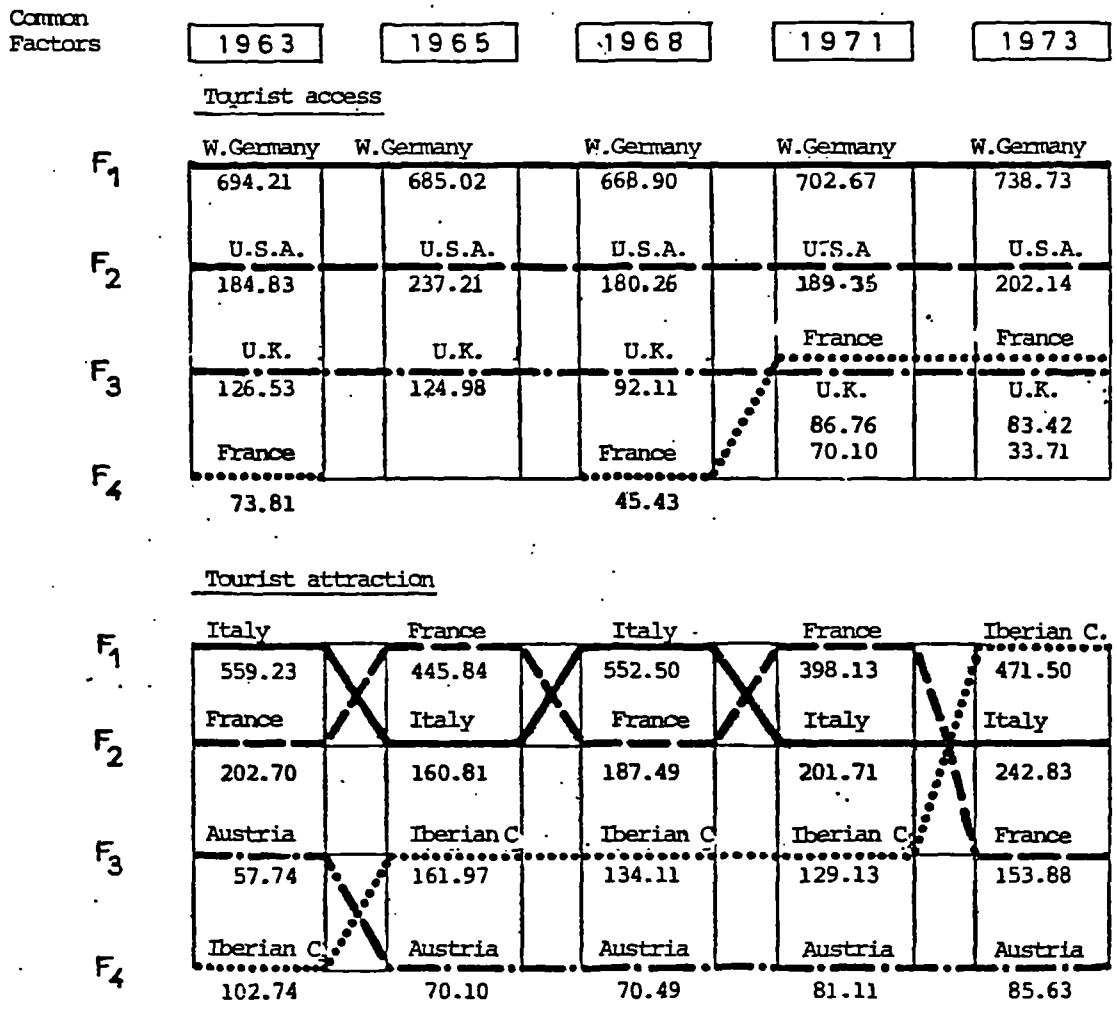
F_4 Outflows' dependence on the tourist market of GROUP D countries among which the attraction of Iberian countries (1963) and Austria (1965,1968,1971,1973) is predominant.

* The underlined values show the most significant relationships.

Diagram III -.1

Tourist Flows

(access and attraction evolution of major countries)
factor analysis



* Change in the relative position of countries which dominate and charasterize the common Factors. The weighted scores express the degree to which the access or attraction of the major origin or destination country respectively weighs on the common factors.

with respect to the degree of access, maintained their position, the major destination countries changed their position with respect to the degree of attraction they exerted.

1.2. Interpretation of the pattern of tourist flows: Tenable hypotheses regarding the determining factors or the reasons which are responsible for the geographical distribution of tourist flows

1.2.1. A general model of the spatial distribution of tourist flows

As a first approximation to the problem, we employed the model which has been applied by Williams and Zelinsky (1970) in a different geographical and temporal frame. According to the model, the distribution of tourists in the destination countries of an examined system is consistent with the following assumption: The expected tourist flow, into a specific "destination" country from other "origin" countries, is a function of its percentile share in the total volume of flows observed in the entire system. For example, if a given country has a percentile share, say X%, in the total volume of tourists in the system, then it is implied that it is receiving an identical share (X%) of tourists, separately, from each origin country.

On the basis of the above hypothesis, we have estimated correlation coefficients between the observed and the expected flows. These coefficients indicate relative deviations between the observed and the expected flows.

Although the results (see Tables 6, 7, 8 in Appendix A) did not support the hypothesis, certain findings useful for further analysis, should be pointed.

a. As a rule, the highest and positive coefficient values appear to exist among neighbouring countries. The difference in this case between the observed and the expected flows might be attributed to two factors - distance and travel cost.
b. With respect to tourist exchanges no absolute correspondence or mutuality exists between the countries of the system. This can be observed in the tables where the positive or negative values of one member of the pair do not correspond to the values of the other member of the pair.

c. During the period 1963-1973, in addition to the observed stability of the indicators, some distinctive points which stand out refer to: i) the "mutual" close tourist relationship, on the one hand, between U.S.A. and U.K., and on the other between Italy and Greece; ii) the relative strong attraction which Greece seems to have on Yugoslavia and the Scandinavian countries (despite the relative decline in the arrivals of Scandinavians during the period 1968-1971), or, to the attraction that Germany and Italy have on Greek tourists; iii) the very small mutual tourist exchanges which exist between certain neighbouring countries, for example France and W.Germany or Austria and Switzerland, as against large exchanges between countries like Austria and W.Germany.

In the analysis which follows, we attempt a systematic examination of a number of hypotheses which, we believe, contribute to understanding the nature of the spatial differentiations in the patterns of tourist flows.

1.2.2. The spatial structure of tourist transport networks and the role of the distance factor in tourist flows

a. The characteristics of the structure of tourist transport networks

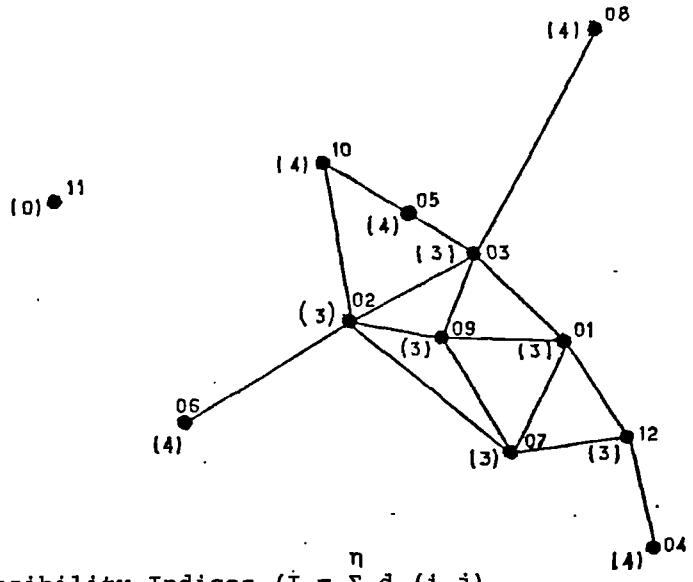
The analysis undertaken on the spatial structure of tourist transport networks uses topological and geometrical data and certain properties pertaining to graphs is order to reduce the complexity of networks. In this case, a graph consists of connecting lines, representing the main resultants of traffic networks which connect each country to the other countries, and modes, which represent the geographical centres of various transport stations, through which each country is connected to the other countries (see Diagram III-2).

Based on the theory of graphs, various indices have been employed in order to describe the characteristics of an entire network and its elements. From these indices, which have been analyzed in various studies (Berge, 1958; Kansky, 1963; Haggett and Chorley, 1969; Taaffe and Gauthier, 1973), we use in the present study the accessibility indicator ($Ia = \sum_{i=1}^{n} d_{ij}$), which describes the existing direct and indirect connections between the countries of the examined system.

Diagram III - 2

Structure of Transport Network

(Graph and indices of the tourist transport network)



Accessibility Indices ($I_a = \sum_{i=1}^{\eta} d\ (i\ j)$)

Countries	(1) Direct Connections	(2) Direct and indirect Connections A	(3) Direct and indirect Connections B	(4) Cost of Air Travel	(5) Air Travel Distance
01	5	719	541419	1530	17278
02	6	748	560785	1385	15820
03	6	748	560785	1350	15040
04	2	124	89869	2144	26583
05	3	294	217499	1415	16098
06	2	206	153401	1845	22033
07	5	719	541419	1592	18430
08	2	206	153401	2025	24418
09	5	786	592723	1365	15071
10	3	294	217499	1450	17447
11	1	-	-	4813	71759
12	4	426	318116	1745	20149

Derives from matrix of table

(1)	"	"	"	"	"	III-4
(2)	"	"	"	"	"	III-5
(3)	"	"	"	"	"	III-8
(4)	"	"	"	"	"	III-6
(5)	"	"	"	"	"	"

The direct connections which exist among the countries of the system are determined from the matrix C (see Table III-4) which shows in a binary code the direct connections between pairs of countries (1, is assigned to neighbouring countries and, 0, to non-neighbouring countries). The matrix is symmetrical and the sum of each column or row describes the number of connections which serve each country.

In order to compute the existing direct and the indirect connections between countries, we used the method developed by Shimbel and Katz (1953) according to which the original matrix (C) of the binary system is converted into another matrix (T) which results from the equation:

$$T_1 = C^1 + C^2 + C^3 + ... C^n = \sum_{i=1}^{n} C^i$$

The rationale for this procedure stems from the assumption that it is possible to move from country i to a neighbouring country j directly, or through one or more countries (e.g., the travel from Yugoslavia to Austria can take place either directly or via Italy).

The power to which the original matrix (C) must be raised, in order to remove the zero value, is equal to the diameter (d) of the graph[1]. Thus, the two matrices (T1, T2) which describe the direct and the indirect connections (see Tables III-5, 8) were developed by using, in the first case, the above mentioned equation and, in the second case, the equation $T_2 = A^1C^1 + A^2C^2 + A^3C^3 + A^4C^4$, where C refers to the original matrix and A to the matrix which is formed from the values of a series of weighting indices; the latter ensuing from measurements of the road distance (in kilometers) between the capitals of the countries of the examined system (Tables III-6, 7).

b. The distance factor in tourist flows

The customary way of measuring distance is to refer to the physical dimension, i.e., the straight line which connects various points in space. In several studies, time, rather than physical distance, is considered to be a better unit of measurement; yet, certain geographers

1. The diameter (d) of the graph, used as an indicator of the topological length between two nodes (countries) describes the maximum number of lines (connections) which represent sections of the shortest route between paired nodes (Kansky, 1963); in our case we have d=4.

Table III - 4

Structure of Transport Network
(Matrix C of road connections)

Road distance (in Km between capital cities)		Direct land connections*											
		01	02	03	04	05	06	07	08	09	10	11	12
AUSTRIA	01	1	0	1	0	0	0	1	0	1	0	—	1
FRANCE	02	1248	1	1	0	0	1	1	0	1	1	—	0
GERMANY W.	03	727	587	1	0	1	0	0	1	1	0	—	0
GREECE	04	1755	2871	2481	1	0	0	0	0	0	0	—	1
NETHERLANDS	05	1182	506	436	3122	1	0	0	0	0	1	—	0
IBERIAN C.	06	2529	1249	1851	3832	1780	1	0	0	0	0	—	0
ITALY	07	1164	1490	1353	2480	1768	2038	1	0	1	0	—	1
SCANDINAVIAN C.	08	1105	1379	958	3270	929	2641	2083	1	0	0	—	0
SWITZERLAND	09	873	534	457	2337	852	1731	962	1344	1	0	—	0
UNITED KINGDOM	10	1347	386	602	3267	197	1635	1876	2113	759	1	—	0
USA	11	-	-	-	-	-	-	-	-	-	-	1	-
YUGOSLAVIA	12	676	1833	1427	1204	1918	3358	1635	1786	1653	2058	—	1

* Countries with common boundaries: 1
Countries without common boundaries: 0

Table III - 5
Structure of Transport Network
(Matrix T1 of direct and indirect connections-case A)

$$T_1 = C^1 + C^2 + C^3 + C^4$$

Countries	1	2	3	4	5	6	7	8	9	10	11	12	Total
01	112	93	98	22	30	20	108	26	112	26	—	72	719
02	93	120	106	9	45	39	98	28	113	50	—	47	748
03	98	106	120	9	50	28	93	39	113	45	—	47	748
04	22	9	9	17	1	1	22	1	14	1	—	27	124
05	30	45	50	1	35	11	26	17	38	31	—	10	294
06	20	39	28	1	11	19	26	6	30	17	—	9	206
07	108	98	93	22	26	26	112	20	112	30	—	72	719
08	26	28	39	1	17	6	20	19	30	11	—	9	206
09	112	113	113	14	38	30	112	30	124	38	—	62	786
10	26	50	45	1	31	17	30	11	38	35	—	10	294
11	-	-	-	-	-	-	-	-	-	-	—	-	-
12	72	47	47	27	10	9	72	9	62	10	—	61	426
Total	719	748	748	124	294	206	719	206	786	294	—	426	
Average	65.36	68.00	68.00	11.27	26.73	18.73	65.36	18.73	71.45	26.73	—	38.73	

Table III - 6

Structure of Transport Network

(Matrix of air-links: Distance in kms and cost of access)

Cost of access (in $,1973) 1/		Air - distance between capital cities (in Km) 2/											
		01	02	03	04	05	06	07	08	09	10	11	12
AUSTRIA	01		1046	620	1276	956	1918	781	1422	602	1273	6912	472
FRANCE	02	100,4		471	2094	403	1024	1100	1569	480	362	5834	1437
GERMANY W.	03	70,7	64.1		1808	366	1421	958	1210	287	654	6190	1055
GREECE	04	122.5	167.5	173,6		2173	2359	1072	3017	1627	2416	7920	821
NETHERLANDS	05	109.9	54,8	49,8	173.8		1461	1296	1151	604	370	5848	1470
IBERIAN C.	06	184.1	98.3	136,4	188,7	140,2		1331	2067	1234	1410	5761	2047
ITALY	07	89,0	105,6	109.2	102,9	124,4	127.8		2169	692	1450	6865	716
SCANDINAVIAN C.	08	136,5	150,6	116,2	241,4	110,5	165,4	173,9		1487	1460	6999	1867
SWITZERLAND	09	68,6	65,3	39,2	156,2	68,8	118,5	78,9	142,7		789	6310	959
UNITED KINGDOM	10	122.2	49,2	74,5	193,3	50,3	135,4	139,2	140,1	89,9		5539	1724
USA	11	463,1	391,0	414,7	530,6	391,8	386,0	459,9	468,9	427,8	371,1		7501
YUGOSLAVIA	12	64,2	137,9	101,3	93,6	141,1	163,8	81,6	179,2	109,3	165,5	507,9	

1/ Estimates are based on tourist class air ticket cost provided by ICAO - International Civil Aviation Organization survey of International Air Transport Fares and Rates 1974. Circular 125-AT/135, Montreal,Canada

2/ Air-distances between capital cities are taken from advertising brochures of Lufthansa

Table III - 7

Structure of Transport Network

(Matrix A of weighting indices)*

Countries	01	02	03	04	05	06	07	08	09	10	11	12
01	1.0	0.5	0.5	0.8	0.4	0.3	0.8	0.7	0.5	0.5	—	0.9
02	0,3	1.0	0.7	0.4	0.7	0,9	0,6	0.5	0.8	0.8	—	0,3
03	0.8	0.6	1.0	0.5	0.8	0.5	0.7	0.8	0.9	0.7	—	0.7
04	0,1	0.0	0,0	1,0	0,0	0.0	0,0	0.0	0,0	0,0	—	0.8
05	0,4	0.8	0,9	0,3	1,0	0.6	0,4	0,9	0.6	0,9	—	0.2
06	0,0	0,4	0,1	0,0	0,2	1.0	0,2	0,1	0,1	0.4	—	0,0
07	0,5	0,2	0,3	0,6	0,3	0.4	1,0	0,3	0,4	0.3	—	0,6
08	0,6	0,3	0,4	0,1	0.5	0.2	0.1	1.0	0.3	0,1	—	0.4
09	0,7	0,7	0,8	0,7	0,6	0,7	0,9	0,6	1.0	0,6	—	0.5
10	0,2	0,9	0,6	0,2	0,9	0,8	0,3	0,2	0,7	1,0	—	0.1
11	-	-	-	-	-	-	-	-	-	-	—	-
12	0.9	0,1	0.2	0.9	0,1	0,1	0,5	0,4	0,2	0,2	—	1,0

* Matrix A derives from Matrix C after ranking the initial values of road distances and applying formula

$$A_{ij} = \frac{\text{Max } R_{ij} - R_{ij}}{\text{Max } R_{ij} - \text{Min } R_{ij}}$$

where A_{ij} is an element of MATRIX A, MAX R_{ij} = max ranked value

MIN R_{ij} = min ranked value

Table III - 8

Structure of Transport Network

(Matrix T2 of direct and indirect connections-case B)

$$T_2 = A^1C^1 + A^2C^2 + A^3C^3 + A^4C^4$$

Countries	01	02	03	04	05	06	07	08	09	10	11	12
01	59.285	61.150	61.178	9.948	23.644	16.682	59.267	16.715	64.763	23.626	—	34.970
02	66.088	68.720	68.686	10.858	26.726	18.847	66.109	18.808	72.497	26.747	—	38.690
03	76.500	79.225	79.236	12.695	30.729	21.667	76.494	21.678	83.746	30.723	—	44.945
04	7.715	7.673	7.700	1.425	2.882	2.045	7.698	2.077	8.268	2.865	—	4.714
05	69.223	71.998	71.980	11.355	28.020	19.743	69.235	19.721	75.949	28.032	—	40.500
06	19.892	20.866	20.825	3.199	8.160	5.759	19.917	5.712	21.918	8.185	—	11.558
07	39.647	40.872	40.885	6.667	15.791	11.149	39.638	11.164	43.296	15.783	—	23.405
08	37.887	39.193	39.218	6.297	15.198	10.706	37.873	10.735	41.455	15.183	—	22.271
09	71.379	73.919	73.917	11.854	28.662	20.219	71.380	20.217	78.136	28.663	—	41.948
10	59.552	62.110	62.060	9.706	24.211	17.067	59.583	17.008	65.429	24.243	—	34.763
11	-	-	-	-	-	-	-	-	-	-	—	-
12	34.251	35.059	35.100	5.865	13.476	9.517	34.225	9.566	37.266	13.450	—	20.353
Total	541.419	560.785	560.785	89.869	217.499	153.401	541.419	153.401	592.723	217.499	—	318.116
Average	49.219	50.980	50.980	8.169	19.772	13.945	49.219	13.945	53.883	19.772	—	28.919

in their studies, in addition to physical distance, analyze the economical and psychological dimension of distance. With respect to the latter case, it is worth citing the mental maps of Gould and White (1974) which show a significant discrepancy between Euclidean distance and the distance between points of a specific space, as perceived by various groups of the population.

Aside from the problem of what constitutes the best unit for measuring distance, in studies in which an attempt is made to suggest ways of discussing and interpreting the flows (as in the present case), there is also the problem of choosing and specifying a distance exponent (b), and of the most appropriate function to express the relationship between flow and distance. The exponent b expresses, in general, the degree with which the distance factor affects or contributes to the interaction and the manifestation of a certain volume of flows between two spatial units. Usually, it is thought to express the degree of friction which exists because of distance .

The methodological procedure followed in the present study ensued from the data, the chosen geographical frame and the relevant studies made in this area. The examination of the effect of the distance factor on the diffentiation of the tourist flows, which exists between countries of the examined system, was based first, on three alternative assumptions regarding the values which express the distance factor, and second, on three different types of functions believed to express the relationship between flow and distance. The main points resulting from the analysis are the following:

- First, in the examination of the total volume of inflows or outflows, the independent variable (the distance factor expressed in terms of accessibility, i.e., airtravel cost from a given country to other countries) seems to explain better the inflows to country i (or the existing demand in origin countries for tourism in country j) than the outflows from a given country. It becomes however evident from Table III-9 that no conclusions of general applicability can be drawn.
- Secondly, the examination of inflows and outflows separately for each country, where alternative distance measures have been employed (Table III-10), shows that for a number of countries the factor,

Table III - 9

The Distance Factor in Tourist Flows

(Regression equations[1] for the total outflows or inflows volume-1973)

Variables	OUTFLOWS	INFLOWS
D_1: Air cost in $	——— 2/	$(1/Y_i) = -0,0^{5}54 + 0,0^{7}15^{*}(D_1)$ $R^2 = 0,6348$ SEE $= 0,0^{4}12$ n=12
D_2: Air distance in $	——— 2/	$(1/Y_i) = 0,0^{5}17 + 0,0^{7}10^{*}(D_2)$ $R^2 = 0,6332$ SEE $= 0.0^{4}10$ n=12
3: Index of direct and indirect connections (Case A)	$x_i = 177,775^{**} \cdot (D_3)^{0.878}$ $R^2 = 0,2465$ SEE $= 0.465$ n=11	$(1/Y_i) = 0,0^{4}35^{*} - 0,0^{6}35^{**}(D_3)$ $R^2 = 0.4075$ SEE $= 0.0^{4}11$ n=11
4: Index of direct and indirect connections (Case B)	$x_i = 0,612 \cdot (D_4)^{0.865}$ $R^2 = 0,2464$ SEE $= 0.465$ n=11	$(1/Y_i) = 0,0^{4}35^{*} - 0,0^{9}46^{**}(D_4)$ $R^2 = 0,4091$ SEE $= 0.0^{4}11$ n=11
5: Average Road-Distance in Kms	$(1/x_i) = 0,0^{4}91 + 0,0^{7}85^{*}(D_5)$ $R^2 = 0.5680$ SEE $= 0.0^{4}39$ n=11	——— 2/

1. The dependent variable for outflows is the total volume of outflows from each country towards all other countries i.e. $(\sum_{j=1}^{12} Tij = Xi)$ while for inflow it is the total volume of inflows in each country from all other countries, i.e. $(\sum_{i=1}^{12} Tij = Yi)$

2. Cases of estimated equations with $R^2 < 0.20$

*,** : 1% and 5% levels of statistical significance.

Table III-10

The Distance Factor in Tourist Flows

(Regression equations for each country separately-1973)

		Inflows	R^2	Outflows	R^2
Austria	01	$T_{ij} = 40{,}365 \cdot (1{,}021)^{D_3}$	0,5636	$1/T_{ij} = 0{,}028 - 0{,}0^{7}40\ (D_4)$	0,7282
France	02	$1/T_{ij} = 0{,}0^{3}42 + 0{,}0^{6}70\ (D_1)$	0,7733	$1/T_{ij} = 0{,}012 - 0{,}0^{7}17\ (D_4)$	0,4304
W.Germany	03	$T_{ij} = 73{,}790 \cdot (D_3)^{0{,}808}$	0,5408	$1/T_{ij} = 0{,}0^{5}97 + 0{,}0^{6}74\ (D_2)$	0,5503
Greece	04	$T_{ij} = -24{,}994 + 1{,}176\ (D_2)$	0,6386	$T_{ij} = 13396{,}767 \cdot (D_3)^{-0{,}772}$	0,3824
Netherlands	05	$T_{ij} = 10^{6{,}372} \cdot (D_1)^{-1{,}470}$	0,7289	$1/T_{ij} = 0{,}0^{6}65 + 0{,}0^{6}26\ (D_3)$	0,6185
Iberian C.	06	$T_{ij} = 10^{20{,}594} \cdot (D_1)^{-5{,}343}$	0,7913	$T_{ij} = 10^{10{,}985} \cdot (D_1)^{-2{,}661}$	0,5843
Italy	07	$T_{ij} = 7{,}534 \cdot (D_3)^{0{,}965}$	0,4771	$1/T_{ij} = 0{,}005 - 0{,}0^{8}64\ (D_4)$	0,6181
Scandinavian C.	08	$1/T_{ij} = -0{,}018 + 0{,}0^{5}21\ (D_1)$	0,5200	$1/T_{ij} = 0{,}058 - 0{,}0^{6}28\ (D_4)$	0,7032
Switzerland	09	$T_{ij} = 10^{8{,}862} \cdot (D_1)^{-2{,}108}$	0,8241	$T_{ij} = 47{,}753 \cdot (1{,}0^{5}37)^{(D_4)}$	0,5893
United Kingdom	10	$T_{ij} = 783{,}430 \cdot (D_1)^{0{,}999}$	0,5260	$T_{ij} = 0{,}0^{3}17 \cdot (D_4)^{1{,}192}$	0,4016
USA	11	$1/T_{ij} = -0{,}118 + 0{,}0^{4}32\ (D_2)$	0,5349	$1/T_{ij} = -0{,}0^{3}29 + 0{,}0^{6}97\ (D_2)$	0,2908
Yugoslavia	12	$1/T_{ij} = 0{,}051 - 0{,}0^{4}66\ (D_3)$	0,7119	$1/T_{ij} = 0{,}011 - 0{,}0^{7}23\ (D_4)$	0,5981

D_1: Road-distance between capital cities of countries i and j.
D_2: Air-travel cost between i and j.
D_3: Index of direct and indirect connections (case A).
D_4: Index of direct and indirect connections (case B).
D_5: Air-distance (Km) between i and j.

road-distance, explains, sufficiently the inflows singly and separately from the other distance variables. Tourist inflows in countries such as Switzerland, Holland, France, and the Iberian countries seem to be influenced to a great extent from road or land connections. This also applies, although to a lesser degree, to the inflows to Austria, Germany and the Scandinavian countries: while the inflows to Italy and the U.K. are explained together with another factor, that of air travel distance (in kms, or cost). Cost of air-travel and air distance (in kms), are the two factors which explain, almost exclusively, the inflows to the U.S.A. and Greece. The equations which were employed in this study and which seem to explain the inflows to Greece, better than in any other country of the examined system, are the following:

$T_{ij} = - 24.994 + 1.176\ D_2 \quad (R^2 = 0,638)$

$T_{ij} = \quad 31.308 + 0.072\ D_5 \quad (R^2 = 0,624)$

D_2 = Cost of air-travel

D_5 = Air-distance in kms

- Thirdly, and in contrast to the previous point, the tourist outflows can be explained, in almost all cases, by all three parameters. Cost of air-travel, air kilometric distance, and road kilometric distance explain, almost equally well, the outflows in Holland, Italy, Spain and Yugoslavia. The above first two distance parameters seem to be more prevalent in interpreting the outflows in Austria, Germany, the Scandinavian countries, and Greece. The outflows of Greece to every single country of the system depends on the cost of air-travel and the air kilometric distance, according to the equations:

$T_{ij} = 10^{3.711} \cdot D_2^{-0.952} \quad (R^2 = 0,35)$

$T_{ij} = 10^{4.127} \cdot D_5^{-0.772} \quad (R^2 = 0,38)$

Where D_2 = cost of air travel, D_5 = air-distance in kms.

Aside from the above intercountry differentiations, certain other findings regarding the importance and meaning of exponent b should be noted. The main points examined and discussed in various studies of tourist flows, or in studies which use interaction models, are con-

cerned with the differentiation of exponent b, which is thought to result from: a) the type of the existing transport connections and the geographical location of each country, b) the improvements diachronically, of transport networks and, consequently, in the relative geographical structure of the examined system (number of countries, size of the individual country, etc.). From the analysis of the fluctuations of the values of the exponent, it is evident that, in general, the highest negative values appear in the most remote countries, especially as far as the road-distance parameter is concerned. It is interesting to note that certain outflows (France, the Scandinavian countries, and the U.K.) and inflows (Yugoslavia) do not seem to be considerably affected by the distance factor or at least are minimally affected (U.S.A., Switzerland, Italy). Also, as it was expected, tourist inflows of the geographically centrally located countries in the system (Holland, W.Germany, Austria, Switzerland, France) are significantly influenced by the distance factor.

Finally, it must be noted that the physical or economic dimension of distance may not express the most "real" dimension; that is, the dimension which corresponds to what the tourist perceives to be a remote country or the distance which separates him from the destination place of his vacation. Perhaps, an operational definition of cognitive distance in the future might contribute to a more precise and complete interpretation of tourist flows.

1.2.3. A general demand hypothesis: The generation profile of tourist flows

The analysis undertaken of the variables which generate tourist flows from a given country, or explain the demand of country i for tourism in another country j, was based on the following general hypothesis.

The volume of tourist outflows ($\sum_{j=1}^{n} T_{ij}$) is a function of certain inherent characteristics of the population of the origin country and of the distance which connects it to the destination countries. The factors which were examined, as independent variables, were:

a. The population of the origin country (P_i).
b. The average per capita consumption (E_i) or, alternatively, the average per capita income (I_i).

c. Employment in all but the primary sectors (expressed as a percentage of the overall employment (U_i)).
d. The daily cost of the tourist services offered in the origin country either in terms of absolute values (C_i) or in conjunction with the average cost of the rest of the countries (see Table 9 in the Appendix A).
e. The average air distance (in kms) between the origin country and the rest of the countries (D_{ij}).

The results from the analysis (see Table III-11) indicate that all the independent variables which were used to examine the flows (the variables which determine the amount of demand for tourist services) were significant. The coefficient of income and employment in most cases approximates or exceeds the value of 1. The coefficient values of the distance factor are negative and greater than 1 (in accordance with similar findings in relevant studies, for as long as, the coefficient connotes negative qualities or difficulties which characterize travel over a given distance). What seems to change during the two studied years (1963, 1973) is the coefficient which is related to the daily cost of tourist services. Whereas, in 1963 the cost of tourist services, in a given tourist origin-country, influenced negatively its outflows, the reverse happened in 1973; in fact, the cost seems to assume greater significance. The interpretation of such a phenomenon requires further examination of the relative changes in the same variables which occured during the period 1963-1973 and of their interactions; changes which, perhaps, justify the relative contribution and significance of the cost-parameter in the second case (1973). It is possible, in other words, that the cost of tourist services in an origin country becomes less "competitive" with respect to the average cost of services in other countries, thus encouraging rather than discouraging (1963) tourist outflows.

Following the above analysis, we attempt to relate and interpret the volume of tourist flows from country i to the other countries of the examined system as a function of a general factor, G_i, which represents the generation potential of tourist flows of the country i. Specifically, such a relationship takes the form:

Table III - 11

Demand Generation Hypotheses
(1963,1973)

Year	equations	k	a_1	a_2	a_3	a_4	a_5	R^2	SEE
'63.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot E_i^{a_3} \cdot C_i^{a_4} \cdot \bar{D}_{ij}^{a_5}$	0.428	0.662*	1.310	0.757	-0.280	-1,102**	0.9591	0.145
'63.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot I_i^{a_3} \cdot C_i^{a_4} \cdot \bar{D}_{ij}^{a_5}$	5.948	0.732*	0.987	0.993**	-0.821	-1,336*	0,9742	0.115
'73.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot E_i^{a_3} \cdot C_i^{a_4} \cdot \bar{D}_{ij}^{a_5}$	0.135	0.767*	0.429	0.786**	0.776	-1.110*	0,9920	0.061
'73.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot I_i^{a_3} \cdot C_i^{a_4} \cdot \bar{D}_{ij}^{a_5}$	0.380	0.731*	0.901	0.796**	1.137	-1.122*	0,9925	0.059
'63.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot E_i^{a_3} \cdot (\frac{C_i}{\bar{C}_m})^{a_4} \cdot \bar{D}_{ij}^{a_5}$	0,785	0.732*	0.987	0.993**	-0,754	-1.336*	0,9742	0.080
'63.	$\sum_{j=1}^{12} T = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot I_i^{a_3} \cdot (\frac{C_i}{\bar{C}_m})^{a_4} \cdot \bar{D}_{ij}^{a_5}$	0,214	0.663*	1.310	0,758	-0.258	-1,102**	0,9592	0.145
'73.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot E_i^{a_3} \cdot (\frac{C_i}{\bar{C}_m})^{a_4} \cdot \bar{D}_{ij}^{a_5}$	19.187	0.731*	0.090	0.796**	1.043**	-1,122*	0,9925	0.059
'73.	$\sum_{j=1}^{12} T_{ij} = k \cdot P_i^{a_1} \cdot U_i^{a_2} \cdot I_i^{a_3} \cdot (\frac{C_i}{\bar{C}_m})^{a_4} \cdot \bar{D}_{ij}^{a_5}$	1.959	0.767*	0.428	0.786**	0,712	-1.110*	0,9920	0.061

*,** : 1%, 5% levels of statistical significance.

$$\sum_{j=1}^{12} T_{ij} = K.G_i^{\beta 1} \bar{D}_{ij}^{\beta 2}$$

The regression equations which has been estimated is:

$$\log \left(\sum_{j=1}^{12} T_{ij}\right) = \log 2.739 + 1.432 \log . (G_i) - 0.265 \log . (\bar{D}_{ij})$$

or

$$\sum_{j=1}^{12} T_{ij} = 547.937 . G_i^{1.432} . \bar{D}_{ij}^{-0.265} \quad (R^2 = 0.833, \text{SEE} = 0.277)$$

The general factor G_i was developed from a profile of tourist flows generation. The profile, has the form of a matrix in which pairwise relationships among countries referred to previously, are presented in a binary form (see Table 10 in the Appendix A). The values or indices pertaining to the generation factor and used in the interpretation of the flows were derived from the summation of the rows of the matrix in the above-mentioned table.

It should be noted that both the generation profile and the attraction profile, which is examined in the next section of the chapter, are based on certain studies which have examined the impact of tourism and attempted to interpret the phenomena of spatial mobility (emigration, tourism). It should also be noted that the analysis presented here should be considered less than exhaustive; since it is meant to be a first step towards a more comprehensive and holistic in nature approach.

1.2.4. Tourist attraction and flows

All research investigations conducted till now have demonstrated that the degree of tourist attraction of a country depends on two fundamental variables. First, the attraction of a country's resources and services and, second, its relative accessibility. Thus, our basic hypothesis here is that the attraction which a country j exerts upon another country i, is a function of a) the inherent attraction of country j and b) the distance between the two countries (D_{ij}).

However, as it was pointed out in the previous chapter, it is very difficult to determine what constitutes a country's tourist attraction. And this because one is faced with the problem of how to measure a country's tourist attraction reliably and validly. In this section,

attraction is expressed by, first, the size of the existing tourist infrastructure and, second, the daily cost of services per tourist in the destination country. Specifically, the equation for testing the above hypothesis is as follows:

$$\sum_{i=1}^{12} T_{ij} = K\ (F_j/\bar{F}_m)^{\beta}\ 1\ (C_j/\bar{C}_m)^{\beta 2}\ D_{ij}^{\beta 3}$$

where, $F_j/\bar{F}_m$ = The ratio tourist equipment (hotel beds) in country j to the corresponding average size in the rest of the countries, and $C_j/\bar{C}_m$ = The ratio daily cost of tourist services in country j to the corresponding average cost in the rest of the countries.

For the years 1963 and 1973, regression equations are calculated and the results are presented in Table III-12. As it appears in the table, distance seems to play an important role in the interpretation of tourist flows, albeit to a lesser degree for 1973.

The significant changes in the values of the coefficients for distance (primarily) and cost indicate that, in the years observed the effect of these two variables on tourist outflows has been modified. In contrast, the effect of tourist infrastructure, (accommodation capacity) does not seem to vary significantly.

Table III - 12

Attraction Hypothesis

1963 ——— $\sum_{i=1}^{12} T_{ij} = 10^{11.496} \cdot \left(\frac{C_j}{\bar{C}_m}\right)^{-1.333} \cdot \left(\frac{F_j}{\bar{F}_m}\right)^{0.616} \cdot (\bar{D}_{ij})^{-2.450}$

$R^2 = 0.789$

1973 ——— $\sum_{i=1}^{12} T_{ij} = 10^{8.713} \cdot \left(\frac{C_j}{\bar{C}_m}\right)^{-1.042} \cdot \left(\frac{F_j}{\bar{F}_m}\right)^{0.582} \cdot (\bar{D}_{ij})^{-1.514}$

$R^2 = 0.752$

As in the case of tourist outflows previously discussed, our specific aim is to interpret tourist inflows through the use of a general tourist attraction profile. With such a profile both internal (A_j^i) and external attraction (A_j^x) (see Table 11 in Appendix A) of a country is assessed. The external attraction of a destination country is considered to be the average internal attraction of all its neighbouring countries. Thus, in addition to the interpretation of the

total volume of tourist inflows in a country, an attempt is made to estimate the relationship between internal and external attraction. In other words, to assess the impact that the attraction of neighbouring competing countries has on the pattern of tourist flows into a country. The relationships examined in this case are the following:

$$\sum_{i=1}^{12} T_{ij} = \alpha + \beta_1 (A_j^i) + \beta_2 (A_j^x) \qquad (a)$$

$$\sum_{i=1}^{12} T_{ij} = \alpha + \beta_1 (A_j^i) + \beta_2 (A_j^i) + \beta_3 (\bar{D}_{ij}) \qquad (b)$$

$$\sum_{i=1}^{12} T_{ij} = \alpha (A_j^i)^{\beta_1} \cdot (A_j^x)^{\beta_2} \qquad (c)$$

$$\sum_{i=1}^{12} T_{ij} = \alpha (A_j^i)^{\beta_1} \cdot (A_j^x)^{\beta_2} \cdot (\bar{D}_{ij})^{\beta_3} \qquad (d)$$

where $\bar{D}ij$ stands for the average kilometric air distance between the destination country and the other 11 countries.

On the basis of the regression equations computed (see Table III-13) for the above four relationships, one could make certain observations as follows: The relative high values of R^2 obtained in most equations indicate that, using the general attraction model tourist inflows can be satisfactorily interpreted. However, what could not be demonstrated conclusively in the present analysis was the validility of the hypothesis about the competitive nature of the factors external and internal attraction; an hypothesis introduced in a study (Nijkamp, 1977) pertaining to a different geographical context (flows between various regions of a country). In that study, the results indicated that the attractiveness of the regions, which neighbour a specific region A, affect negatively the tourist inflows of that region. In the research at hand, however, with the exception of cases 4a and 4b of Table III-13, the positive values of coefficient b2 obtained in most cases contrast with the above findings.

On the basis of our results obtained above, one might claim that the attractiveness of neighbouring countries affects positively tourist flows into a country, or, putting it in a different way, that the tourist, in deciding to visit a particular country, is positively af-

Table III - 13

Tourist Attraction and Flows Hypotheses (for all countries 1973)

Cases[1]		Coefficients					
		a	b_1	b_2	b_3	R^2	SEE
1	a	-0,602	0,627*	0,465**	-	0.7563	1.968
	b	0,717	0.592**	0.432**	-0,135	0.7714	2.021
	c	-0,771	0,436**	0.719*	-	0,7622	0.177
	d	1,253	0.387**	0,675*	-0,198	0.7967	0.174
2	a	0.644	0.323	0,578	-	0.7722	1.902
	b	2.898	0,334	0,504	-0,284	0.8490	1.643
	c	1.358	-0,070	0,887**	-	0.6890	0.202
	d	2,480	-0.042	0,799**	-0,302	0.7759	0,182
3	a	-0,006	0.440**	0,561**	-	0,8370	1.609
	b	1,695	0.458**	0,476**	-0,195	0,8699	1.525
	c	1,066	-0,030	0,986*	-	0.8766	0.127
	d	1,418	0,002	0,913*	-0,130	0.8906	0.127
4	a	1,964	0,975**	-0.277	-	0.5842	2.570
	b	4,531**	0.817**	-0,118	-0,396	0,7323	2.187
	c	1,622	0,274	0.435	-	0.4710	0.263
	d	3.428	0,196	0,470	-0,406	0,6328	0.233

1: Cases refer to alternative values of internal (A_j^i) and external (A_j^x) accessibility. Categories a-d refer to four alternative forms of equations.

fected when its neighbouring countries have high touristic attraction - perhaps because in his "total vacation package deal" includes more than one country.

The guiding hypotheses in interpreting the tourist flows for each country separately were formulated as follows:

Hypothesis a : $T_{ij} = \alpha\ (A^{i}_{j/i})^{\beta_1} \cdot (A^{i}_{i/j})^{\beta_2} \cdot (A_{mij})^{\beta_3}$

or $\log T_{ij} = \log \alpha + \beta_1 \log (A^{i}_{j/i}) + \beta_2 \log (A^{i}_{i/j}) + \beta_3 \log (A_{mij})$

Hypothesis b : $T_{ij} = \alpha C_j^{\beta_1} \cdot F_j^{\beta_2} D_{ij}^{\beta_3}$

or $\log T_{ij} = \log \alpha + \beta_1 \log C_j + \beta_2 \log F_j + \beta_3 \log D_{ij}$

According to hypothesis a, the attraction which a destination country j exerts upon an origin country i is a function of: a) the internal attraction of country j, relative to that of country i ($A^{i}_{j/i}$), b) the internal attraction of country i, relative to country j ($A^{i}_{i/j}$), and c) the average attraction of all countries which are in between country i and country j (for relative analysis see Table 12 in Appendix A).

According to hypothesis b, the tourist inflows (T_{ij}) is a function of: a) the cost of tourist services (C_j) and the number of beds available in a destination country (F_j), b) the travel cost from country i to country j (D_{ij}). It is evident from Table III-14, that the types of model equations used seem to interpret the data in a more satisfactory manner under hypotheses b rather than under hypotheses a.

From the results of the analysis the following conclusions can be drawn:

a. The tourist flows into each destination country of the examined system is affected positively by the internal attraction of the destination country, relative to the attraction of each origin country (except for Germany and the U.S.A.). With the exception of Austria and the USA, the attraction of the countries that are located between an origin and a destination country has a negative effect on the tourist flows into a destination country.

Table III - 14

Tourist Attraction and Flows Hypotheses
(for each country, 1973)

Hypothesis a

$$\log T_{ij} = \log\alpha + \beta_1 \log(A^i_{j/1}) + \beta_2 \log(A^i_{i/j}) + \beta_3 \log(\lambda_{mij})$$

Country		log α	β_1	β_2	β_3	R^2	SEE
AUSTRIA	01	-3.515	1.257	-0.043	3.952	0.4729	0.576
FRANCE	02	2.802	1.411**	-0.306	-0.671	0.7949	0.322
GERMANY W.	03	10.088	-0.356	-1.521	-4.840	0.2940	0.508
GREECE	04	6.215	0.753	0.584	-3.718	0.2530	0.472
NETHERLANDS	05	3.915	0.865	-0.274	-1.917	0.5112	0.479
IBERIAN C.	06	3.418	2.211**	-0.810	-1.251	0.8628	0.362
ITALY	07	9.909**	0.990	-0.530	-5.670	0.6549	0.325
SCANDINAVIAN C.	08	6.555	0.013	-1.419	-2.854	0.5423	0.519
SWITZERLAND	09	7.646	0.204	-1.134	-3.498	0.3952	0.472
UNITED KINGDOM	10	3.902	0.888	-0.496	-1.476	0.2289	0.684
USA	11	2.410	-1.239	-1.237	0.879	0.2288	0.479
YUGOSLAVIA	12	2.499	0.380	-0.007	-0.218	0.0625	0.481

Hypothesis b

$$\log T_{ij} = \log\alpha + \beta_1 \log C_j + \beta_2 \log F_j + \beta_3 \log D_{ij}$$

Country		log α	β_1	β_2	β_3	R^2	SEE
AUSTRIA	01	-0.101	3.213**	0.030	-0.715	0.6223	0.462
FRANCE	02	2.687	1.746	0.780	-1.418	0.6556	0.405
GERMANY W.	03	-2.389	2.831	0.017	0.222	0.7909	0.256
GREECE	04	-2.802	1.184	0.114	0.877	0.3401	0.412
NETHERLANDS	05	-2.489	2.518	0.495	-0.189	0.6685	0.429
IBERIAN C.	06	-1.634	4.622*	0.396	-1.109	0.7952	0.468
ITALY	07	-0.225	1.324**	0.616**	-0.1813	0.8387	0.206
SCANDINAVIAN C.	08	-3.517	3.297**	0.109	0.122	0.7284	0.376
SWITZERLAND	09	-0.846	2.147*	0.605**	-0.452	0.8452	0.253
UNITED KINGDOM	10	-3.845	2.900 **	0.462	0.181	0.7449	0.388
USA	11	-2.170	1.962	0.479	-0.043	0.6074	0.374
YUGOSLAVIA	12	2.915	1.450	0.458	-1.203	0.6391	0.285

*, **: 1% and 5% statistical significance respectively

b. In the case of hypothesis b, the obtained negative values of coefficients b1 and b2 indicate that the two cost parameters (the cost of tourist services and the cost of access to the destination country) have an adverse effect on tourist inflows. However, the elasticity of tourist demand with respect to the above two parameters varies significantly from country to country, as can be seen in Table III-14.

1.2.5. Interaction hypotheses

In many models, which analyze various activity systems at the urban or regional level, the concept of interaction is used in order to express the relationships which exist among various locations with respect to certain specific activities, e.g., shopping, recreation, etc. In these models (discussed in the previous chapter), the relationship between two regional units is specified and explained; the relationship being a dependent variable and expressed in terms of the number of flows existing between the two regional units.

The analysis of tourist interaction, expressed in terms of a specific flow (T_{ij}), between two countries in the examined system was based on the investigation of a number of hypotheses which represent variations of the general gravity model and the model of intermediate opportunities, as stated in certain studies (for example, Long, 1970). According to these hypotheses, and their corresponding equations (see Table III-15), the existing flows between two countries (dependent variable) are related to the following independent variables:

a. Population : The product of the two countries population ($P_i \cdot P_j$) or the product adjusted with an index which represents the percentage of employment in all but the primary sectors to the total employment, i.e., $(P_i x U_i) \cdot (P_i x U_j)$.

b. Distance : The distance between the two countries (D_{ij}) and the average distance between the origin country and the rest of the countries in the system ($\bar{D}_m$) or, alternatively, the ratio $\frac{\bar{D}_m}{D_{ij}}$.

c. Cost of tourist services : The ratio cost of tourist services in the origin country to the corresponding cost at the destination or, alternatively, the ratio average cost of tourist services of all countries examined (excluding that of the origin country) to

Table III - 15

Interaction Hypotheses

(Regression equations 1963,1973)

Equations	Variables: Constant / Years b_o	P_iP_j	$P_iU_iP_jU_j$	D_{ij}	$\bar{D}_m$	$\frac{\bar{D}_m}{D_{ij}}$	$\frac{C_i}{C_j}$	$\frac{\bar{C}_m}{C_j}$	$\frac{I_i}{C_j}$	$\frac{F_i}{F_j}$	$\frac{\bar{F}_m}{F_j}$	R^2	SEE
1. 1963	4,036*	0,674*	-	-1.231*	-	-	-	-	-	-	-	0,3567	0,601
1973	3,503*	0,666**	-	0,954*	-	-	-	-	-	-	-	0,3916	0,494
2. 1963	0,567**	0,534*	-	-	-	-1.601*	-	-	-	-	-	0,4401	0,561
1973	0,834*	0,554*	-	-	-	-1,204*	-	-	-	-	-	0,4434	0·473
3. 1963	0,397	0.513*	-	-1.519*	0,876*	-	-0.219	-0.847**	1,157*		-	0,7172	0.405
1973	1.022	0.552*	-	-1.119*	0.684*	-	1,189**	-0.974*	0.584		-	0,7410	0,328
4. 1963	0,700	-	0.496*	-1,495*	0.893*	-	-0,204	-0,363	1.028*		-	0,7145	0.404
1973	1.172	-	0.553*	-1,117*	0,683*	-	1.026	-0,520	0.550		-	0,7435	0,326
5. 1963	1,335**	-	0.183	-1,499*	1.037*	-	-0,033	-0,072	0,919*	0.266**	-0.717*	0,7469	0.386
1973	1,552	-	0.348	-1,145*	0.839*	-	1.300**	-0,492	0.442	0,103	0,491*	0,7689	0.312

1. $T_{ij} = b_o(P_iP_j)^{b_1} \cdot D_{ij}^{b_2}$

2. $T_{ij} = b_o(P_iP_j)^{b_1} \cdot \left(\frac{\bar{D}_m}{D_{ij}}\right)^{b_2}$

3. $T_{ij} = b_o \cdot (P_iP_j)^{b_1} \cdot D_{ij}^{b_2} \cdot \bar{D}_m^{b_3} \cdot \left(\frac{C_i}{C_j}\right)^{b_4} \cdot \left(\frac{\bar{C}_m}{C_j}\right)^{b_5} \cdot \left(\frac{I_i}{C_j}\right)^{b_6}$

4. $T_{ij} = b_o(P_iU_iP_jU_j)^{b_1} \cdot D_{ij}^{b_2} \cdot \bar{D}_m^{b_3} \cdot \left(\frac{C_i}{C_j}\right)^{b_4} \cdot \left(\frac{\bar{C}_m}{C_j}\right)^{b_5} \cdot \left(\frac{I_i}{C_j}\right)^{b_6}$

5. $T_{ij} = b_o(P_iU_iP_jU_j)^{b_1} \cdot D_{ij}^{b_2} \cdot \bar{D}_m^{b_3} \cdot \left(\frac{C_i}{C_j}\right)^{b_4} \cdot \left(\frac{\bar{C}_m}{C_j}\right)^{b_5} \cdot \left(\frac{I_i}{C_j}\right)^{b_6} \cdot \left(\frac{F_i}{F_j}\right)^{b_7} \cdot \left(\frac{F_m}{F_j}\right)^{b_8}$

*, ** : 1% and 5% statistical significance respectively

SEE : Standard Error of Estimate

the cost at the destination country.

d. Per capita income : The ratio per capita income in the origin country to the cost of tourist services at the destination country.

e. Tourist accommodation capacity : The ratio number of hotel beds in the origin country to the of cost of tourist services at the destination country.

The importance of the above factors from the statistical significance point of view is presented in Table III-15. On the basis of the results in this table, one could observe the following:

- The population coefficients are almost similar in the two alternative forms the population is expressed with (equations 3, 4). Regarding the distance coefficient - which supposedly denotes the elasticity of demand as a result of differences in the physical air distance (kms) - one should notice a temporal differentiation between 1963 and 1973.
- The different values of distance coefficients in equations 1 and 2 seem to confirm previous conclusions (Long, 1970), that the influence of the distance factor decreases when alternative destination are not being considered. In equation 3, the values of R^2 increase significantly when two other factors (cost of tourist services and income) are considered. The expected positive value of the income coefficient shows that the greater the ratio I_i/C_j is, the greater is the volume of a tourist flow from country i to country j.

1.3. Further notes on the significance of socioeconomic variables and post-1973 data on tourist flows

1.3.1. The significance of certain demographic and socioeconomic variables in the location and nature of tourism in W.Europe

In the quantitative analysis of flows in the preceding sections we have differentiated segments of international tourism demand by nationality, or country of origin and destination. Each tourist flow from, or into each country, or group of countries, has been considered the dependent variable while, in connection to this, we have analysed a specific set of socioeconomic factors as independent or explanatory variables of tourist flows.

The categorization and analysis of international tourism demand into "user groups" or into market segments, and the relevant analysis of flows, may be based on various visitor and trip-related attributes; it may include a wide range of variables (see Table 1 of Chapter I). Apart from the availability of data - statistics at this level of analysis are mostly volume statistics, do not cover tourist profile characteristics - this would depend on the type and purpose of the analysis undertaken. Viewed within different geographical contexts (international, national-regional, local), or different broad categories of markets (e.g., CIT travel, touring, business travel, etc.), each of the various explanatory variables may assume different weight, or significance. For example, in the CIT type of travel, the role of "air transport cost" may become less important, vis-à-vis the role of this factor in independent travel (e.g., see relevant work by Guitart, 1981).

Within the W.European context of flows, analysed so far in this chapter, we should mention certain demographic and socioeconomic variables, the consideration of which would complement the results of the analysis, adding further and useful information on the location and nature of tourism in W.Europe, for marketing and development planning purposes. These variables should be seen as components which define the tourist profile characteristics, as variant variables on the nationality segmentation. Their significance and the rationale for their inclusion in tourist flows studies, as well as, in specifically designed surveys - to aquire relevant statistics on tourist profile characteristics at both international and national levels - is outlined below.

The age composition of the tourist clientele is an important variable in the segmentation of the international tourist market. Why? First, different age groups have different needs, raise different demands upon resources, exhibit different patterns of expenditures, visit particular places. Thus, pertinent information about this variant variable on the nationality segmentation, would yield useful insights to the design of appropriate marketing-tourism promotion policies. Second, taking as example a specific age group, and according to certain forecasts (Rooij, 1986), the "mature market" in Europe (people aged 55 and more), which is already significant, will cover 25% of the population by the year 2000. Holiday expenditures in the

same year by the market are estimated to be in the range of $ 31,000 mill. Consequently, the tourist industry, or, the relevant rational planning agencies should respond and consider carefully the diverse demands of this specific market segment, making those provisions (e.g., allocation of investments, promotional campaigns, appropriate design of the tourist product) that would secure, not only high returns but also, possibly, the advantages of repeat visits, or out-of-season expenditures by this age group, as well as, higher occupancy rates of accommodation in particular tourist resorts or locations.

In the case of Greece, this factor seems to acquire particular weight due to the country's favorable climatic conditions, as well as, due to its traditional links with a large number of expatriates (migrants). The presence and a relative long, in duration, stay of retired people in certain places could even out peak demand and bring increased benefits to the local community, since these people bring their pensions and equity to the locality.

Apart from the age composition or distribution variables,the sociocultural characteristics of the tourist population and its socioprofessional occupational and educational characteristics seem to affect travel propensity and participation rates and specific modes of tourism consumption. These variables are not easily quantified or measured. Additionally, as has been stated elsewhere, "some, in particular education and occupation, are closely correlated with income and may be, therefore submerged in income in a general assessment of determinants; others, such as age and life-cycle patterns, are also linked with income, and whilst of undoubted significance in explaining individual behaviour, and, therefore, in marketing, there are practical difficulties in their use as determinants of tourism growth generally and in comparison of tourism propensity between countries" (Burkart and Medlik, 1981, p. 55). However, such variables should be viewed and identified within the context of each country's economic, social, institutional and technical organization, or within the prevailing value system, which gives rise and determines different travel budgets and tourism activity patterns among different groups of the population (Thurot, 1983).

The sociocultural characteristics of the tourist population pertain to specific forms of travel and holidays organization and par-

ticipation; for example, individuals or groups, families, clubs and associations, special interest groups (e.g., sports, congresses, cruises, etc.). What has been observed here is an evolution towards a more pronounced "cultural fragmentation and pluralism" (Urry, 1987) which may have contributed to a significant differentiation of the tourist industry; differentiation in terms of growth of diverse types of holidays and recreational practices which demand various categories of services and forms of accommodation. From a planning implication point of view, pertinent information on these variables would suggest e.g., around which accommodation types (e.g., family hotels, guest houses, holiday villages, camping grounds, etc.) the development of new resorts should be based.

Socioprofessional-occupational*[1] and educational (levels of education) variables may be considered either within the context of motivation and preferences surveys (e.g., travel for educational purposes), of the type reviewed in Chapter II, or, in market research studies; where such variables are analysed as specific variant variables on broad market segments, to determine their effect on participation rates, in particular tourism activities, and in relation to selected tourist products offered or planned. In either case, pertinent information on these variables could help, e.g., destinations identify their particular markets; identify the types of specialised services (e.g., archaeological sites and museums, conference or congress facilities, spas and health resorts, etc.), either those being used (for monitoring their performance) or the services needed (for designing and promoting a new tourist product).

A common denominator to the above outlined variables or specialised market segments would be a time or seasonal variable. In such a case,a seasonal segmentation of the tourist market (or a seasonal differentiation of each special segment) would yield useful insights as to whether different factors have influenced tourist choices in different periods of the year. For example, the results of a study of the Massachusets, USA, travel market (Calantone, Johar, 1984) have shown that benefits for each season differ; people seeking a combination of bene-

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*[1] Such variables can be distinguished or classified in different ways, e.g., from few and simple occupation types (e.g., manual, non-manual) to numerous and diverse types of employment (e.g., professional-business, commerce, clerical sales and related, engineers-scientists-technicians, retired, etc.).

fits during one period may be not the same people seeking the benefits during another period. Within the Greek context this could mean that, e.g., a group of tourists (of the retired type) visiting Crete in winter may seek the benefits of a mild winter while another group of tourists (of the same type) who visit Crete in summer may seek the benefits of a seaside resort.

The significance of socioeconomic and other types of variables will be further analysed in the following Chapter IV,which focuses on relevant issues at the national level. To conclude our discussion here a final point is in due order. The relevant international organizations (OECD, WTO),which draw on estimates of individual countries, should undertake greater efforts to increase, apart from the uniformity and comparability, the range and specificity of variables covered. Unless the existing tourism volume statistics of international tourism are enriched with types of tourists and behaviour statistics, tourist profile characteristics, the practical difficulties in employing such variables to make cross-country comparisons and study in more detail the tourist flows, seem unsurmountable.

1.3.2. The pattern of tourist flows in the 1974-1984 period

The detail and comparability of international tourism statistics has not improved greatly in the post-1973 period, or in the early 1980s, in spite of certain recommendations towards this direction made by relevant international organizations[1]. In other words, the available data has not changed in such a way as to allow a different or more detailed analysis of flows in W. Europe. As has been stated elsewhere, "at the beginning of the 1980s even in Europe, which receives and generates most of the international and domestic tourism movements, while available published statistics make,to a greater or lesser extent, possible an analysis of tourist flows for most individual countries they allow only a broad assessment of intra-European flows, and of the flows within and

1. In 1975 the OECD Tourism Committee retained a list of common data to be collected within the framework of visitor sample surveys at frontiers and/or tourist accommodation. The data to be collected according to the OECD recommendation included age and sex, socioeconomic status, main categories of consumption expenditures, types of accommodation used, etc. For further information see: OECD, Tourism Policy and International Tourism in OECD Member Countries, Paris, 1976.

between various regions of the world" (Medlik, op. cit., p. 81).

In relation to the above observation, it should also be noticed that during the 1974-1984 period certain of the changes in the collection of international tourism statistics by individual countries make cross-country comparisons more difficult; either during the 1974-1984 period, or between the two observed periods. Thus, for example, the new series of statistics concerning France from 1976 are based on sample surveys at frontiers, while for the Scandinavian countries from 1977 onwards arrivals at frontiers are not included in the OECD series (see Table III-16).

One of the main conclusions reached earlier in the analysis of the 1963-1973 data was the relative stability in the pattern of tourist flows. Apart from the decline of Italy's share of total arrivals and the corresponding increase of Spain's, the observed changes among the other countries were less significant. The time series statistics of the 1974-1984 period (Table III-16), as well as, from Table III-17, evidence slower overall growth rates in tourism demand but we observe that the overall pattern of flows within a selected group of origin and destination countries (of particular relevance to Greece) has not changed considerably. Specifically, Table III-17 shows that for each tourist destination country the main group of tourist origin countries, i.e., its major tourist markets has changed very little. However, observing each particular destination country, the most noteworthy changes in the ranking order of their tourist markets are those concerning the decline in the relative share (rank order) of the USA market; particularly in countries like Italy and Greece. In the 1980s, the UK seems to have replaced the USA as the main tourist market of Greece. This may be partly due to the rapid increase of CIT travel from the UK to Greece. Also, security concerns and exchange rates movements may have been recently influential.

Thus, post-1973 data seems to confirm the conclusions of the 1963-1973 analysis regarding the stability of tourist flows. Certain conclusions reached elsewhere in relevant studies provide further support to the above observation. For example, Noval

Table III-16

Tourism demand in selected W.European countries

Years

1963, 1973, 1974-1984

	COUNTRIES	*1	1963	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
1	AUSTRIA	AF	5754973	9783000	10890563	11535120	11591088	11750791	12262668	12478294	13877324	14233871	14255784	14477563	15106538
		LS	(6.60)	(6.88)	(6.88)	(6.93)	(6.82)	(6.67)	(6.63)	(6.80)	(6.50)	(6.50)	(6.31)	(6.04)	(5.74)
		NS	37982819	78262335	74927079	79938385	79051224	78377778	*2 81301494	84852400	90202611	92520201	89954002	87444481	86713254
2	FRANCE	AF	10000000	12493230	12697000	13064000	13470000	26265000	26846000	28763000	3010000	30476000	-	33184000	-
		LS													
		NS													
3	W.GERMANY	AF	5824429	9059523	8592727	9045000	9827727	10260454	10220000	10772173	11378632	11604424	11514479	12013181	-
		LS	(2.10)	(2.20)	(2.20)	(2.20)	(2.20)	(2.20)	(2.30)	(2.30)	(2.34)	(2.26)	(2.21)	(2.20)	-
		NS	12231301	19930951	18904000	19899000	21621000	22573000	23506000	24776000	26626000	26229000	25447000	26429000	-
4	GREECE	AF	672920	2864549	1956417	2840112	3672054	3961112	4532411	5232973	4795900	5094349	5463860	4778447	5523192
		LS													
		NS													
5	NETHERLANDS	AF	1938193	4663247	4815883	5083833	5190987	5321659	4766822	5111727	-	4168116	-	4040717	-
		LS	(2.50)	(2.39)	2.37	2.33	(2.33)	(2.17)	(2.14)	(2.20)	(2.20)	(2.76)	-	3.07	-
		NS	4845482	11145161	11413644	11845330	12095000	11548000	10201000	11259000	-	11504000	-	12405000	-
6	IBERIAN COUNTRIES	AF	7340876	25937855	20783337	20719678	18958287	22372555	26280991	26255576	25207816	27336323	28050000	29242000	30659000
		LS													
		NS													
7	ITALY	AF	10599500	15000000	14200000	15500000	16505400	18500000	19192600	21953915	22057500	20036000	22240000	21440000	22619200
		LS													
		NS													
8	SCANDINAVIAN COUNTRIES	AF	1680000	4000000	4284000	4588000	4951000	*3 -	-	-	-	-	-	-	-
		LS													
		NS						20450000	21239000	22595000	22725000	22741000	22175000	24270000	22644000
9	SWITZERLAND	AF	7391970	10894258	10192179	10541862	10118078	8339772	7859467	7608633	8873450	9376220	9184575	9201355	9473713
		LS	(3,20)	(3,10)	(3,12)	(3.06)	(3.07)	(395)	(4.13)	(3.95)	4.06)	(4.18)	(4.00)	(3.91)	(3.69)
		NS	23654305	33772200	31799600	32258100	31062500	32942100	32549600	30054100	36025800	39192600	36738300	35977300	34958000
10	UNITED KINGDOM	AF	2158600	7724000	7935000	8880000	10089000	11470000	11720000	12486000	12393000	11452200	11636600	12498807	13710900
		LS													
		NS													
11	USA	AF	6083229	13955114	14123047	15698118	17523239	18609794	18628739	20310000	22500000	23080203	20910000	21677000	20810000
		LS													
		NS													
12	YUGOSLAVIA	AF	1738475	6149060	5454425	5855857	5541096	5625114	6385724	5969600	6487349	6615761	5959867	5952006	7225615
		LS	(4.40)	(5.21)	(5.45)	(5.40)	(5.30)	(5.16)	(5.46)	(5.61)	(5.77)	(6.00)	(5.97)	(5.94)	(5.85)
		NS	7649291	32036603	29726620	31621630	29367808	29025588	34866053	33489460	36977889	39694565	35580407	35354914	42269847

Source: OECD, Tourism Policy and International Tourism in OECD Member Countries, OECD, Paris

*1 AF : Arrivals at frontiers (excursionists are excluded)
LS : Average Length of Stay
NS : Nights spent in tourist accommodation

*2 New series of statistics from 1976 based on sample surveys at frontiers.

*3 From 1977 onwards arrivals at frontiers are not recorded.

Table III-17

International Tourist Flows
in selected W. European countries
(arrivals at frontiers, in thousands)

Origin \ Destination		Iberian Countries Spain, Port.	R	Italy	R	Greece	R	Yugoslavia 1/	R
Austria	1963							353	2
	1973							618	3
	1983							540	3
France	1963	2/ 3884	1	1590	3	66	4	139	4
	1973	2/ 12242	1	1628	3	177	5	400	4
	1983	2/ 10659	1	3000	2	300	-	266	5
W. Germany	1963	821	3	2205	1	87	2	440	1
	1973	3593	3	3081	1	321	3	1736	1
	1983	5325	3	5300	1	728	2	1931	1
Italy	1963					33	-	187	3
	1973					125	-	872	2
	1983					328	5	718	2
Netherlands	1963	206	-						
	1973	1321	-						
	1983	1471	4						
Switzerland	1963			615	5				
	1973			719	5				
	1983			2000	3				
Scandinavian countries	1963	244	5			41	5		
	1973	1354	5			240	4		
	1983	1450	5			562	3		
United Kingdom	1963	928	2	1272	4	74	3	124	5
	1973	3930	2	1247	4	365	2	361	5
	1983	5818	2	1900	4	889	1	354	4
U.S.A.	1963	416	4	1929	2	148	1		
	1973	1513	4	2934	2	616	1		
	1983	998	-	1602	5	407	4		

Sources: OECD, WTO

1/ : Arrivals in registered accommodation
2/ : Visitor arrivals at frontiers
R : Ranking order of generating country - The 5 major markets

(1975) explaining "the apparent stability in the pattern of arrivals", argues that certain tourism demand variables - what he cells "variations in local conditions and exchange rates over the years" have a greater effect upon tourist expenditures and the length of stay, than on the selection, or change, of the destination country itself. Another example may be offered with reference to the tourist flows in the Mediterranean countries during the period 1965-1979. In this case, the analysis of Thurot (1983) as pertains that the repatrition of flows among the observed countries has basically taken place in the 1960s. Since then, Thurot argues, the "historical" position of the markets is characterized by heavy inertia and what is taking place is only a small scale redistribution of flows among the different countries.

On the basis of the above conclusions, concering the stability in the spatial distribution of flows in both periods, it could be assumed that certain of the factors which have been identified as significant in the 1963-1973 analysis (accessibility or transport cost, relative cost of tourist services, per capita income or private consumption) play an equally important role in affecting tourism demand in the post-1973 period. This assumption could be perhaps supported by drawing on the conclusions of relevant studies which attribute tourism's growth during this later period mainly to the continuing stability or reduction in the real cost of travel (in spite of the two economic-oil crises in 1973/1974 and 1979/1980)[1] and to the CIT travel price. According to Guitart (1981), the 1978 CIT price (estimated in constant prices) was more favourable than the 1970 one. In his study the author provides wvidence that in major European tourism-generating countries (e.g., W. Germany, UK, Netherlands, Switzerland) the holidays package represented for the holiday makes an economic effort which was smaller in 1978 than in 1970. In addition to the above arguments, one may further argue that over the years

1. A discussion of this point, against the background of the economic recession in the 1970s and its effect on tourism, can be found in International Tourism Quarterly, The Effects of the recession on tourism, Special Report No. 39, EIV, 1981.

tourism, or travel in general, has become an integral part in the consumer's life; a consumer's item which has assumed a higher priority vis-à-vis other consumer items and hence has become less easily sacrificed in periods of economic recession.

The fact that no major changes in the distribution of tourist flows are evidenced in the post-1973 period, and the ascertained stability which characterized both periods, does not mean that there are no differences among the observed countries. Differences as to the weight of significance of factors which account for the intensity or variation in the distribution of tourist flows; differences as to each country's share in the market, or as to the market segments each country attracts. However, a more elaborate study of such differences would require a case by case investigation and, also, the enrichment of the available statistics, e.g., with the type of socioeconomic data suggested in the previous section.

2. Approach B: Dependency-interdependency relations in tourism at a core-periphery level: An alternative interpretative-methodological frame

Scope and conceptual clarification

The analysis in the previous section, could be considered as an endeavour to determine existing interelationships among various factors pertaining to the spatial structure of tourism within a particular geographical setting. It has assessed, quantitatively, density, spatial concentration and relational ties of certain factors to the tourist exchanges among a group of countries; exchanges expressed in terms of physical tourist flows. However, the appropriateness of such measures, or indicators, depends on the assumption that the particular way with which one entity is conditioned by another corresponds directly to the pattern of the quantitative measures of tourist flows.

In this section tourism is viewed within the context of inter-country relations, as well as, relations which transcend national-administrative boundaries. This second approach, to interpret tourism's spatial structure, follows mainly a qualitative-normative and diachronic-historical framework of analysis. It purports to consider the relevant problems of tourism, by employing an interpretative-methodological frame, which draws on the broad field of "developmental studies" and particularly on notions and assumptions pertaining to the concepts and "theories" of dependency and core-periphery relations.

Our scope here is to formulate and put forward certain hypothetical propositions-interpretative statements and then, delineate and suggest the major axes of orientation, around which the analysis of empirical reality (empirical situations and practices) should evolve in order to support the validity of such, "untested" here, hypotheses.

The concept of dependency[1] is used often as a general methodological frame of analysis to examine situations or types of conditional

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1. The concept of dependency, which has been briefly defined earlier (see Chapter II), resulted from discussions of development and underdevelopment issues in Latin America. For further clarification of the notion and an overview of relevant discussion, see Dos Santos (1969), in Bernstein (ed.), 1978; Caporaso (ed.), 1978; Palma, 1978.

relations characterizing certain structures. The concept structure connotes a system of elements and their relations which are shaped and transformed through the operation of distinctive rules; pertaining either to the internal functioning of the structure or to its external relations to other structures, or better, to the interplay between internal and external relations.

Dependency situations are often considered cases, in the capitalist growth process, characterizing certain sectors and/or countries; or those situations in which certain differentiations exhibited by structures are thought to be conditioned by the operation of the international capitalist system. In other words, within the context of dependency situations, relational differences within or among structures, as well as, spatial units are viewed as reflections of structural or functional assymetries attributed to the process of capitalist production and reproduction.

The core-periphery system is associated, conceptually, with particular types of relations existing among spatial units (administrative or functional regions, inner and outer zones, etc.) of a spatial structure. The peripheral region notion has been given different interpretations. It has been associated to the problem area notion (Parr, 1979) or, it has been defined by its relation of dependence and subordination to a core, central and dynamic region (Friedmann, 1972). Still further, peripheral were considered those regions evidencing a relative high concentration of "peripheral activities" or specific characteristics[1]; peripheral being described those activities with

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1. Selwyn briefly summarises five characteristics of peripheries: "a) lack of effective local control over the use of resources, b) lack of local innovation, c) weakness of internal linkages (weakness of regional multiplier effects), d) information flows within the periphery and from the periphery to the core will be weaker than such flows from the core to the periphery, e) migration flows will be normally be from the periphery to the core (reflecting cyclical fluctuations in the core economy)". See Selwyn, P., "Some thoughts on core and peripheries" in Underdeveloped Europe: Studies in Core-Periphery Relations, Seers, D., Schaffer, B., (Ed.) I.D.S, The Harvester Press, 1979, pp. 35-43. In connection to the above, and on the basis of our earlier analysis one may add a sixth characteristic: tourist flows are predominantly from the core to the periphery.

low labor productivity. Here, however, for the purposes of the analysis, it is accepted a priori, that a differentiation can be made between central European countries and those on the southern perimeter (Portugal, Spain, Greece, Yugoslavia, Italy-South) on the basis of certain parameters of a situation that has evolved and been formed historically.

2.1. Levels of organization of hypothetical propositions and arguments

The various assumptions and concepts are employed here within a "two levels" organizational frame of hypothetical statements and supporting arguments, through which, to approach the concrete designation of the process of tourism's spatial structure formation and transformation (the field of our inquiry). The "levels" refer to degrees of historical specificity and generality, or abstraction (e.g., the abstract constructs employed in the formulation of hypotheses) manifested, or assumed by the various elements of the observed phenomenon and their asserted properties and relationships.

2.1.1. First level hypotheses - major arguments

a. hypothesis statement

At the first level, the relational context of tourism is designated against an abstract, conceptually, or, less specified spatially, background. The major hypothetical proposition considered here is that the various structures of the tourist phenomenon (economic, sociocultural, physical) are considered to be shaped and conditioned by two sets of relationships: internal and external. The first (TLi), pertain to the whole netting of relationships of a particular type of tourism structure (e.g., the economic structure of tourism) to the other types of tourism structures and to the wider structure it is linked with (e.g., tourism's economic structure linked with a country's economic structure). The second set (TLe), refers to a network of relations to the worldwide organizational structure of tourism and to the international capitalist economic structure (see Diagram III-3).

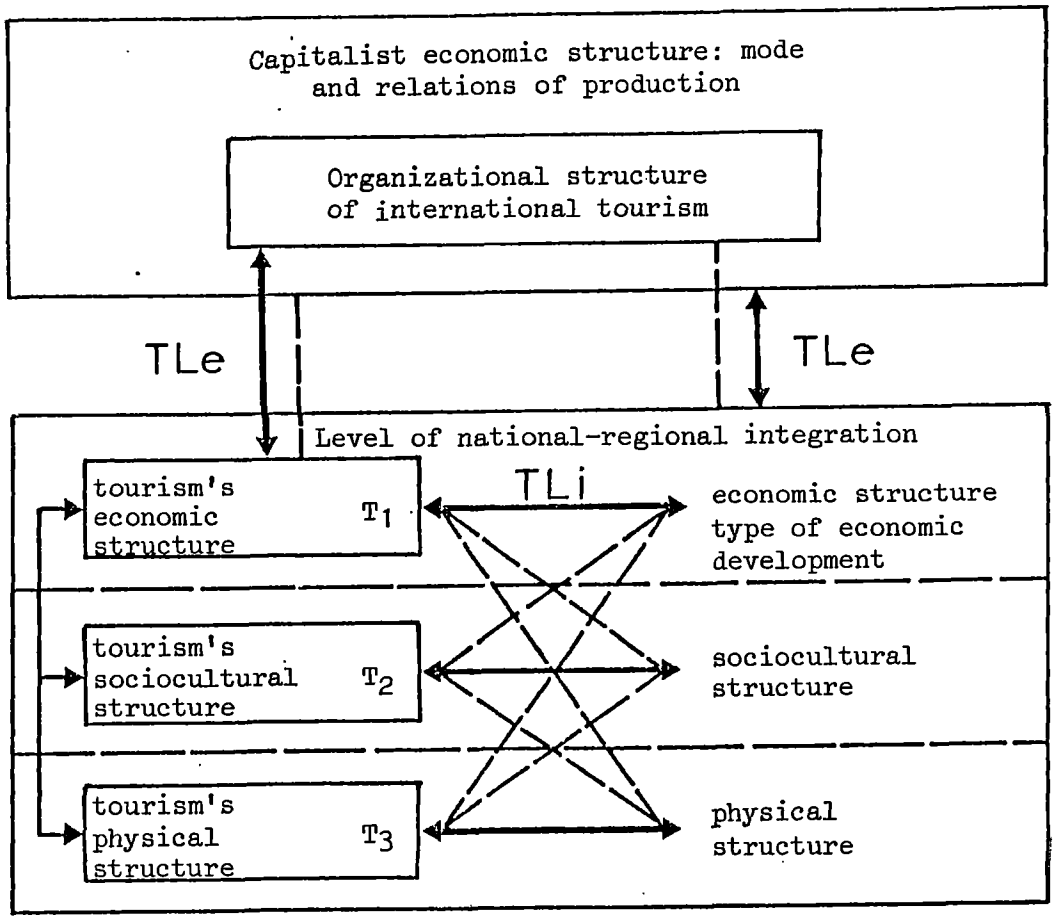
b. interpretative argument

The entire structure of the capitalist system and the mode of development, produce and reproduce, at the core-periphery level, unequal

Diagram III-3

Dependency Relations in International Tourism

Tourism's spatial structure (T) and its various dimensions (T_1, T_2, T_3) assume particular forms depending on two types of relations (TLi, TLe)



or different conditions for the development of tourism. For example, as we indicate in the following section 2.5, the entire organization and operation of the international air-travel industry, creates unequal conditions in the air-travel market between the various tourism generation and receiving countries.

2.1.2. Second level hypotheses - major arguments

a. hypotheses statement

At the second level, the analysis is more concrete and assumes a spatio-temporal specificity, by focusing on particular aspects of the relations in tourism's production at the core periphery-level. The first hypothetical proposition here is that tourism's spatial structure viewed within the frame of differences at the core-periphery level, is related to: a) the movement and spatial concentration and/or centralization of tourism capital, and b) the conditions pertaining to the movement and spatial differentiation of demand and supply factors.

The second hypothetical proposition considers that tourism's spatial structure is related to changes and to the new conditions in the international organization of leisure, and specifically to the emergence and activities of International Tour Operators (ITO), which express a new dimension in the development of the capitalist mode of tourism production. The hypothesis here is that the same factors that conduce to the formation and action of ITO are affecting (or are the structural forces in) the process of tourism's spatial structure formation and transformation.

b. interpretative arguments

Observed overall conditions, as well as, modes and relations of production in tourism are such (core-periphery differences, kind of linkage of each national-regional unit with the international organizational structure of tourism), that through a distinct system of mechanisms certain processes are realized. Specifically, we are arguing about the Spatial Transfer of Surplus Value (STSV), a process whereupon a relative large share of the benefits in tourism transactions are accruing to metropolitan or core-regions[1].

1. Such claims are made by Turner whose statements are general

The role of Multinational Corporations (MNC) has been viewed and discussed within the context of imperfect competition (in international trade), or under monopolistic and oligopolistic market conditions. We are assuming that International Tour Operators (ITO) "behave" like MNC, which constitute "A substitute for the market as a method of organizing international exchange (Hymer, 1979), or "emerge in response of market imperfection and to exploit particular ownership specific advantages" (Dunning and Norman, 1983). Within such a context, capital accumulation and surplus value acquisition, which are the determining motive of tourism production, are realized under: a) intra-class competitive terms (Hymer, 1979) which compel the enterprises to adopt labour saving technologies, bargaining strategies, etc. and b) inter-class conflicts which derive from the pursuit to control the labour product.

2.1.3. Analytical procedures: Objectives and stages of analysis

The analytical procedure followed (in sections 2.2, 2.3) corresponds to the hypothetical propositions and main arguments outlined at each level above. Thus, we may delineate two stages and the relevant issues involved as follows:

The overall pattern of growth and the structure of international tourism is analysed in the first stage. The analysis focuses on identifying: a) core-periphery differences in the overall pattern of tourism's growth through a historical examination of the "conditions for inequality" in the growth of tourism demand-generation and supply-attraction factors, or pertaining to economic, sociopolitical (institutions, agents and cultural practices) structures and transport tech-

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"in the absence of enough definitive studies"; while Armanski presents specific examples to substantiate his thesis. See Turner, L., "The International Division of Leisure: Tourism and the Third World" in World Development, Vol. 4, No. 3, 1976, pp. 253-260; Armanski, G., Die kostbarsten Tage des Jahres, Rotbuch Verlag, Berlin, 1980, pp. 42-47. The phenomenon of the STSV has been studied at both the international and interregional level. For example, an empirical study of the latter case shows that "surplus value is really transferred from the less developed to the more developed regions". See Marelli, E., "Empirical estimation of intersectoral and interregional transfers of surplus value: The case of Italy", in Journal of Regional Science, Vol. 23, No. 1, 1983.

nology, b) internal processes of the sectors' growth, i.e., particular operational aspects of the organizational structure of international tourism and their regional differentiations (core-periphery).

In the second stage, the analysis focuses, basically, on identifying the above-mentioned system of mechanisms and its role on the STSV. The system can be outlined as follows: a) an international tourist market manipulation (influencing) mechanism, b) a bargaining power (price making) mechanism, c) a functional, tourist movement mechanism.

The first major objective is to identify the existence and formation of dependency situations, within the particular system chosen, rather than test different hypotheses regarding relationships between "degrees of dependency" (causal variables) and certain tourism structures (dependent variables). The underlying basic assumption here is that both differentiation and transformation of structures within the core-periphery system is realized through a historical process. The study of the dynamic of dependency situations postulates that there exists a dialectic unity of internal and external relations; a postulate implying that the conditioning effect of each (internal or external) in the formation of dependency situations can be isolated only by making a static analysis.

A second major objective focuses on the study of the nature and effect (conditioning influences) of interacting factors (i.e., the way tourism's growth in individual countries relates to the organizational structure of international tourism and its major operators or agents) on the form and formation of the spatial structure of tourism in the core-periphery system.

2.2. Stage one: The pattern of growth and the organizational structure of international tourism

Introductory note

Many assumptions, which have been frequently employed in travel research and tourism demand estimates, are based on the individual rational decision making within the market-price system. Within such a context, the different holiday resorts, or travel destinations, are considered as commodities, having their own prices among which the individual consumer chooses, so as to maximize some measure of satis-

faction; the problem then appearing as one of maximizing some utility function subject to a budget constraint and regardless whether the consumer derives utility from the commodity proper, or, its wider environmental characteristics, or the whole recreation-holiday experience.

In antiparathesis to the above approach, and following the general assumptions outlined previously, the underlying postulate of our major discussions and arguments in this approach is that tourism is a form of consumption within the capitalist consumers society which is created and promoted as a result of the prevailing socioeconomic conditions. Further, tourism as a consumer item is viewed as an expression of the system's ideology about "free time" and holidays which both are constituent elements of the phase for the reproduction of its labor power; or, according to certain views (Boissevain, 1979), as a means of recovering the working class power in order to achieve higher levels of productivity.

Today the organizational structure of international tourism is such, that through its major agents develops and assumes such activities, roles and functions, in relation to the means of tourism production, so as to influence volume and type of demand consumption at the origin country and its allocation among different destination countries and regions. Within such an organizational context, the role of ITO's is significant: acting as intermediaries between the tourist clientele and the TP influence and effect, through the packages and programmes repertoire marketed, both the volume and type of tourism consumption and the spatial frame of its allocation.

2.2.1. Inequality and differences (core-periphery) in the growth of tourism: Unequal power to generate or consume and attract tourism; tourism's growth in relation to the socioeconomic structure, as well as, to the political-administrative organizational structure of the countries considered.

The mode of capitalist development and the postwar economic boom of the European society created the particular conditions (pertaining to the socioeconomic structure, political-administrative structure and transport technology) for the growth of tourism and its spatial differentiation. Specifically, it has created:

a. "Conditions of inequality" in the growth of tourism: differences in tourism generation and attraction power. In this connection, the analysis involves selected socioeconomic factors (indices) related to tourism: Differences (core-periphery) and temporal evolution as to the GNP, per caput consumption expenses, per caput expenditures in tourism proper, cost of tourist services, etc.

b. Conditions conducing to specific forms of labour production, as well as, labour and leisure mobility and leading to specific modes of tourism production and consumption for achieving this. Here tourism and migration are analysed, within the spatial frame chosen, to discern their spatiotemporal characteristics and their major role, within the context of dependency relations and the development process; focusing on the particular role played by the Mediterranean region (periphery) in the international division of labour and leisure.

c. Different conditions in the organization and utilization of physical space between core and periphery regions; particularly with regard to recreation-touristic space. Here the physical structure of tourism is viewed within the context of core-periphery differences concerning both the superstructural frame (i.e., organization of the state, the legal-administrative system, the nature and instruments of planning to control and influence socioeconomic development and the quality of the environment) and the underlying socioeconomic factors.

2.2.2. The organizational structure of international tourism and travel mechanisms

The organizational structure is considered as a constituent part of the productive forces in tourism directly depending on the relations of production. Specifically, the organizational structure pertains to production techniques and organizational technology, capital organization, communications - transport and information technology, building techniques, business operations, marketing and management techniques, etc.

The relations of production in tourism are seen as a system of positions assigned to, or hold by certain agents in relation to the means of production. Such positions are places where particular roles

and functions are carried out with regard to the process of tourist package formation, the concentration distribution and circulation of consumers (tourists) to the products, the design and production of the TP at the destination place, etc. The concrete forms of action that the relations of production assume appear particularly on the agents bearing different functions and roles. The relations of production in tourism express the distribution of power among agents and are determining the allocation of opportunities and resources.

Within the above context the analysis focuses on the study of the following issues:

a. The spatio-temporal evolution in the structure and growth of international travel systems and ITO. Issues or factors explaining their growth and change: dynamism and technological development of the airlines industry and charter systems; forms of vertical and horizontal integration of travel agencies as well as concentration and centralization processes of tourism capital; strategies-objectives, organization and planning regarding their tourism generating (demand influence) and TP's price making ability.

b. The nature of relationships between the periphery's tourism representatives and their international partners-constituencies; for example within the system of flows and transfers outlined in Diagram III-4.

2.3. Stage two: Dependency relations and situations in the process of tourism's growth

On the basis of the hypotheses, main arguments and objectives set out in section 2.1 and following stage one, in this section we outline: a) the underlying main assumptions of the analysis, b) types and criteria of dependency and c) possible effects of dependency relations.

2.3.1. Main assumptions

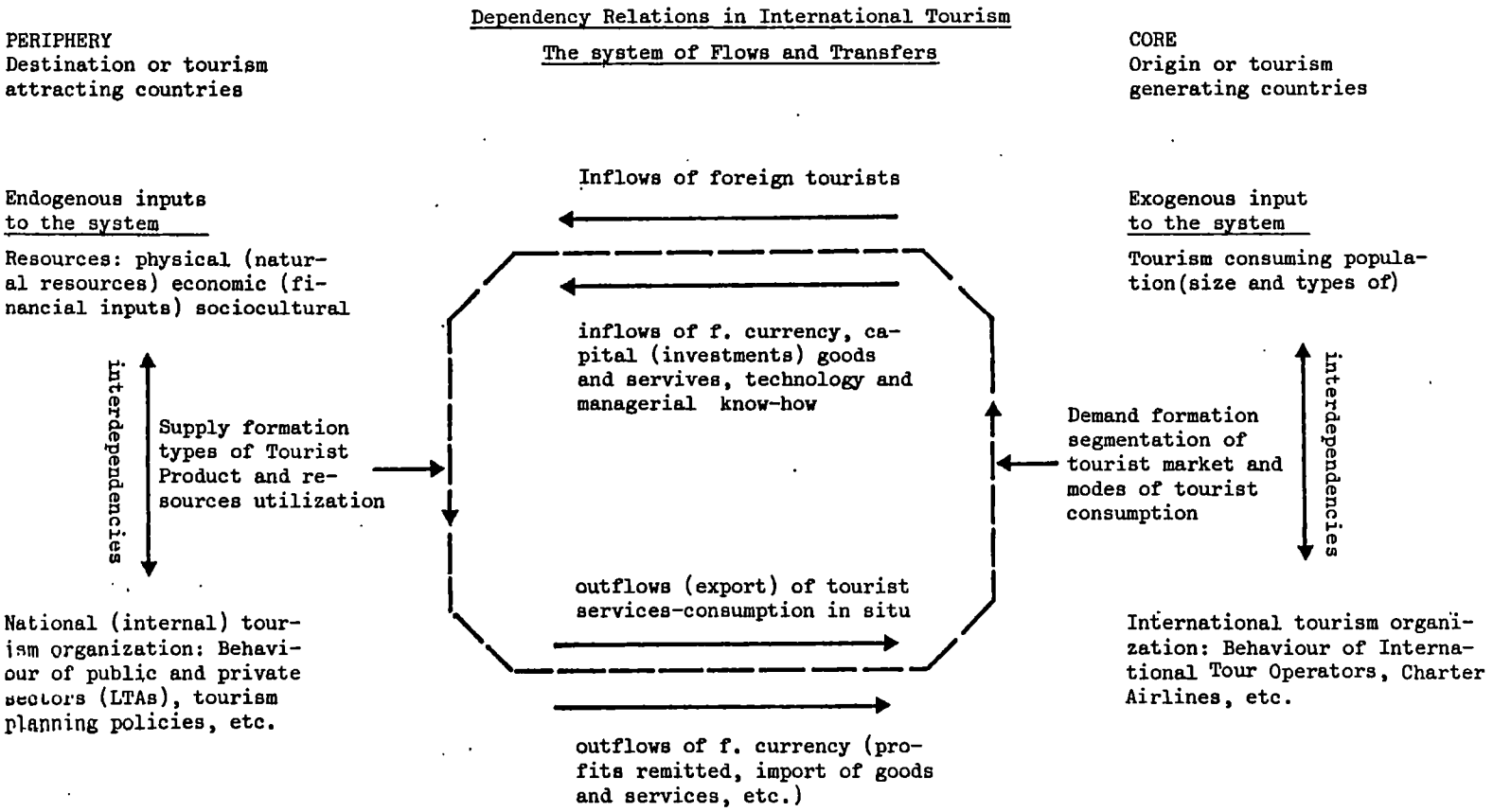
Dependency relations in tourism are viewed within the context of, or as resulting from, the interplay of two major factors:

a. The system of mechanisms outlined above, the organizational structure of international tourism and the related mechanisms and processes, the global strategies of ITO and

Diagram III-4

Dependency Relations in International Tourism

The system of Flows and Transfers



b. The "internal" dynamic of tourism, or, in general, the state's or the region's capability to assert national or regional priorities for development (autonomous or dependent action by the region's tourism agents).

The above-mentioned "internal" dynamic of tourism pertains to and is defined by the following:

- The very same (differential) structure and mode of capitalist development characterizing peripheral countries,
- The dependent on the above point differential mode of organization and utilization of their territory,
- The internal structure of tourism pertaining to i) the way tourism and recreation is segmented into international tourism, domestic tourism, outdoor recreation (market and TP segmentation and specialization) and ii) the strength or ability of tourism's internal organization and of tourism's domestic agents to mitigate certain constraints (demand, price making) imposed by the ITO.

It follows, in consistence to the above, that an appropriate approach for investigating the role and effect of Tour Operators should be one that considers them not as independent individual producers and consumers, but within the frame of social relations, where they operate, and which affects their actions. The analysis in this part may be based on theoretical and empirical research work, as well as, technical methods pertaining to the areas of descriptive decision theory and bargaining models.

2.3.2. Types and criteria of dependency

The various alternative types of dependency may be defined on the basis of several criteria as follows:

a. International tourism market dependency is defined by:

International Tourism's share in a country's or region's market; domestic versus international tourism.
Tourist Sector's diversification with regard to demand (diversity of foreign clientele) and supply (diversity of the TP).
Degree of integration and linkages of tourism with other sectors; pertains to the structural basis of tourism development, i.e., to

the completeness of economic processes (capital accumulation, production, marketing, distribution, expenditures), or the degree of reliance on external agents for a full integration of such processes.

b. Operational power dependency is defined by:

- Bargaining or monopsonistic power of ITO to impose their conditions and regulate prices of the TP offered at the destination country.
- ITO's, through their tour programmes and the holiday packages promoted, affect the size or type of demand and its geographical orientation.

c. Functional (financial, organizational-managerial and technical) dependency is defined by:

- Foreign inputs (e.g., managerial know how, hotel equipment, investments, etc.) to produce and service the TP; the extent of tourism's reliance on external supplies (import content) and the ratio of foreign to domestic invested capital and technology.

2.3.3. Dependency relations and their effect on the form and formation of tourism's spatial structure

The below-outlined, or, additional examples of possible effects attributed to dependency relations, may be studied through the analysis of specific empirical situations (case studies):

a. Dependency relations reinforce, or consolidate "economic dualism" in tourism; in the sense that they contribute to the development and/or the separation of the sector into two "compartments" with few economic (or social and cultural) connections; one "export" oriented, the other serving the domestic (local) market.

b. Dependency relations reinforce existing differences between core and periphery with regard to the particular way space is organized, utilized or consumed. Additionally, within the peripheral country, the particular way of tourism's growth accentuates an allready critical territorial inbalance between city and the countryside, coastal areas and hinterlands.

c. Dependency on mass tourism and ITO (who offer through their

packages a standardized holidays product almost similar for every region) conduce to the homogenization of the host country's TP. Additionally, certain types of dependency relations involve or conduce to the transfer of behavioural and consumption patterns, thus effecting sociocultural patterns and/or the increase of foreign goods imports.

2.4. The Survey of Tour Operators (TO)

Following the above-described interpretative-methodological frame, and drawing particularly on the assumptions developed in paragraphs 2.2 and 2.3, we have attempted to examine certain aspects of a TO's behaviour within the context of his decision making process; with reference to the selection of holiday destinations included and promoted in the various holiday programmes and packages.

To this end, we have constructed and mailed a self-administered questionnaire (see Appendix A) to a sample of TO in the UK, who are involved in the Inclusive Tours market. This questionnaire was intended as a preliminary and exploratory step to be completed, depending on the outcome, by a follow-up study, or, other survey methods. The aim was to gain pertinent, qualitative mainly, information concerning the criteria a TO uses to formulate and market certain holiday programmes. Our contention underlying this survey was that the levels of information available to the individual consumer are to a large extent affected by a TO's activities: the whole spectrum of holiday alternatives programmed and marketed by him. In other words, the assumption was that the consumer's decisions to travel are influenced by the TO, on the basis of a list of holiday destinations, or travel commodities, he selects and promotes. The TO, acting as a middle man between the tourist and the product, offers, through his package-programme repertoire, a particular spatial frame for tourist demand distribution; he exercises considerable influence over choice of destination.

The results obtained, and particularly the kind of replies given to our questions, did not warrant, in our opinion, that a survey in this area, independently of the method employed, could be carried on further. In the majority of the replies, a characteristic worth noticing is the emphatic nature of statements referring to the con-

fidentiality of the relevant data, and expressing the unwillingness of the respondents to "disclose" what they consider "vital" information and practices. Although from the limited number of relevant replies obtained it is difficult to draw any conclusions, or, to substantiate particular arguments, nevertheless, one should notice, that certain of the advanced in the questionnaire criteria acquire more weight than other. Thus, "price competitiveness" and "well established places" seem to predominate among the criteria employed by a TO to select and market existing holiday destinations; while, the selection of new destinations, or new product development seems to be influenced by "cost" factors and "policies of competitors" considerations. This has, perhaps, certain implications for tourist destination countries, or regions; in the sense that any price variation of the product offered (as a result of exchange rates and/or domestic price level changes), could give rise to the probability of a substitution effect, i.e., one product-destination being substituted by another.

The above points, which should be considered as working hypotheses that need to be further explored, have been discussed in several studies (see e.g., Dobbie, 1976; Hochreiter, Arndt, 1978; Armanski, 1980; United Nations Centre on Transnational Corporations, 1982). The studies dealing with the role and inpact of ITO seem, however, to provide only general arguments about the macro-behaviour and activities of ITO; discussing mainly the dynamic growth of ITO within a changing tourist market structure (ITO marketing practices, scale and modes of operations, pricing policies, etc.), as well as, the dependent relation of tourist receiving countries to foreign tour operators. It seems that relatively little attention has been accorded to the motives and micro-behaviour of travel agents, or, of the various tourism operatives.

The approach advanced in this section has put forward an alternative model for analysing and understanding tourist flows. While in the models explored earlier in Approach A, an abstract market was implicitly assumed - i.e., in the hypotheses tested consumer choices were influenced by specific variables, e.g., price, transport costs, certain environmental attributes of destination countries, etc. - this approach seeked to introduce micro-behavioural considerations - the particular role of ITO as market controllers - within the operational frame of the international tourist market; also, it has indicated the applicability of a core-periphery relations and dependency-theorist paradigm to the study of international tourism.

2.5. The organization of the tourist industry in W.Europe

The organization of the tourist industry is viewed within a general frame of tourism's organizational structure in W.Europe, involving three interdependent components: the tourist industry, the market, and the tourist product (see Diagram III-5). In this section we focus on describing function and role of the tourist industry's major agents: The airlines, tour operators, hotel operators and governments. We briefly discuss their effect on tourism's growth and draw general implications for planning in Greece.

2.5.1. The transport industry - airlines

In the tourist transport sector among the most significant providers of transport are the international airlines: A very complex industry which grows up in a highly politicized environment, through bilateral, or international negotiations and agreements. The industry's development (which requires and employs high technology inputs, innovations and huge investments for infrastructural works) is based mainly on the large metropolitan centres and the major tourism generating countries which are also large markets of domestic tourism[1].

Within the W.European context of tourism origin-destination countries, we observe an unequal participation of the national carriers in the air-travel market; foreign tourists carried by foreign airlines to particular destinations for exceeding those carried by the national carriers of those destinations. This "inequality" may be viewed as a result of specific international arrangements. In this respect, one should not ignore the fact that a large part of tourist expenditure (and the resulting gains) are controled (and realized) through the control of the tourist movement. However, such developments are related to the operation of the entire air-transport system; an operation reflecting modern industrial economics of profit maximization and costs minimization as applied to efficient handling and management techniques of large volumes of people (Lundgren, 1975).

Worth observing and distinguishing in the European air-transport

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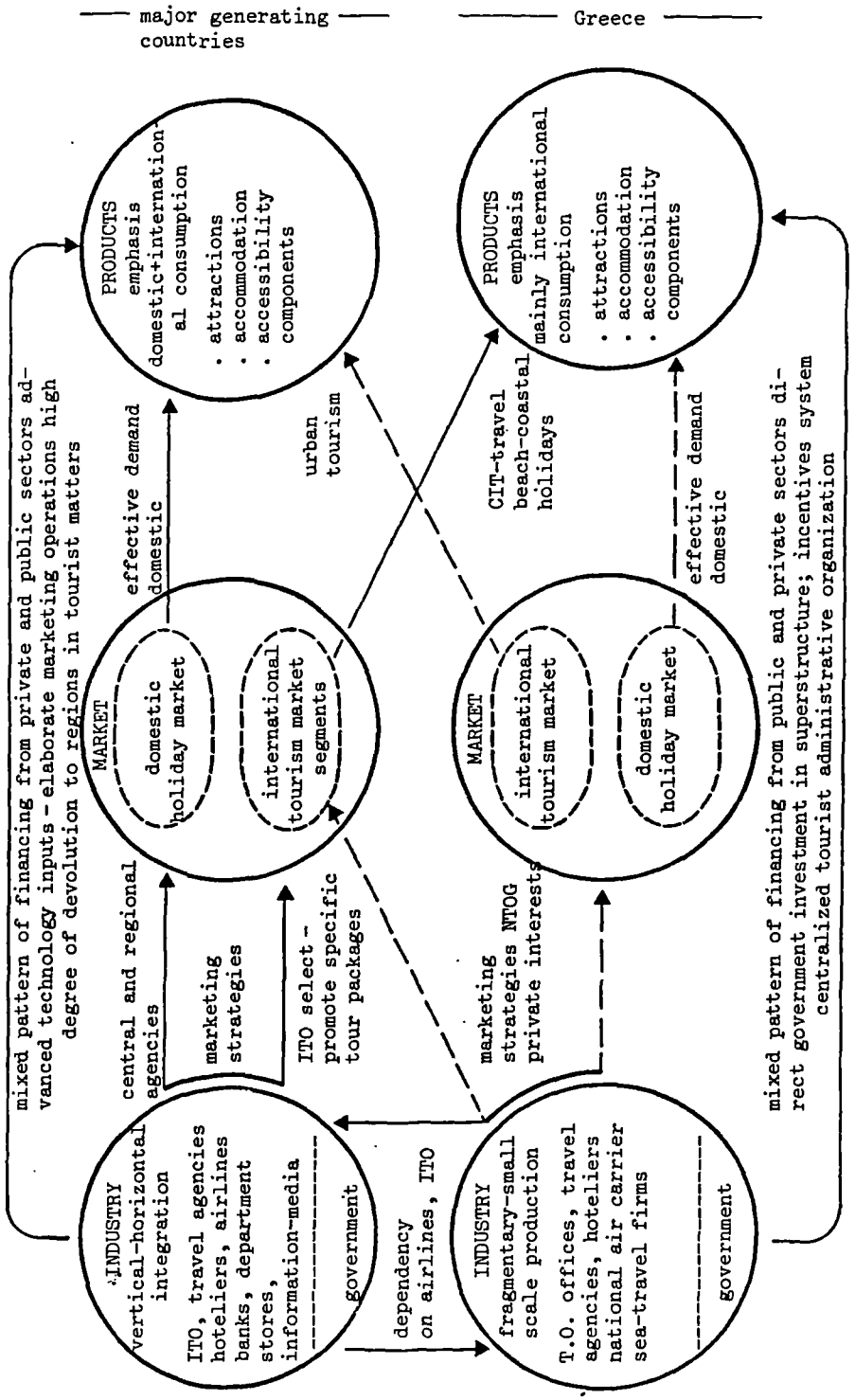
1. For example domestic tourism in USA, measured in terms of nights spent in accommodation away from home exceeds incoming (foreign) tourism by a staggering factor 24:1, Source: International Tourism Quarterly, No. 1, 1980, p. 28.

Diagram III-5

Interdependencies in tourism industry-market-product
W.Europe - Greece



system is the differential functional role which seems to develop between a) countries, regions, or resorts (particularly in Mediterranean tourist destinations) which serve, predominantly as connecting-transit nodes, or terminals, an extra-national demand; regions which develop infrastructure and logistics supportive of externally originating production and consumption-use requirements, and b) countries and regions where developments are supportive mainly of internal production and consumption-use requirements.

Viewed within such a context, the further development and improvement of the air-transport system requires from a destination country to increase the "serviceability" of its main tourism-supporting central, or regional air-nodes. This emerging demand seems to lead to the further expansion of central and/or a few peripheral airports, i.e., to the further concentration of investments. An illustrative example in this case is the Greek Government's relatively recent decision to develop a second international airport in Greater Athens; the primary rationale of this decision being the further promotion of international tourism and the improvement of the country's transport links with W.Europe.

2.5.2. Tour operators

Tour operators are mainly wholesalers who produce in bulk, assembling the different components (transport, accommodation, attractions) of a travel package. Their main function is to reduce the (information and transaction) costs for the consumer and reduce promotional expenditure for the supplier. A tour operator is the major actor of the tourist industry, through whom the market is "activated", the tourist-consumer is influenced in his selection of particular packages and destinations. The major characteristic of the tour operating industry today is the polarization between very few big operators and a plethora of smaller ones. Vertical integration is a common feature among the larger operators. These operators can affort to develop expensive marketing and advertising strategies and can purchase in bulk the transport and accommodation components; in their knowledge that any future changes (e.g., changes in the price of package, or due to sudden events in the destination country) can be backed by sufficient financial resources.

Developments in air-transport, package tours and in the tour operators organization have been viewed as major determinants not only

of the pattern and distribution of intra-European tourist flows but also of their magnitude and the overall volume of tourism. The effect of tour operators on the growth of tourism may be considered within the context of either the generating countries, or the tourism destination countries. The cheapness of chartered flights made intra-European travel very attractive and accessible to an enlarged European clientele. "The inclusive tour using chartered aircraft has powerfully transformed intra-European tourism. It represents the first real mass market in tourism. From the consumer's point of view, tour operation has made the holiday abroad as desirable and as normal as the consumer durables which are thought be part of the good life, refrigerators, cars, washing machines, and the like" (Medlik, 1982, p. 189).

The tour operating industry seems to have a significant effect on the destination country. This is however an area where research is very limited. Earlier, our discussion of the survey we have undertaken has indicated the difficulty of obtaining relevant information in this area. Yet, certain points and implications could be drawn which derive from relevant analyses of tour operators' brochures in studies undertaken elsewhere.

In the brochures of tour operators, the distribution of packages and of publicity pages among tourism destination countries indicate, generally the relative position attributed by the tour operator to each country, within the context of a particular tourism market, i.e., CIT-travel. Moreover, by specifying the number and price of packages, their geographic distribution, as well as, by actively pursuing specific policies to realize their targets, tour operators in fact are shaping the volume of demand and its spatial distribution. Spain's competitiveness and its leading position as prime destination in Europe is analysed and indicated in a relevant study undertaken by the Instituto Espanol de Turismo (1984). The crucial role of tour operators in this case is recognized by Medlik, who notes that "in the immediate future the substantial commitments made to Spain by tour operators in all the prime generating countries in Europe will ensure that that country remain the principal receiving destination" (Medlik, op.cit., p. 310).

However the analysis of ITO's brochures does not provide a complete, or comparative picture of the significance of a destination (country or region) within the entire (both mass and individual tourism) market. From brochures of holiday packages only, we cannot draw

explicit implications as to the importance of a destination country, its tourism potential, or with regard to the diversity of its tourist product. According to Dumas (1980), the image of Spain given by French tour operators is stereotyped, incomplete, or distorted; the importance attributed to each region and resort reflecting simply the number and categories of hotels being promoted. In connection with the ITO's influence through the brochures, two further points are worth making. First, certain studies (Dumas, op.cit., Barke and France, 1986) indicate that tour operators through their brochures and marketing strategies, convey an almost uniform image of the various destinations: The same terms are employed, the same themes are stressed, almost the same tourist product-components are promoted for consumption. The second point worth noticing refers to the brochure's "range of influence". According to a specific sample survey in W.Germany (Matthey, 1973),70% of CIT-travel participants have been influenced by the brochure in their selection of holidays destination. Another study (Rudolph, 1972), has shown that in the average each CIT-travel participant consults five brochures of different tour operators before deciding and booking.

With reference to Greece, available information from recent surveys[1] of the National Tourism Organization (NTOG) indicates that a small number of tour operators from tourism generating countries of W. Europe control a substantial proportion of their country's market for "holidays in Greece". This influence and control of demand seems to have increased over the years and concentrate, apart from Athens, in three tourist regions: Crete, Rhodes, Corfu. The role and share of smaller tour operators in the generating countries specializing in Greece seems to be, generally, limited. These operators are facing strong competition, suffering from all the problems which have conduced to strengthen the tendency for operators to revert to large units. Unless they can offer a very specific type of service, or concentrate

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1. For example, according to the survey undertaken in 1983 by the Greek offices of the NTOG abroad, the situation, with regard to certain countries, was the following:
- West Germany: Three T.O. (Tui, Neckermann, ITS-Kaufhof) controlled 66% of the Greek market in Germany.
- Sweden : Three T.O. (Vingresor AB, Atlasresor, Fridits Resor) controlled 68.5% of the market.
- Switzerland : Three T.O. (Kuoni, Hotelplan, Imholz) controlled 55% of the market.

in a few destinations and in one country, offering attractive new, or "enriched" products to specific tourist markets, smaller tour operators may not manage to escape the trend towards large travel conglomerates.

2.5.3. The accommodation sector - hotel operators

The full complexity pertaining to the structure and spatial organization of the hotel industry in W.Europe would require an entire exposition in itself. Here, we briefly describe certain characteristics thought indicative of the industry's structure and growth trends. The particular characteristics of the accommodation sector in Greece will be discussed in Chapter V.

Internationally, a major trend in the hotel industry has been the consolidation and expansion of the industry's operations through the development of a chain and franchise approach. Also, it has been observed (United Nations, 1982), that among transnational hotel corporations a considerable part of their expansion and related marketing strategies are geared towards the more developed industrialized countries and directed towards their metropolitan areas (central, or peri-urban locations).

Another development characteristic of the industry's structure is its diversification and vertical and horizontal integration; different forms of control-acquisition participation and cooperation between the accommodation-hotel sector and the airlines, railways, tour operators, real estate companies, banks, etc. Obviously, factors related to financing, marketing and economies of scale, as well as tourist habits, or tastes (in the case of hotel chains offering standard services and facilities reflecting "home conditions" regardless of the local milieu they exist) are thought to underly the above developments.

However, trends such as the above differ considerably among W.Europe countries. There are many differences and peculiarities in the accommodation-hotel sector with regard to patterns of ownership, range of facilities and quality of services offered, the market they serve, etc. For example, in France the growth of the integrated hotel chain (the American model) does not cover, according to Blanchet and Cauet (1984) more than 10% of the total accommodation capacity. In this country, one still observes the preponderance of family-run, or small hotels (with a capacity of 20-25 rooms), many located in rural areas and smaller cities.

A rather usual form of development in the Mediterranean region is a spontaneous growth mainly in coastal areas, of small medium-sized, family-run hotels, or rented apartments; cases where the tourist business activity is usually conducted on a part-time basis together with other activities (e.g., agriculture, commerce). This type of development seems to be missing in Sicily where according to Campagnoli (1979) "the largest hotels - which have been constructed along the most scenic parts of the coast - have been built with outside capital (Valtur, Hyatt, etc.), and the market for second homes which is the most conspicuous aspect of the touristic development of the island, is monopolized by real-estate societies based outside the region". Elsewhere, in certain tourist regions, or resorts of Spain, recent developments show a rapid decline of hotel construction, while the majority of accommodation is provided by rented apartments and second homes (Morris, 1985).

The holiday market for the hotel sector proper seems to have decreased in relation to other forms of accommodation. Whereas in the mid-seventies almost one third of the total European holiday market involved a hotel type accommodation (McEwen, 1975), what seems to be taking place at present and may possibly continue in the future, is a decline of "serviced" accommodation. A development related to cost-saving strategies in the entire accommodation sector and involving:

a) self-catering, aiming at the partial replacement of the labour (function) inputs,
b) rationalization pertaining to the closure of certain hotels and conversion of others to other uses,
c) introduction of labour input changes, i.e., increasing the share of female or part-time employment,
d) quality up-grading in the hotel sector and formation of hotel consortia to economise on several functions (marketing, purchases, reservation, etc.).

2.5.4. National Government

West European governments, recognizing the importance of tourism in their national economy (particularly for their balance of payments), intervene in various ways, undertaking action in several directions.

- establish tourism organizations, administrations, or services at national, regional and local levels, as well as, tourist offices ab-

road; concerned with marketing and promotion, to develop travel to their country from abroad and increase foreign currency inflows, and with the physical development of tourist facilities and infrastructure,

- provide, through other governmental departments, various types of aid to develop tourist infrastructure and superstructure; organizing systems of incentives loans and grants, schemes of public investments allocation, etc.,
- organize and promote through relevant agencies tourism-related surveys and studies, as well as, legislation.

Governmental policies in tourism extend also beyond economic and revenue considerations, since tourism's growth has been increasingly recognized as resulting in a series of social and environmental problems and as offering employment opportunities to develop backward-peripheral regions. This has forced certain government departments to support and cater for the conservation of natural resources, the retention of traditional landscapes and settlements, a better integration of tourism in local land use plans, into regional development policies and, generally, a careful integration of the tourist industry into the existing socioeconomic system. Another tourism-specific problem, governments have come to recognize and consider, is the sector's diversity and fragmentation, which often conduces to the appearance of several conflicts, affecting adversely many efforts to planned and the comprehensive development of tourism.

The organization and administration of tourism, as well as, related tourism planning activities differ considerably among W.European governments. On the basis of available statistics[1], which however do not allow detailed cross-country comparisons, we may observe considerable differences among travel and tourism administrations of W.European countries; differences in their revenue and budgets, in their expenditure on tourism promotion abroad, and in the staff they employ in different activities and places. As to the latter item, and in the case of Greece, worth noticing is the concentration of the employed staff at the headquarters in Athens; a characteristic element reflect-

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1. Source: World Tourism Organization, Budgets of National Tourism Administrations, Madrid 1986. Particularly see B.1.2. pages 6, 7, 23, 24.

ing the centralized structure of tourism's administrative management in this country. Generally, however, differences as those referred above do not seem to correspond to the volume of tourism each country receives, or, to its earnings from tourism.

There are basic differences among W.European governments in their approach of tourism, or, in their approach to planning for tourism development. Such marked differences presumably reflect the political and economic system within which planning in general and tourism planning in particular, takes place[1]. Specifically, the various tourism planning approaches seem to relate to a country's institutional-administrative structure, the legal frame and related land use and land development practices, the tourism resource base and the role tourism plays in the country's socioeconomic life.

In both generating and destination countries, economic considerations seem to hold a central position in planning practices for tourism development; in the formulation of policy objectives and in the measures of implementation taken. The shortcomings and consequently the improvement of planning practice in this area, have been associated[2] with a) a better understanding of the complex interdependencies within the tourist sector, or between tourism and other sectors, and b) an improved integration of macro- with micro-economic planning and with the tourist market mechanisms.

Within the W.European context, the influence of government (of the tourist organization in government and of planning practices) on the spatial growth of tourism is not easily identifiable. We cannot easily distinguish, apart from a few examples[3], cases where government plays a leading role as an agent of growth. Usually, governments assume a regulatory function (with different degrees of success), to ensure that the tourist industry does not grow in great dissonance with the government's socioeconomic goals. The tourist agents and mar-

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1. For an illustration of tourism planning approaches in two touristically "advanced" countries, with different socioeconomic and political systems, See: Vuconić, B., Barucci, P., et.al., "Italy and Yugoslavia: A case of two touristically advanced countries", in Tourism Planning for the Eighties, Ed. AIEST, Berne, 1978, pp. 174-204.

2. Marris, T., AIEST, op.cit., pp. 131-136.

3. The Languedoc-Roussillon tourist development programme in S.France and the S.Adriatic tourist development projects in Yugoslavia.

ket mechanisms described earlier seem to play the most significant role in the growth of tourism. However, we shall return to this issue in Chapter VI, where we discuss Greek planning practice and its relation to the spatial structure of tourism.

2.5.5. General implications for planning in Greece

The interdependencies among the tourist industry's agents, the markets and the tourist products within the relational context Western Europe-Greece are sketched briefly in diagram . The diagram serves as a background against which to draw certain preliminary conclusions and planning implications which emerge from the preceding exposition. We shall return to the discussion of the issue in the following Chapters V, VI and particularly in Chapter VII.

The preceding discussion has indicated that the organization of the tourist industry in Western Europe, especially through the airlines and tour operators (the role of the hotel industry and government in Greece will be discussed in Chapters V and VI) affects both tourism demand (or the European markets for "Greek holidays") and supply, i.e., the Greek product and especially its transport-accessibility component.

Although it would appear that Greece, as a destination country, can influence substantially the volume of tourist flows and their spatial distribution within the country - since the TP demanded by the European tourist clientele is consumed in situ, within its territory - the ultimate control of large market segments (CIT-travel) seems to reside in the tourism generating countries; specifically in the large metropolitan centres upon which the entire organization of the international tourist industry is based.

International airlines and the tour operators organization select and control transport links (particular regional Greek destinations) with the major European markets, as well as, the price of tour packages. Depending on the conditions pertaining to air-transport infrastructure and services in Greece, as well as, on the volume of international demand for particular holiday products-destinations, airlines and ITO seem to favor (determining frequency of connections and volume of traffic) specific Greek regional destinations. Tour packages are increasingly geared towards the consumption of particular, stereotyped product-components (coastal-beach holidays) and promote a continuous concentration of tourism in "established" places.

There are certain possibilities for Greek planning in the directions of influencing (restructuring) both demand (international tourist flows) and supply (the tourist product). The greater potential seems to lie in the second direction, i.e., in restructuring the major components (attractions, accommodation facilities, accessibility) of the Greek tourist product; since through such a restructuring one could influence directly, or indirectly the major determinants of tourist flows. This issue, however, will be one of the major themes of our discussions in Chapter VII, where we develop our policy conclusions and proposals concerning the organization of tourism in Greece.

3. Conclusions

This final section draws on the results and findings of the preceding analysis to outline the main conclusions which emerge in relation to the hypotheses and to the specific questions set out in the introduction of this chapter.

In the quantitative analysis of the first approach, the advanced hypotheses to analyse the tourist flows in W. Europe were grouped into four categories. The evidence emerging from the empirical testing tends to confirm the reasonableness of the first group of hypotheses, where tourist flows were related exclusively to the distance factors, or to the different forms distance has been expressed with. The existence of inter-country differentiations, as to the frictional impact of distance, or as to the importance of the various modes of transport, were evidenced, e.g., in countries like Greece - tourist flows were satisfactorily related to the air-travel cost factor - or, in the centrally located countries like the Netherlands, W. Germany, Austria and France - tourist flows were significantly influenced by the land or road-distance factor. Generally, we observed that the total inflows to each country related better to the distance factor (air-travel cost) than the total outflows.

In the case of Greece, we should emphasize the country's peripheral geographical location, vis-à-vis, the major tourism origin countries, the cost of travel and the type of transport connections - determined to a large extent by the international organization of the travel industry and tour operators - as important factors which determine the place of Greece within the W. European patterns of tourist flows.

In the second and third groups of hypotheses, we have related tourist outflows and inflows to selected economic socio-cultural and physical characteristics of tourism development pertaining to the observed countries.

The results from the analysis and testing of the tourism generation (demand) models indicate that the examined independent variables were significant to a greater or lesser degree. Specifically, the relative high (in certain cases approximating

the value of 1) per capita income or consumption coefficients indicate the significant influence of these variables upon the generation of tourist flows. However, these results should be viewed with caution, since they are based only on cross-sectional data, and should be related to those deriving from country by country analyses, in order to identify differences or inter-dependencies among individual or groups of countries. In this case, relevant studies elsewhere (e.g., Anastasopoulos, 1984) have shown that income elasticities of tourist arrivals differ considerably among a group of Mediterranean countries including Greece.

With the attraction hypotheses we have seeked to relate tourist flows into each country to specific variables pertaining to a country's tourist product (size and cost of tourist infra-structure and services), or to particular indices broadly defining a country's tourist attraction profile. Distance measures were also included in this group of hypotheses. The results obtained seem to confirm the validity of the hypotheses, although we have evidenced considerable differences among countries, regarding the percentage of the explained variation in the observed tourist flows.

The testing of the fourth group of hypotheses (which are based on the interaction or gravity models and the intermediate opportunities model) has provided, in comparison to the previous hypotheses, less satisfactory results; although the consideration of additional variables, in certain of the hypotheses, increased the percentage of the explained variation in the observed flows. Gravity models have been widely applied and criticized on the grounds of their conceptual justification and theoretical ramification. It is believed (Lesceux, 1977), that the essence of gravity models lies in the "evidence" they provide regarding the disparities between the diverse masses (places, regions, countries) which compose a spatial system. However, we believe that a major problem, and a drawback in our case, seems to lie in the selection and appropriateness of the demographic or population variables which were chosen to represent the "masses" (countries) of the system.

The analytical frame employed in the second approach of tourist flows, seeked to add qualitative dimensions in the analysis,

drawing on relevant theories of dependency and core-periphery relations. The proposed alternative frame has put forward supporting arguments and specific suggestions, as to the context and content of the analysis that should be undertaken, in order to explore and verify the reasonableness of the advanced hypotheses.

According to the first hypothesis, tourism's spatial structure is resulting from the interplay of both internal and external conditions and relations, developing within each country's territory and pertaining to the organizational structure of international tourism respectively. In the advanced argument and in the proposed frame of analysis, such relations are viewed within a cause-effect explanatory frame of the developing inequalities or differences in the growth of tourism, at a core-periphery level.

In the second and third hypotheses, the spatial structure of tourism is related to a) the movement and spatial concentration of tourist capital, b) the spatial differentiation of demand and supply factors and c) the particular mechanisms and practices to the travel industry's organization and main agents, the ITO. The suggested analytical method for exploring the above hypotheses focuses on identifying the formation of core-periphery dependence or inter-dependence relations in the process of tourism's growth. It is assumed that such relations result from the way the international tourist industry (travel mechanisms and agents) interacts with each country's 'internal' dynamic of tourism's growth.

With reference to the main elements and factors which characterize and underlie the pattern of tourist flows, as well as, with regard to the particular relations developing among the observed countries in the growth of tourism, we should outline a number of points emerging from the analysis.

The tourist transport system, the tourist population (markets) and the territorial units (origin or destination countries) constitute the main elements of the tourist flows pattern in W. Europe. The tourist transport system, due to its structure - the differential degree of accessibility or connectivity it exhibits at

different locations - seems to influence considerably the volume of tourism that each origin, or destination country generates or attracts. The entire transport landscape constitutes the physical background which, together with specific policies of the international travel industry and national governments, conduce to the development of tourism at particular regions.

On the basis of the magnitude and direction of tourist flows, we have outlined the skeleton of the spatial structure of tourism; we have identified the position and ordering of all countries within the system and quantified the various degrees of tourist connections existing among them. Tourist flows exhibit, generally, a relative stability in their spatial articulation - direction and concentration. In spite of certain changes over time, it seems that after the establishment of a basic pattern of tourist movement, there is a considerable degree of inertia in the change of such a pattern.

With regard to the origination and/or destination of their main inflows and/or outflows each country or group of countries seems to a) assume, diachronically, a more or less stable position in the market and b) develop especially strong 'tourist connections' with certain other countries concerning the main flows of tourists received or generated. Nevertheless, during the period 1963-1984, we observe certain noteworthy changes and characteristics. First, Spain becomes a leading destination country surpassing traditional leaders of the 1960s, i.e., France and mainly Italy. Second, the decline in the relative share of the USA market particularly in countries like Italy and Greece where it used to play a leading role. Third, certain south European-Mediterranean countries (Spain, Italy, Greece, Yugoslavia) seem to depend increasingly on a few and the same markets (W. Germany, UK, France); a characteristic suggesting the strong competition which develops among the above destination countries. However, there is not clear indication as to whether the tourist industries of these destination countries are competitive, complementary or both. For example, in a relevant study which explored the influence of relative prices upon tourist arrivals in the Mediterranean (Anastasopoulos, op. cit.), it was found that a change in the relative price of tour-

ist services in Greece affected tourist arrivals in Italy in a complementary way - with a relative decline of prices in Greece, tourist arrivals in Italy have increased. In contrast to this, a competitive relationship was observed, whereby a decline in the relative price of tourist services in Italy was found to contribute to the decline of tourist arrivals in Greece.

The search into the factors which account for the existing spatial patterns of tourism flows in W. Europe, has shown the relative impotance of common boundaries, the strength of tourism exchanges between neighbouring countries; indicating the significance of factors such as travel cost-distance, or proximity to markets of considerable "tourism consumption" capacity for the growth of tourism at particular destinations. Nevertheless, the above factors, as well as, the assumption of mutuality or correspondence in tourism exchanges was not ascertained in all the countries we have considered. Moreover, a fuller understanding of the observed, mutually or especially strong "tourist connections" between certain countries, seem to require the consideration and understanding of additional factors, albeit difficult to assess or quantify, such as cultural affinity - language, religion -, political and commercial ties, etc. For example, in the case of commercial-business activity patterns it was found (Polese, 1981) that their resulting spatial patterns exhibit a considerable response and sensitivity to factors such as the above.

A general conclusion emerging from the quantitative analysis concerns the extent to which international tourist flows can be considered as a function of specific tourism generating socio-economic factors (e.g., per capita income or consumption, relative price of tourist services) and/or as a function of attraction factors (e.g., tourism resources and infrastructure). The analysis has indicated that the importance of these factors differs from country to country. This may be attributed to the differential impact of certain market factors (socioeconomic and motivational variables) on each country, or to the variable impact of non-quantifiable factors pertaining to the travel industry's organizational structure, e.g., the impact of the tour operating business.

The study of the above factors and of the role of exchange rates and government policies (e.g., promotional expenditures) would add on, the results in this chapter and would contribute to a more detailed assessment and identification of the various inter-country relationships and of the market segments and tourist flows towards particular destinations. With reference to Greece, and according to the results obtained, the country's place in the W. European tourist flows pattern (or its share in the market) seems to depend on market (demand) factors of an exogenous, primarily, origination and influence - most important, the country's transport accessibility and interlinkage with the international travel system - and on tourism supply factors pertaining to the country's tourist product; its attractiveness or competitiveness and relative price in the market. Certain of the above factors shall be further considered in the following two chapters where we describe and analyse the regional structure of tourism in Greece.

CHAPTER IV

The present spatial pattern of tourism in Greece: Characteristic elements of uneveness in the spatial growth of tourism

Scope and methodological approach

In Chapter IV the analysis of the spatial dimensions of tourism demand and supply, as well as, of certain other characteristics of the tourism phenomenon in Greece aims at answering two main questions: a) which are the similarities and/or differences among the various categories of spatial units with regard to tourism resources and demand or, among the different groups of the tourist population (foreign nationalities, domestic tourists) regarding their "locational preferences"?, b) how such differences evolve diachronically? Within the context of the research objectives set in the introductory chapter, and specifically those in Direction B, this chapter will attempt to identify the spatial characteristics of tourism in Greece on a national scale. The analysis in this chapter is, basically, of a descriptive and classificatory nature. The factors which are thought to underlie (explain or influence) the spatial patterns of tourism will be considered in the succeeding chapter.

Following the above delineation of the chapter's scope, it is in order here to outline the main criteria underlying the selection of the particular demand and supply variables, as well as, the methods, techniques and data employed in this chapter.

Drawing on the evaluation and classification methods reviewed in Chapter II, it is pertinent to observe that there are different methods of classification in tourism; that the selection and value of a particular classification depends on the purpose it serves, on the availability and quality of the employed data (in our case visitor surveys and tourist resource inventories), as well as, on the techniques per se used to classify the major elements of tourism being observed, i.e., tourist population segments, tourist activities, or tourist resources. In connection to the above, we should stress that the methodological approach employed in this chapter is largely determined by the available data, and the particular scope of our analysis, namely to investigate the geographical pattern of tourism on a country-wide (interregional) scale and, additionally, to explore specific issues of the

tourist phenomenon at different levels of spatial aggregation.

Thus, with regard to the international tourism demand, we shall employ the nationality, or country of origin variable, to analyze the regional distribution of nine groups of tourists (corresponding to the most important for Greece tourism-origin countries) in the 51 nomi of the country. The nomos spatial unit has been selected because it is the main administrative-planning unit, on the basis of which most of the regional statistical data are collected. The socioeconomic categorization of tourists, as a variation of nationality segmentation, will also be considered and the implications for Greece will be discussed.

On the supply side, the main criterion employed in the selection and analysis of the different types of tourist resources, is to consider those resource types which would permit a distinctive regional differentiation and the mapping out of what we may call the tourist product profile, or a region's tourist potential. The types of tourist resources that will be selected and analysed belong, either to a supply category, related directly to tourist demand (tourist infrastructure proper), or, to a supply category which encompasses what we consider as the country's sociocultural and natural resources patrimony.

With regard to methods and techniques employed in this chapter, we should notice the following. Through the homogeneity analysis we undertake a systematic cross-sectional (cross-sectional analysis of statistical data) examination of both the tourist demand's and supply's spatial pattern. The spatial dimension of international tourism demand is assumed to correspond quantitatively to the nights spent by foreign tourists (nine nationalities) at different categories of spatial units. Tourist supply is examined and assessed on the basis of diverse morphological characteristics defined by the properties of natural and man-made resources. In the case of domestic tourism, we have already mentioned the scarcity of relevant statistics. What should be stressed here is that regional domestic tourism statistics were employed only in order to distinguish and generally compare the spatial distribution patterns of domestic versus international tourism. We thought, that a more "extensive" use of domestic tourism statistics could not be substantiated, since the kind of data referring

to the nights spent by domestic tourists in hotels, or similar accommodation establishments, covers only a small part of the domestic tourism market. Instead, certain aspects of domestic tourism demand pertaining to outdoor recreation will be analysed on the basis of (week-end and holidays) traffic statistics covering a major part of the Greek territory: The main north-south road transport axis linking the country's largest urban centres (Athens, Thessaloniki, Patras, Larissa, Volos).

The significance of factor analytic techniques employed in this chapter lies in their capacity for aggregation and delineation of basic underlying dimensions pertaining to a large set of variables; in our case those referring to various categories of spatial units, tourist population, and resources. However, one should also mention the limitations of factor analysis, i.e., limitations related to the interpretation of factors, as well as, to the need for a carefull consideration of results, since causal relationships cannot be inferred from various correlations alone, or the factors derived from them. The particular techniques and procedures of analysis employed in the various sections of this chapter are elaborated in Appendix B.

1. The spatial characteristics of tourist demand, needs, and activities

General introductory remarks

The analysis of demand and needs for tourism, and the participation in various tourist activities, can be approached in different ways.

In economic studies, the usual approach is to assess, quantitatively and qualitatively, various magnitudes of goods and services that different groups of population consume, or are willing to consume, at a given price over a certain period. Within such an objective frame, the analyses center on discerning the role and the effect of factors such as income, relative prices of tourist services, etc.

Many tourist and recreational activities, as well as, their supporting services and equipment are considered, additionally, as serving a variety of social and psychological needs of the population; thus contributing to its well being, or to the increase of its productive capacity. Society and the state (with its institutions and governmental agencies) are viewed as agents which, through distinctive or characteristic mechanisms and actions, introduce and promote particular types of tourism activities and consumption. Here, however, there are considerable differences as to the emphasis attached to the "social element". Tourism is considered, in demand assessment studies, as a purely market service, or an economic process in a given location to which other non economic processes are thought to produce or contribute a "noise" or "error term" element. In practice, various policy measures and actions of governmental or societal bodies and groups differ as to their broadness of scope, the importance they attribute and the resources they allocate to satisfying diverse needs, especially, those of the less privileged sections of the population. Many such approaches and measures are usually covered under the umbrella of "social" tourism; a rather controversial issue giving rise to conflicting views, not only in conceptual and semantic terms (as if there are two categories of tourism: social and a-social), but also with regard to its substantial role within the context of either the capitalistic or socialist system.

Tourist demand, needs and activities in all approaches (outlined

briefly above) exhibit two major characteristics. They have first a temporal or seasonal character pertaining to their incidence and duration and depending on various factors like climate, social habits, and patterns of work organization, the educational system, etc. Secondly, they assume a spatial or geographic dimension which is the focus of the following analysis. Such a characteristic refers to the spatial manifestation and evolution of the above characteristics at different levels or units of space ramification, as well as, to the diverse relations of tourism's spatial parameters to the settlement pattern, resources distribution and transport networks.

1.1. Categories of tourist clientele, or a typology of tourist demand

The nights spent by each of the nine nationality groups of foreign tourists in various places of Greece are assumed to be nine different categories of demand. In the case examined, these nine categories are considered the independent variables related to five categories of spatial units: a) prefectures - nomi, b) urban centres or settlements with population over 10,000 p., c) settlements of 4,000 - 10,000 p., d) settlements of 1,000 - 4,000 p., and, e) settlements below 1,000 p.

The results of factor analysis employed show similarities and relationships among nationalities regarding the spatial orientation of their clientele's demand for tourism in Greece. The common factors refer to the similarities among nationalities, or nationality groupings, and constitute distinctive types of demand (see the naming of factors in Tables IV 1-2). The factor F_1, e.g., expresses the major, most typical, dimension of demand which could also be described as the common preference of all nationalities for tourism in different spatial units. The estimated values, or loadings, in each column of the tables indicate the relationship, or the degree the individual demand of each nationality agrees (conforms) with the two common factors, or major types of demand. The position of each nationality, within the system of coordinates defined by the two factors, is presented in Diagram IV-1.

What can be observed from the analysis is that the similarities among groups of nationalities, regarding the demand of their clientele for tourism at the examined categories of spatial units, differ both spatially and temporally; i.e., within each spatial category different groupings of nationalities relate or agree each time (1973, 1978)

Table IV-1

Foreign Tourist Demand by Category of Spatial Units

(1973)

Nationalities	Categories of Spatial Units									
	Settl. - 1,000 pop. Factors		Settl. 1,000-4,000 pop. Factors		Settl. 4,000-10,000 pop. Factors		Urban Centres Factors		Nomi Factors	
	1a	2a	1b	2b	1c	2c	1d	2d	1e	2e
British	0.0432	0.7599	0.4414	0.7599	0.8765	0.2642	0.9676	0.2296	0.9627	0.2210
Austrians	0.3213	0.8524	0.0642	0.7641	0.2175	0.9513	0.7072	0.6929	0.7128	0.6646
French	0.7161	0.4930	0.8184	0.3694	0.3073	0.8990	0.9849	0.1692	0.9765	0.1619
Germans (W)	0.5218	0.6735	0.6540	0.5936	0.6936	0.6239	0.8695	0.4918	0.8664	0.4946
Swiss	0.9146	0.2251	0.2383	0.8661	0.7751	0.5383	0.8466	0.5238	0.8372	0.5356
Italians	0.2697	0.8393	0.3916	0.6864	0.7164	0.3485	0.9776	0.1904	0.9779	0.1771
Dutch	0.9488	0.1463	0.9497	0.1607	0.5207	0.7571	0.5126	0.8578	0.4737	0.8787
Scandinavians	0.3922	0.6785	0.7441	0.4496	0.8691	0.2282	-0.0256	0.9988	-0.0246	0.9951
Americans (USA)	0.6896	0.2650	0.9319	0.1642	0.6932	0.2325	0.9909	0.1242	0.9855	0.1253

1a : Demand for composite types of tourism (resort and touring) oriented mainly towards spatially dispersed places.

1b : Demand for composite types of tourism in the proximity of Greater Athens or along tourist circuits based on Athens.

1c : Demand for resort tourism oriented mainly towards spatially dispersed places.

1d : Demand for composite types of tourism oriented mainly towards Greater Athens.

1e : Demand for composite types of tourism oriented mainly towards the Attica nomos.

2a : Demand for resort tourism oriented mainly towards spatially concentrated places.

2b : Demand for resort tourism oriented mainly towards spatially dispersed places.

2c : Demand for composite types of tourism oriented mainly towards places in the proximity of Greater Athens.

2d : Demand for resort tourism oriented mainly to places outside Greater Athens.

2e : Demand for composite types of tourism oriented mainly towards places outside the Attica nomos.

Source: NTO of Greece: International tourist nights statistics; Calculations by the author.

Table IV-2

Foreign Tourist Demand by Category of Spatial Units

(1978)

	Categories of Spatial Units								
	Settl. - 1000 pop. Factors		Settl. 1000-4000 pop. Factors		Settl. 4000-10000 pop. Factors		Urban Centres Factor	Nomi Factors	
	1a	2a	1b	2b	1c	2c	1d	1e	2e
British	0,6623	0.0151	0.2407	0.7696	0.7327	0.0656	0.9892	0.7178	0.4616
Austrians	0,2759	0.8302	0.6504	0.1051	0.8971	0.1347	0.9952	0.7589	0.1327
French	0,1902	0,9430	0.1199	0.1180	0.0781	0,8709	0.9701	0.2225	0,9440
Germans (W)	0,8822	0.2390	0,8675	0,4502	0.9230	0.2355	0.9877	0.8778	0,4307
Swiss	0,0807	0.9194	0.9152	0,0719	0.3339	0.2607	0.9924	0.9004	0.3833
Italians	0.7734	0.3958	0.8713	0,1445	0.3416	0.8481	0.9599	0,3601	0.9258
Dutch	0.8010	0.3751	0.3079	0,8882	0.8865	0.3581	0.9842	0.8003	0.5468
Scandinavians	0,8498	-0.0111	0.0191	0.9510	0.9481	0.0798	0.5232	0.9098	0.0162
Americans (USA)	0.7596	0.3542	0,5148	0,2463	0.1393	0.9387	0.9530	0.1711	0.9761

1a : Demand for composite types of tourism (resort and touring) oriented mainly towards spatially dispersed places.

1b : Demand for resort tourism oriented mainly towards spatially dispersed places.

1c : Demand for resort tourism oriented mainly towards spatially dispersed places.

1d : Demand for composite types of tourism oriented mainly towards Greater Athens (only one Factor).

1e : Demand for resort tourism oriented mainly outside the Attica nomos (or its adjacent nomi).

2a : Demand for resort tourism oriented mainly towards spatially concentrated places.

2b : Demand for resort tourism oriented mainly towards spatially concentrated places.

2c : Demand for touring - individual type of tourism oriented mainly towards spatially dispersed places.

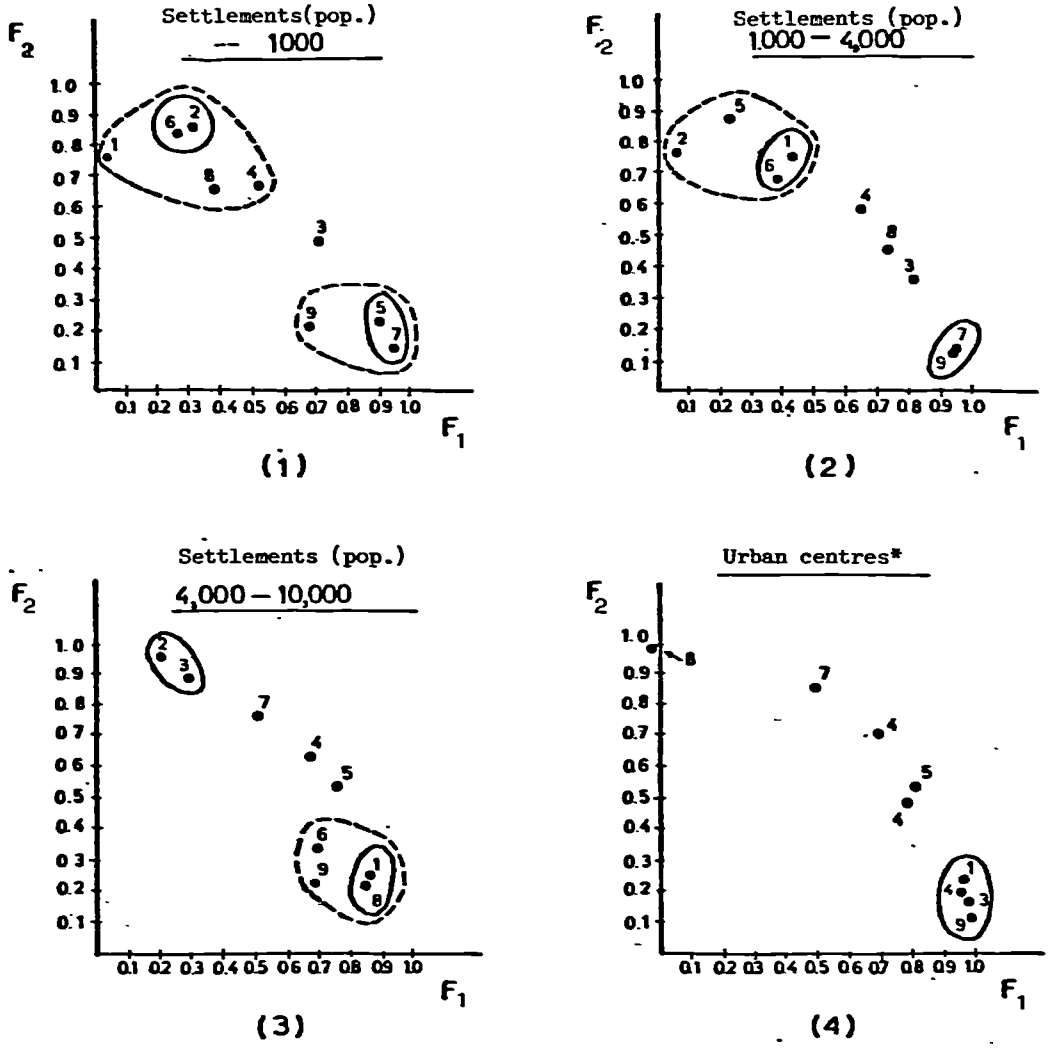
2e : Demand for touring - individual type of tourism oriented mainly towards the Attica nomos.

Source: NTO of Greece: International tourist nights statistics; Calculations by the author.

Diagram IV - 1

Foreign Tourist Demand

(Spatial differences or similarities among nationalities)



Nationalities

1. British
2. Austrians
3. French
4. Germans (W)
5. Swiss
6. Italians
7. Dutch
8. Scandinavians
9. Americans (USA).

* Above 10,000 pop.

Source: NTO of Greece: International tourist nights statistics;
Calculations and drawings by the author.

with the common factors. More analytically, we can observe the following:

a. There are particular and distinct groupings of nationalities which exhibit similarities as to the spatial orientation -various degrees of concentration in certain areas, or dispersal, in the examined categories of settlements- of their clientele. However, such similarities do not seem to remain stable over time; one can observe a transposal of demand's spatial orientation from central regions (Attica and adjacent regions) to more peripheral ones.

b. With reference to the type of demand[1] which predominates among nationalities, it seems that the individual - touring type of tourism is predominant in the Italian, French and American (USA) nationalities, while the resort type predominates in all other nationalities. This is also evidenced in a survey of tourist spatial mobility undertaken by the Greek National Tourist Organization (NTO., 1979) where it is observed that the same nationalities mentioned above manifest the greatest, relatively, spatial mobility (visit 2-4 different places during their stay) and use mostly supplementary forms of accommodation. The American and W.German tourist clientele, in that order, evidence the greatest stability as to their agreement with demand's major common factor. The W.German clientele is further distinguished because it exhibits the greatest degree of "spatial dispersal".

1.2. Rank order and classification of various spatial units

On the basis of the preceeding, analysis we can now determine the relative size and rank order of the various categories of spatial units examined, as a function of the common factors defined.

The two categories of weighted scores which have been estimated[2] for each spatial unit correspond to two major dimensions (common factors) of demand and express, basically, the degree each variable con-

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1. The Factors defined in the analysis pertain to three types of demand (resort tourism, individual or touring type of tourism, and a composite type made up of the previous two types) and their corresponding spatial pattern of their distribution.

2. The weighted scores are the result of the product of two matrices; the matrix with the initial values and the loadings matrix.

tributes or weighs on the common factors. For example, if one spatial unit (e.g., the urban centre of Rhodes) exhibits large values in one particular variable (on the Scandinavian clientele) which, in turn, weighs significantly (large loadings) on a major common factor (demand for resort-type tourism), then the same spatial unit exhibits large weighted scores in relation to that major common factor.

The rank order (the "first" ten) spatial units are presented in Map IV-1. Apart from the rank order of spatial units, one can also observe a temporal transposal and, consequently, improvement in the position of certain peripheral regions (nomi), namely, those of Kerkyra, Lasithiou, Herakliou, Chalkidikis as against those neighbouring the Attica region (Argolidos, Korinthias, Euboias).

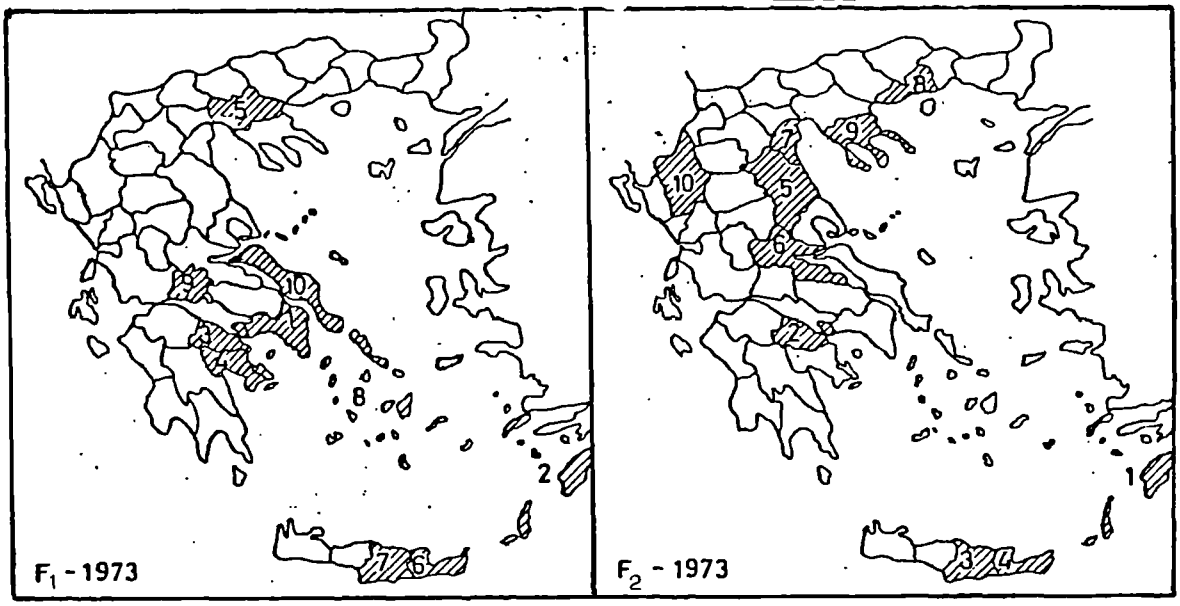
The composition of the tourist clientele in each type of spatial unit differs with respect to the extent of its diversification. The search into such a differentiation involved a systematic analysis of nights spent by all nationalities in all types of spatial units, for the years 1973 and 1978. From the analysis we have identified three major common factors, corresponding to three different types of spatial units. The first common factor (F_1) relates to one type of spatial unit (spatial unit with characteristics of A type) which attracts diversified tourist clientèle (almost all nationalities) but with one nationality (the W.German) having a dominant participation. The second and third factors relate to types of spatial units which attract, predominantly, two or three special categories of tourist clientele or nationalities. The naming of factors, as well as, the loadings which correspond to each spatial unit and manifest the differing degrees of agreement with the common factor, are presented in Maps IV-2-3.

From the above analysis certain conclusions can be drawn as follows:

a. The exhibited similarity among a large number of spatial units (e.g., 24 nomi in 1973 and 27 in 1978) as to their agreement with Factor 1 does not remain stable diachronically. At the nomos level, only 13 nomi manifest a temporal stability with regard to their agreement with the common Factor 1 in both years of observation. This may imply that many nomi have not as yet established themselves as permanent destination places of one and the same tourist

Map IV - 1

Foreign Tourist Demand. Rank Order of Spatial Units (nomi)

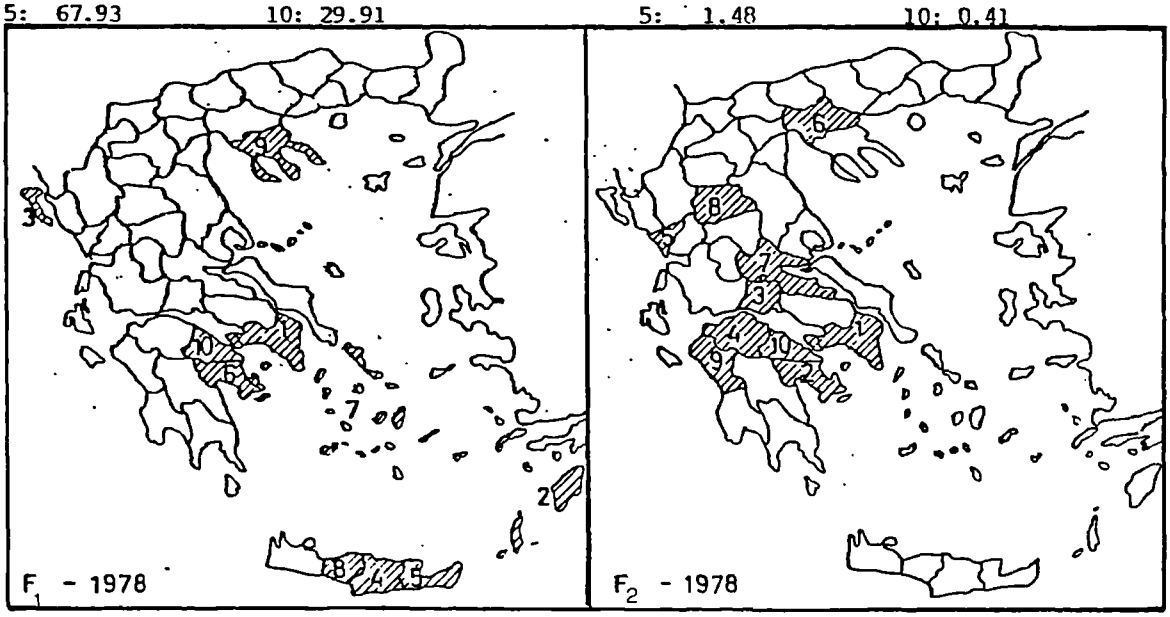


Demand type:composite (resort and touring)

1: 728.18	6: 59.31
2: 344.82	7: 57.29
3: 93.36	8: 40.75
4: 70.82	9: 34.37
5: 67.93	10: 29.91

Demand type: composite (resort and touring)

1: 154.36	6: 1.42
2: 12.14	7: 1.19
3: 6.16	8: 0.65
4: 5.95	9: 0.50
5: 1.48	10: 0.41



Demand type: resort tourism

1: 550.14	6: 77.88
2: 439.77	7: 41.33
3: 302.11	8: 39.74
4: 182.03	9: 34.79
5: 87.83	10: 32.16

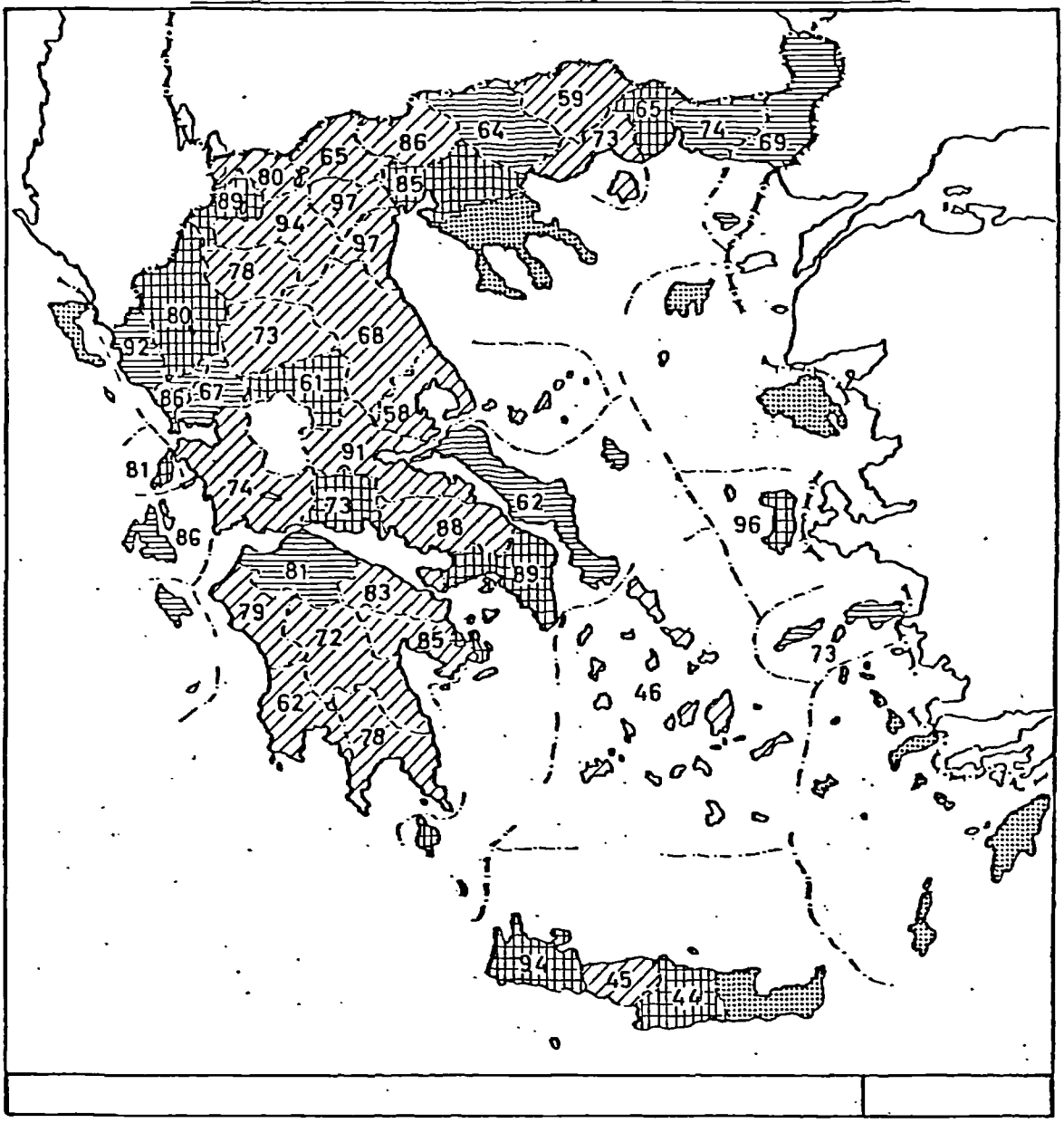
Demand type: touring - individual tourism.

1: 96.38	6: 4.51
2: 21.11	7: 2.56
3: 6.66	8: 2.07
4: 5.49	9: 1.98
5: 4.76	10: 1.76

Source: NTO of Greece: International tourist nights statistics;
Calculations and drawings by the author.

Map IV - 2

Foreign Tourist Demand (1973). Types of Spatial Units (nomi)



F_1: Type A units: attraction of diversified tourist clientele - W.German predominates

F_2: Type B units: attraction of special tourist clientele - Italian - French predominates

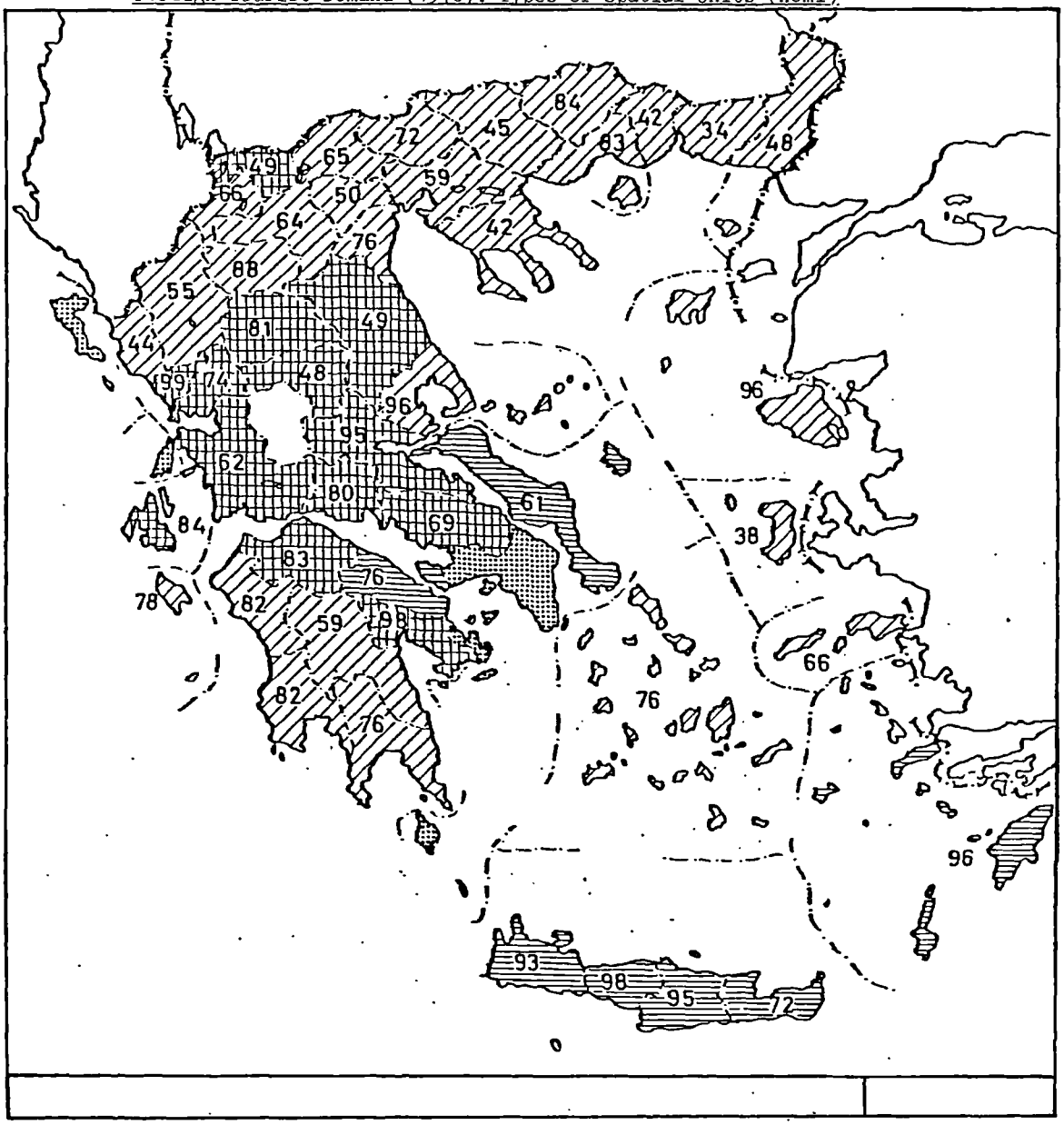
F_3: Type C units: attraction of special tourist clientele - American (primary) and Italian - British (secondary)

: Units of particular type:each attracts a different tourist clientele (e.g. Swedish in Dodecanese, British in Corfu)

Source: NTO of Greece: International tourist nights statistics; Calculations and drawings by the author.

Map IV - 3

Foreign Tourist Demand (1978). Types of Spatial Units (nomi)



F_1: Type A units: attraction of diversified tourist clientele - W.German predominates

F_2: Type B units: attraction of special tourist clientele - predominan of Swedish - German - British.

F_3: Type C units: attraction of special tourist clientele - French predominates

: Units of particular type: each attracts a different tourist clientele (e.g. British in Corfu, Americans in Attica)

Source: NTO of Greece: International tourist nights statistics; Calculations and drawings by the author.

clientèle or a group of nationalities; or, it may imply that tourist flows of particular nationalities change, or alternate, over time their major spatial orientation with regard to the destination region, or place of the country they visit.

b. The analysis in smaller units of spatial observation (urban centres and smaller settlements) has revealed one common factor which represents a major type of spatial unit, i.e., one attracting the tourist clientele of many nationalities among which the W.German is predominant; or, equally the American - W.German in the case of urban centres. As to the latter, we observe that most of them agree with the major common factor. In all other categories of settlements examined, the resulting secondary common factors (type B and C of spatial units) are distinguished by their "specialization" in attracting the French - Italian and the British tourist clientele, respectively. For example, the first accounts for the similarity among coastal and inland settlements of western mainland regions, as well as, the Ionian, Cycladic and Dodecanese islands.

1.3. . Conclusions and a further note on the socioeconomic categorization of tourists as a variant on nationality segmentation.

A significant issue in the study of a tourist market is to analyse or divide one market into specific segments, or into homogeneous fractions according to certain common characteristics shared by the members of each group. This notion and definition of a market segment which has been given also elsewhere (WTO, 1977) allows different ways to classify and divide a final tourist market into different segments.

Employing the nationality, or country of origin variable we have assessed the regional distribution and differentiation of tourist market segments (nine nationalities in the 51 nomi of Greece), their temporal variation, as well as, their relation to three different types of tourism (mass-individual-composite) defined on the basis of Average Length of Stay statistics. The usefulness of our analysis lies in the fact that it provides a general approximation of the significance of each regional unit regarding international tourism demand. More important, by relating the emerging regional patterns of visitor groups (nationality market segments) to specific locations or regional units (and to their regional resource attributes), one may acquire a general indication of visitor preferences and draw useful insights for the

design of marketing policies directed to the major tourism origin countries or markets of Greece.

However, in connection to the above, we are aware that a further and more detailed market segmentation, considering socioeconomic, demographic or other categories of variables could add valuable information with useful implications for tourism promotion and marketing policies, for physical planning and the design of the tourist product. We have already discussed in Chapter III (Section 1.3.1) the signifacance of certain demographic and socioeconomic variables in the location and nature of tourism in W.Europe.

Within the Greek context the consideration of such variables becomes equally important for tourism and regional development planning.

First, it would allow those concerned with the planning and development of the tourist industry, to assess the differential benefits of different categories of tourists, thereby enabling the concerned bodies to identify those categories serving best the interests of the Greek economy.

Second, a socioeconomic categorization of tourists at the regional level would contribute to the assessment of the economic, as well as, the sociocultural and physical impact of tourism, in case there was also available information on tourist activities and expenditure patterns related to each tourist category. Pertinent information on socioeconomic variables would enable central or regional bodies involved in regional development, or in the formulation of regional tourist policies, to consider the tourist sector's range of alternatives; to reconcile and relate tourism to other sectors, as well as, to the environmental and resource characteristics of each region; to plan a desirable "mix" of tourist activities and of the corresponding supply components which make up the tourist product.

Socioeconomic variables have been considered in several surveys and studies. Many National Holiday Surveys[1] present socioeconomic profiles of visitors relating specific variables such as, income, occupation, age, social class, to travel propensity, or to travel participa-

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1. See, e.g., relevant report by Medlik, S., "Holiday Surveys Examined. A Pilot Guide to National Holiday Surveys in Western Europe, Horwath and Horwath (UK) Ltd, London.

tion rates. However, travel motives (e.g., why people do not take holidays or why they do) and attitudes are rarely examined while the data included in these surveys are not comparable. The tourists categorization employed in economic impact studies of regional, or sub-regional scale, vary. In these type of studies (reviewed earlier in Chapter II) socioeconomic variables are included in the derived income multipliers to assess the differential economic impact of each category of tourists (Wheeler and Richards,1974). A case study from Yugoslavia, based on a qualitative sample survey of foreign visitors (Vukonic, 1986), considered nationality, socioeconomic (age, sex) and other variables to assess their impact on different tourist expenditure patterns. It was found that differences in spending were less marked among different nationalities than among the socioeconomic categories of the tourist population.

Against the background of the above discussion,as well as, in relation to earlier relevant discussion in Chapter III, we should like to emphasize the significance of and the need for undertaking primary research studies and relevant tourist surveys of both domestic and international tourism in Greece.

Surveys on international tourism must in our opinion be geared towards obtaining useful information on tourist characteristics, motives and attitudes. Specifically, with reference to the tourist profile characteristics, the nationality segmentation statistics should be enriched with information on specific socioeconomic variables. Additionally, we believe that for tourism marketing and planning purposes further surveys are needed to acquire information on tourist expenditure patterns exhibited by the different categories of tourists. In such surveys,specific groups of tourists-consumers should be related to the major categories or "bundles" of resources being used or consumed. A "general orientation frame" to develop for such surveys to be undertaken is presented in Diagram IV-2.

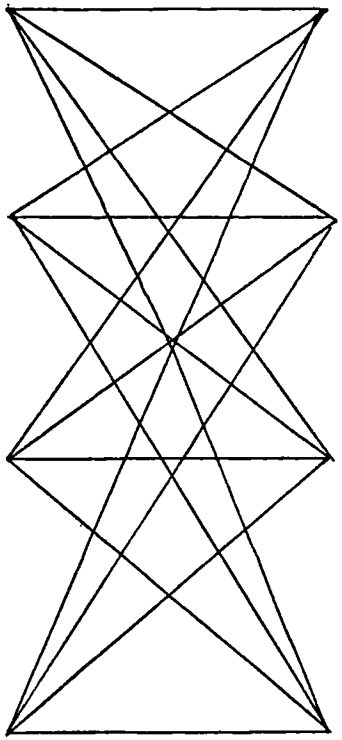
Diagram IV-2

Tourist Market and Product Categories

TOURIST PROFILE CHARACTERISTICS

"Nationality X" socioeconomic variables

- Age profile or range
  - 15-24
  - 25-44
  - 45-64
- Income levels
  - high
  - medium
  - low
- Occupational-educational types or levels
  - occupation types: professional/ business, clerical sales and related, retired, students, etc.
  - educational levels: university, secondary education, etc.
- Sociocultural forms in travel participation
  - family-friends accompaniment, individual travel
  - clubs, associations, special interest groups



TOURIST RESOURCES - PRODUCT CATEGORIES

Activities or expenditures patterns related to:

- Tourist infrastructure proper
  - lodging/types of accommodation: hotels, guesthouses,
  - "Food and drinks" facilities: restaurants/cafés, gourmet-local cuisine
- Tourism-related infrastructure and facilities
  - transport means and facilities used: car-hire, public means
  - commercial-shopping and entertainment facilities
  - sports and recreational facilities
- Sociocultural resources and facilities
  - cultural-educational facilities: museums, local culture/handicrafts, folkloristic events
  - health and hygiene: spas, fitness centres, clinics
- Natural-ecological resources
  - water resources: sea-coastal, lakes-reservoirs
  - forests-parks, natural attractions-monuments: caves springs, etc.

2. The spatial characteristics of tourist supply and resources

2.1. The classification of tourist resources

There are considerable problems and difficulties involved in the analysis of tourist supply or resources. A basic difficulty, in this type of analysis, lies in the conceptual clarification of the term tourist resources, per se; a clarification which, together with the scale of the spatial unit considered and the survey's scope, determines the kind of a survey or a resource classification undertaken. Another difficulty pertains to the way tourist resources are assessed or evaluated; an issue discussed earlier in Chapter II. A third problem refers to the basic information domain; i.e, the entire information material needed (which is, either, readily available, or, should be obtained through specialist advice and specific enquiries or field studies) to support and be integrated within an appropriate survey of tourism resources.

A survey of tourism resources should not be, according to the Tourism Study of County Donegal in Ireland (An Foras Forbartha, 1966), "a mere listing of hotels and beaches but a comprehensive attempt to record all the items which comprise the amenity heritage or which attract and serve the visitor". Surveys of such a systematic nature, or with such a broad scope have been undertaken in many countries and regions. Apart from Ireland and Scotland (TRRU 1974), one may refer to examples from USA (Lewis, 1964) and Poland (Bartkowski, 1979). The information that an appropriate survey would yield covers a wide range of items in two major areas:

a. The identification, classification and recording of tourist resources, covering different levels of spatial aggregation (urban-local, regional, national) and allowing for comparisons between levels,

b. The evaluation of areas for tourism and recreational use, as well as, the assessment of existing or potential resources capacity.

The second survey object relates, or is jointly undertaken, with surveys of client groups or users' behaviour; which aim at determining activity patterns of tourists (understand or predict what visitors do in tourist places) and ecological patterns of tourism or outdoor recreational use (understand the relation between visitors and the

tourism environment).

The resource categories examined here can be considered as falling into a tourist supply of a twofold character: a) a demand-oriented supply depending largely on location of the user-client and encompassing all man-made equipment serving the tourist, and, b) a resource-oriented supply depending on the quantity, quality and geographical distribution of natural and cultural resources (climate, beaches, monuments, etc.) Both supply characters are defined and distinguished by quantitative and qualitative attributes observed at each spatial level, or unit. Evidently, a thorough analysis and classification of the country's tourist resources is not within the scope of the present work.[1] The aim in this section is simply to delineate major regional differentiations in the resources distribution; which could help in the formulation of both a policy-frame in the planning of tourist-resource investments (planning implication) and a frame of reference (spatial pattern) for searching into factors which affect, or relate, to the formation of such a pattern (methodological position and proposal).

2.2. Categories of spatial units and tourist resources

The analysis which follows covers all 51 regional-administrative units of the Greek territory. Every regional, or taxonomic unit, is correlated with another with respect to 16 categories of tourist resources (or tourist attractions). Each resource category is distinguished from another, on the basis of a distinctive property, or a unique character. In the analysis of the taxonomic structure we used only the multistate quantitative type of a character.[2]

Specifically, we have considered the following four major resource categories, each comprising four sub-categories:

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1. Most of tourism resources surveys undertaken in Greece are constituent parts of tourism development plans or projects, covering specific areas or regions (see Chapter VI); evidencing considerable differences among them, as to the range of items covered, the detail or comprehensiveness of the approach.

2. The type of a character refers to the different states or quantitative and qualitative gradings used in the assessment of characters. Thus, we may have two-state characters (0,1) or multistate characters where continuous numbers, or rankings are used (Sneath and Socal, 1973).

1. Natural-ecological resources
   - Total length of coast (in km)
   - Sandy beaches (in km)
   - Forests (in Sq.km)
   - National Parks (in Sq.km)

2. Sociocultural resources
   - Traditional settlements
   - Traditional settlements of great architectural interest
   - Monuments and archaeological sites
   - Monuments of international attraction

3. Tourist infrastructure proper
   - Accommodation capacity (beds) all types of lodging
   - Supplementary means of accommodation
   - Tourist enterprises
   - Tourist and outdoor recreation facilities

4. Human resources
   - Total population
   - Urban population
   - Employment in the tertiary sector
   - Employment in tourist and recreation services

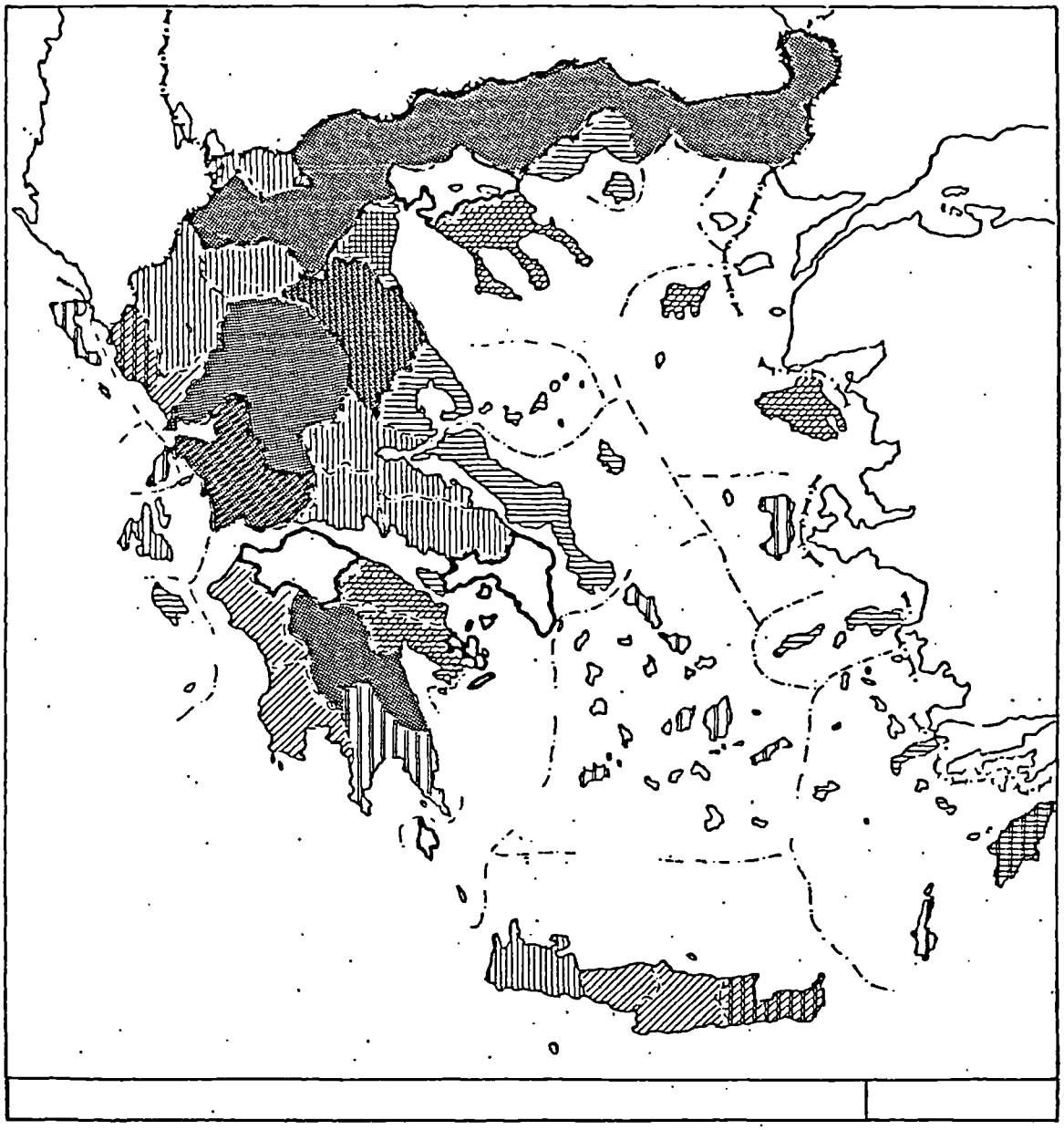
From the analysis we have identified six different types of regional units (nomi) corresponding to six common factors. The naming of the factors, which express one dominant or a combination of several characteristics, as well as, the loadings of each spatial unit on the common factors are presented in Map IV-4. From the map, one can observe that certain regions load equally on two factors which, presumably, results from the diversity of resources those regions are endowed with.

However, it should be noticed here that the analysis of tourist resources and the resulting similarities, or differences among regional units, provide only a static representation of an existing pattern, in the sense that, while certain types of resource characters remain constant over time (e.g., length of coast), others change both in quantity and quality (e.g., hotel beds and tourist infrastructure).

Following the above overall assessment of the country's regional characteristics, as to the tourist resources, we proceeded to a clas-

Map IV - 4

Tourist Resources - Types of Spatial Units



F_1 Natural resources of an agricultural mainly mountainous hinterland - forests predominate

F_2 Cultural resources - traditional settlements and built fabric

F_3 Combination of both natural and cultural resources - natural resources (parks) predominate

F_4 Combination of both natural resources and total accommodation infrastructure

F_5 Urban-oriented infrastructure and services

F_6 Variety of resources - sandy beaches predominate

sification of nomi, i.e., to an assessment of ranking size and hierarchical order on the basis of the size of their resource base and four characteristic types, or groups of resources (common factors). Thus, the four categories of weighted scores which have been estimated (see Table IV-3) correspond to the following common factors:

Factor 1 : Tourist infrastructure - total accommodation capacity - services and monuments of international attraction.

Factor 2 : Cultural resources - traditional built fabric - and total length of coastline.

Factor 3 : Supplementary tourist accommodation - and length of sandy beaches.

Factor 4 : Forest resources and natural landscape (parks).

From Table IV-3 we derive the following groups of nomi with regard to the weighted scores of the various nomi on each factor:

Factor 1: Nomi Attikis (954.30), Dodecanisou (270.30), Kykladon (243.79), Thessalonikis (237.59), evidence high weighted scores, or predominate in accommodation infrastructure and monuments.

Factor 2: Nomi Kykladon (303.35), Lakonias (207.38), Dodekanisou (201.17), Kerkyras (142.02), evidence high weighted scores, or predominate in cultural resources and length of coast-line.

Factor 3: Nomi Evias (65.30), Chalkidikis (54.68), Ilias (52.74), evidence high weighted scores, or predominate in supplementary forms of accommodation and sandy beaches.

Factor 4: Nomi Fthiotidas (123.48), Evias (105.52), Grevenon (102.50), evidence high weighted scores, or predominate in natural resources (forests and parks).

2.3. Concluding points on tourist resources classification

Viewing the employed in our study method of resources classification within the relational context of other approaches outlined earlier in this section and in Chapter II, it is pertinent here to make certain concluding points, elaborating on its usefulness within the Greek planning context.

a) With regard to geographical coverage and scale, our objective was to delineate the country's interregional resource potential. From a practical planning point of view, we thought pertinent that a classification should refer and apply to geographical units which coincide or correspond to those administrative, or planning units which are employed as standard units for the formulation and operationalization of

Table IV - 3
Spatial Distribution of Tourist Resources
(weighted scores and rank order of spatial units)

Spatial Units (nomi)	Factors F_1		F_2		F_3		F_4	
1. Attikis	954.30	51	-12.25	4	6.86	30	64.06	45
2. Etoloakarnanias	107.56	32	30.91	26	1.38	25	60.33	41
3. Beotias	67.30	24	11.79	16	-22.43	7	34.11	24
4. Evias	205.87	47	104.56	46	65.30	51	105.52	50
5. Evritanias	25.58	6	1.91	12	-20.80	8	39.65	27
6. Fthiotidas	138.29	41	22.36	21	-18.72	11	123.48	51
7. Phokidas	71.87	25	26.25	24	-14.83	13	50.51	36
8. Argolidas	114.15	35	40.35	33	11.59	35	22.69	15
9. Arkadias	94.34	30	43.89	35	-33.74	4	56.56	39
10. Achaias	118.89	37	34.64	31	7.99	31	56.39	38
11. Ilias	138.65	42	60.34	40	52.74	49	56.68	40
12. Korinthias	117.15	36	34.18	30	10.06	33	46.97	34
13. Lakonias	159.98	44	207.38	50	-74.38	1	13.45	6
14. Messinias	134.26	40	79.95	45	24.21	43	42.27	31
15. Zakynthou	36.14	13	22.34	20	19.26	39	13.93	7
16. Kerkyras	155.16	43	142.02	48	22.04	42	24.33	18
17. Kephalinias	45.66	16	32.26	27	10.81	34	23.84	17
18. Leukadas	21.88	2	29.15	25	4.22	27	5.38	1
19. Artas	42.72	15	8.29	14	-17.59	12	27.94	20
20. Thesprotias	37.56	14	32.40	28	4.47	28	9.02	3
21. Ioanninon	86.77	29	16.36	19	-52.87	2	80.91	46
22. Prevezes	54.91	19	32.98	29	20.26	40	14.62	9
23. Karditsas	22.54	3	-5.89	7	-8.34	19	24.79	19
24. Larisas	73.31	26	12.14	17	-7.24	20	31.52	23
25. Magnesias	172.12	46	105.09	47	37.59	45	62.79	44
26. Trikalon	56.02	21	.33	11	-20.19	9	42.35	32
27. Grevenon	28.51	9	-51.09	1	-49.17	3	102.50	49
28. Dramas	31.33	11	-14.34	3	-19.64	10	51.98	37
29. Imathias	32.54	12	-5.38	8	-8.75	18	18.35	11
30. Thessalonikis	237.59	48	22.99	23	47.80	48	39.75	28
31. Kavalas	124.44	39	59.04	39	44.45	47	49.65	35
32. Kastorias	27.02	7	-3.36	9	-10.84	14	22.62	14
33. Kilkis	9.10	1	-8.14	6	-5.13	22	17.02	10
34. Kozanis	28.31	8	-2.34	10	-10.39	15	14.22	8
35. Pellas	23.39	4	-8.93	5	-9.48	17	23.12	16
36. Pierias	107.31	33	22.55	22	41.18	46	87.93	47
37. Serron	51.93	18	2.64	13	-10.23	16	38.18	26
38. Florinas	24.09	5	-16.51	2	-22.59	6	42.86	33
39. Chalkidikis	160.75	45	55.64	38	54.68	50	93.93	48
40. Evrou	80.66	27	15.81	18	1.39	26	61.06	43
41. Xanthis	29.76	10	11.58	15	-4.84	23	28.28	21
42. Rodopis	60.84	23	36.54	32	-5.31	21	40.55	30
43. Dodecanissou	270.39	50	201.17	49	17.85	38	60.66	42
44. Kykladon	243.79	49	303.35	51	-23.42	5	39.88	29
45. Lesvou	98.04	31	75.43	43	37.15	44	30.29	22
46. Samou	50.74	17	45.79	36	16.65	37	20.18	12
47. Chiou	55.53	20	43.74	34	6.56	29	8.15	2
48. Heraklion	123.81	38	67.66	42	13.02	36	13.18	5
49. Lasythiou	105.47	32	77.95	44	20.55	41	22.43	13
50. Rethymnon	60.22	22	60.98	41	8.66	32	12.27	4
51. Chanion	82.00	28	48.13	37	-4.31	24	37.41	25

Sources: - National Statistical Service of Greece.
- National Tourist Organization.
- Ministry of the Interior (traditional settlement).

the various governmental regional planning policies (e.g., incentives, public investment programmes, etc.). Thus, the nomos unit, which has been selected to identify and delineate the tourist resource profile, constitutes the major regional administrative-planning unit in Greece. The suitability of employing the nomos unit in the analysis of tourist flows and resources, as against other tourism-specific spatial units (e.g., zones or geographical areas) like those suggested by White or Pearce (see relevant review in Chapter II), may be perhaps questioned on the grounds that such a unit lacks functionality or specificity. However, adopting different from the nomos spatial units would not only necessitate specific sample surveys, to aquire pertinent data, but, more important, it does not provide the possibility for intersectoral comparisons (e.g., consider the growth of tourism in relation to other sectors in the same administrative-planning region) and regional policy coordination.

b) Our rationale for selecting specific types of tourist resources (16 categories) was a function of the data set; simply those were the items (categories) recorded in various formal documents and statistical data. Furthermore, and this we consider more important, the categories selected correspond, grosso modo, to the broad public tourist investment categories included in the annual investment budgets of the relevant central planning authorities. This can be ascertained in section 2.2 of the next chapter where the issue of investments distribution is discussed (see particularly Table V-14 in Chapter V).

3. Particular aspects of spatial uneveness in the growth of tourism

3.1. The growth and location of tourist activities in urban and rural areas

Although foreign demand for major tourist facilities and services has increased, at an annual rate of 16% during the period 1963-1973, no major changes have taken place in the evolution of demand's spatial distribution over the same period (see Map IV-5). The same or slower (during the last 4-5 years) growth rates evidenced, generally, during the period 1974-1981 have favoured a few peripheral areas, as against the "older" centres, but did not effect any substantial change in the established spatial pattern. It is in place here to note the contrasting slower growth rates, or stagnation, of domestic tourist demand during the above periods[1]. For example, while, the nights spent by foreign tourists have tripled over the period 1974-1981 (from cir. 10 mill. to cir. 30 mill.) those by domestic tourists remained stable (cir. 10 mill.).

Considering the distribution of peak seasonal demand among different categories of settlements, (see Table IV-5), it is worth noticing that the nights spent by foreign tourists during the month of August (1973) at coastal settlements and locations cover 95% of the total monthly figure; while, for domestic tourists the equivalent figure is 85%. This is an indication of the intensity of pressure coastal resources are subjected to.

On the supply side, the emphasis given to one category, i.e., accommodation equipment, mainly hotels, is evidenced[1] as follows:

Period	1961 - 1965	: 5,000	new hotel beds added annually
"	1966 - 1970	: 8,000	" " " " "
"	1971 - 1975	: 13,000	" " " " "
"	1976 - 1982	: 14,000	" " " " "

As to the spatial pattern of accommodation supply and its evolution (see Maps IV-5,6) one notices two things. First, a further concentration in the older established tourist centres: Greater Athens area and Rhodos Island receive 41% of the new hotel beds built between 1963-1973. Secondly, almost 50% of the new hotel beds were built in the urban centres. On the nomos level one observes, apart from a differ-

1. On the basis of statistics provided by the Statistical Service of the NTO of Greece.

Table IV-4

Spatial Distribution of Peak Demand

Number of nights spent by tourists (foreign and domestic) in hotels
(August 1973)

Settlements		FOREIGN			DOMESTIC			TOTAL		
		Nights Spent	Clients	A.L.S.[5] (days)	Nights Spent	Clients	A.L.S.[5] (days)	Nights Spent	Clients	A.L.S. (days)
Urban Centres[1]	A[2]	1,365,877	398,012	3.43	569,173	207,950	2.74	1,935,050	605,962	3.2
	B[3]	51,520	35,183	1.46	179,621	99,848	1.80	231,141	135,031	1.7
	C[4]	1,417,397	433,195	3.27	748,794	307,796	2.43	2,166,191	740,993	2.9
Settlements	A	268,477	65,018	4.13	182,516	35,874	5.09	450,993	100,892	4.5
4,000-10,000	B	8,468	8,203	1.03	13,109	5,038	2.60	21,577	13,241	1.6
Inhabitants	C	276,945	73,221	3.78	195,625	40,912	4.78	472,570	114,133	4.1
Settlements	A	267,446	52,873	5.06	278,875	41,786	6.67	546,321	94,659	5.8
100-4,000	B	67,647	49,630	1.36	56,112	9,814	5.72	123,759	59,444	2.1
Inhabitants	C	355,093	102,503	3.27	334,987	51,600	6.49	670,080	154,103	4.3
Total settlements	A	1,901,800	515,903	3.69	1,030,564	285,610	3.61	2,932,364	801,513	3.7
	B	127,635	93,016	1.37	248,842	114,700	2.17	376.477	207,716	1.8
	C	2,029,435	608,919	3.33	1,279,406	400,310	3.20	3,308,841	1,009,229	3.3
Total Greece		2,421,580			1,441,712			3,863,292		

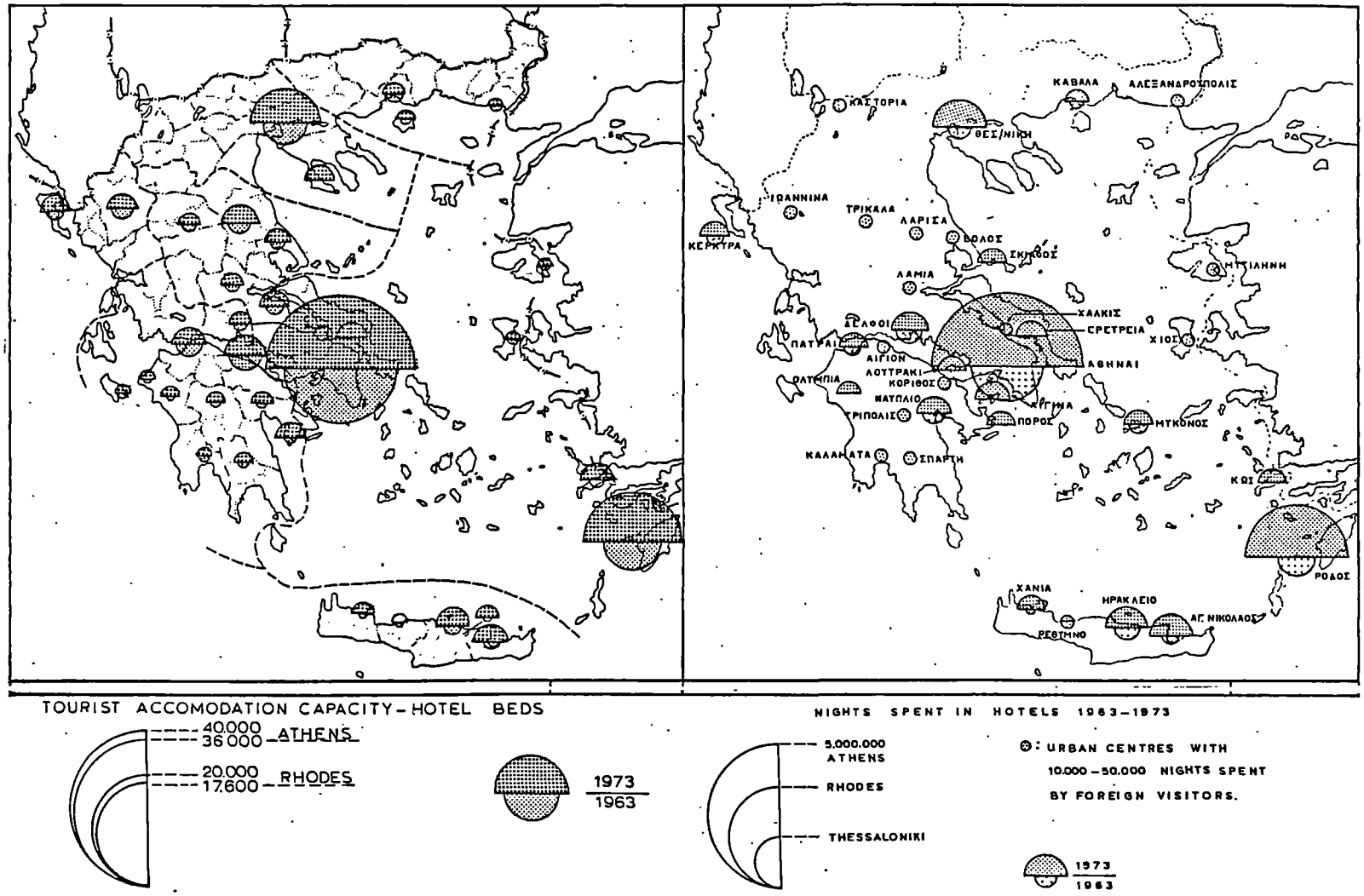
1/ Settlements over 10,000 inhabitants.
2/ A: Coastal Settlements.
3/ B: Inland Settlements.
4/ C: A+B.
5/ ALS: Average Length of Stay.

Source: Statistical Service of the NTO of Greece.

Map IV - 5

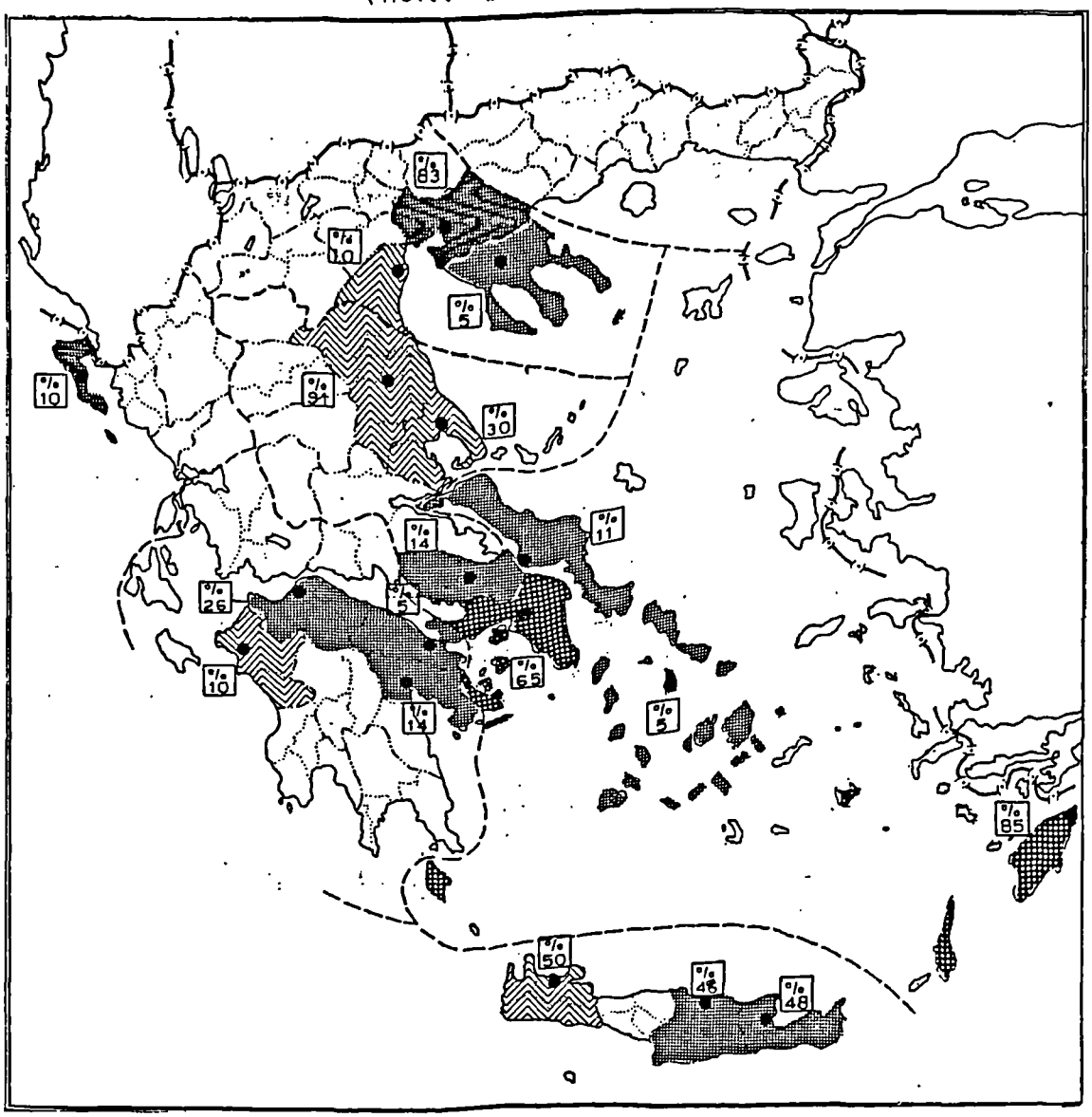
Foreign Tourist Demand (nights spent) and Supply (hotel accommodation)

(1963, 1973)



Map IV - 6

Evolution of Accommodation Capacity
(hotel beds — 1963-1973)



PERCENTILE INCREASE OF ACCOMODATION CAPACITY. 1963—1973

administr. department-nomos
total — country = 92 500

capital of department
total — nomos

0,1 — 0,9 %

1,0 — 1,9 %

2,0 — 4,9 %

5,0 — 9,9 %

10,0 %

● % = Index of agglomeration:
Hotel beds concentrating in the departments' capital as % of the total.

Source: NTO of Greece: Accommodation capacity statistics;
Calculations and drawings by the author.

ence in the growth rates among the various nomi, different degrees of concentration of hotel accommodation in the capital city of the nomos. (Map IV-6).

The growth of tourism in the country's urban centres and rural settlements differs, depending on their geographical, locational, demographic, and socioeconomic characteristics. Further, tourism as an activity and land use cannot be easily differentiated spatially from other recreational, but also cultural and commercial-business activities, particularly, in the centre's core.

It seems that for certain urban centres and rural settlements quantitative and qualitative changes of tourist demand and supply evidenced so far, were instrumental in bringing about considerable changes in the existing physical (land uses) functional and socioeconomic urban structure. Observing here only the physical structure one may notice:

a. Location-wise, tourist facilities have taken a diverse orientation, differing from centre to centre; they are attracted to central areas (CBDs) transportation nodes, outdoor recreational-green areas, as well as, residential areas (see Table IV-6).
b. A progressive replacement of local-based inputs and supplies, by more efficient "modern" services to cope with increasing demand; resulting in uniform (internationally standardized) appearance and a disproportionate development of the tourist servicing sector at the expense of other services needed by the local populace. A characteristic example is the city of Rhodes which concentrates more than 2/3 of the islands hotel beds capacity. The new structures in the form of either hotel buildings, second homes, or other tourist establishments, cause considerable changes (disruption, renewal) in many cases not only in the old built fabric of the settlement, per se, but also within its immediate wider functional environment.
c. Agricultural land use is subjected to great pressure, particularly, in coastal areas of southern Greece and on the islands; due to the prevailing physiographic conditions - small strips of flat fertile land and/or valleys mostly along the coast - and to the fact that tourism assumes a strong coastal spatial orientation. On the smaller islands, the limited extent of fertile land - even if not of the

Table IV-5

Characteristics of Tourism in Major Urban Centres

URBAN CENTRES	Distribution of hotel beds										Functional indices		
	C.B.D.[1]		RESIDENTIAL AREAS		TRANSPORT NODES		RECREATION AREAS-PARKS		TOTAL		DENSITY[3]	OCCUPANCY[4]	EMPLOYMENT[5]
	(1)	%	(2)	%	(3)	%	(4)	%	(5)	%	(6)	(7)	(8)
1. Thessaloniki	6,750[2]	90.0	-	-	202	2.7	541	7.3	7,493	100	2.5	57	4.2
2. Patra	1,354	91.0	-	-	-	-	135	9.0	1,489	100	3.4	51	4.1
3. Volos	479	38.0		2.0			750	60.0	1,256	100	0.7	53	5.2
4. Heraklio	1,949	85.1	-	-	180	8.0	156	7.0	2,285	100	2.8	62	2.4
5. Chania	435	47.0	247	27.0	89	10.0	156	16.0	927	100	2.0	63	3.8
6. Kavala	528	62.0	-	-	-	-	324	38.0	852	100	3.2	79	3.3
7. Rhodes	1,994	19.1	6,288	59.5	-	-	1,488	14.3	10,449	100	1.9	72	2.3
8. Ioannina	335	24.3	336	24.5	-	-	705	51.2	1,376	100	0.8	55	6.4

1/ CBD: Central Business District.
2/ Including the area near to the International Fair and the administrative Centre.
3/ Floor area ratio - aggregate.
4/ Nights spent/bed - percentile figures for 1973.
5/ Number of hotel beds per hotel employee - based only on records of insured hotel employees.

Source: Athens Technical University - Dept. of Architecture.

highest productive capability - is valuable not only as an element of the islands landscape but also as a source for the local produce of fresh vegetables and fruits. In the proximity of the biggest urban centres and their coastal areas, mainly, in Athens and Thessaloniki, agriculture and forest land is subjected to increasing pressure either from industry and housing, or tourism and recreation.

3.2. The spatial dimension of tourist employment

The major research interests in the area of tourist employment have centered on socioeconomic, in nature, issues and problems pertaining to: a) the volume and kind of tourist employment generated by tourism's growth and its regional impact, b) the seasonality of tourist employment, its relation or complementarity to other sectors[1] (e.g., agriculture) and c) the labour intensiveness and productivity of, and, in various categories of tourism.

Here, however, such issues will be touched upon in so far they relate to the study's objective, namely, to analyze the spatial dimension of employments temporal - seasonal fluctuation.

The volume and monthly fluctuation[1] of tourism's employment in the hotel sector at the major urban and tourist centres of the country are presented in Diagram IV-3. On the basis of this diagram, which shows the average employment figures over two five-year periods, 1969-1973 and 1974-1978, one can observe the following. The seasonality of tourist employment has not changed, generally, in intensity over the observed period; although there exist some differences and changes among urban centres as to the month of peak employments' manifestation. There is a smoother monthly distribution of employment in the largest urban centres as against high peaks evidenced in other smaller ones. Additionally, in certain small and "specialized" tourist places (e.g., spa resorts) employment is highly seasonal in comparison to several smaller tourist centres within the week-end accessibility radius of greater Athens.

Comparisons between monthly demand and employment figures disclose certain spatial and temporal differentiations worth noticing. The ratio

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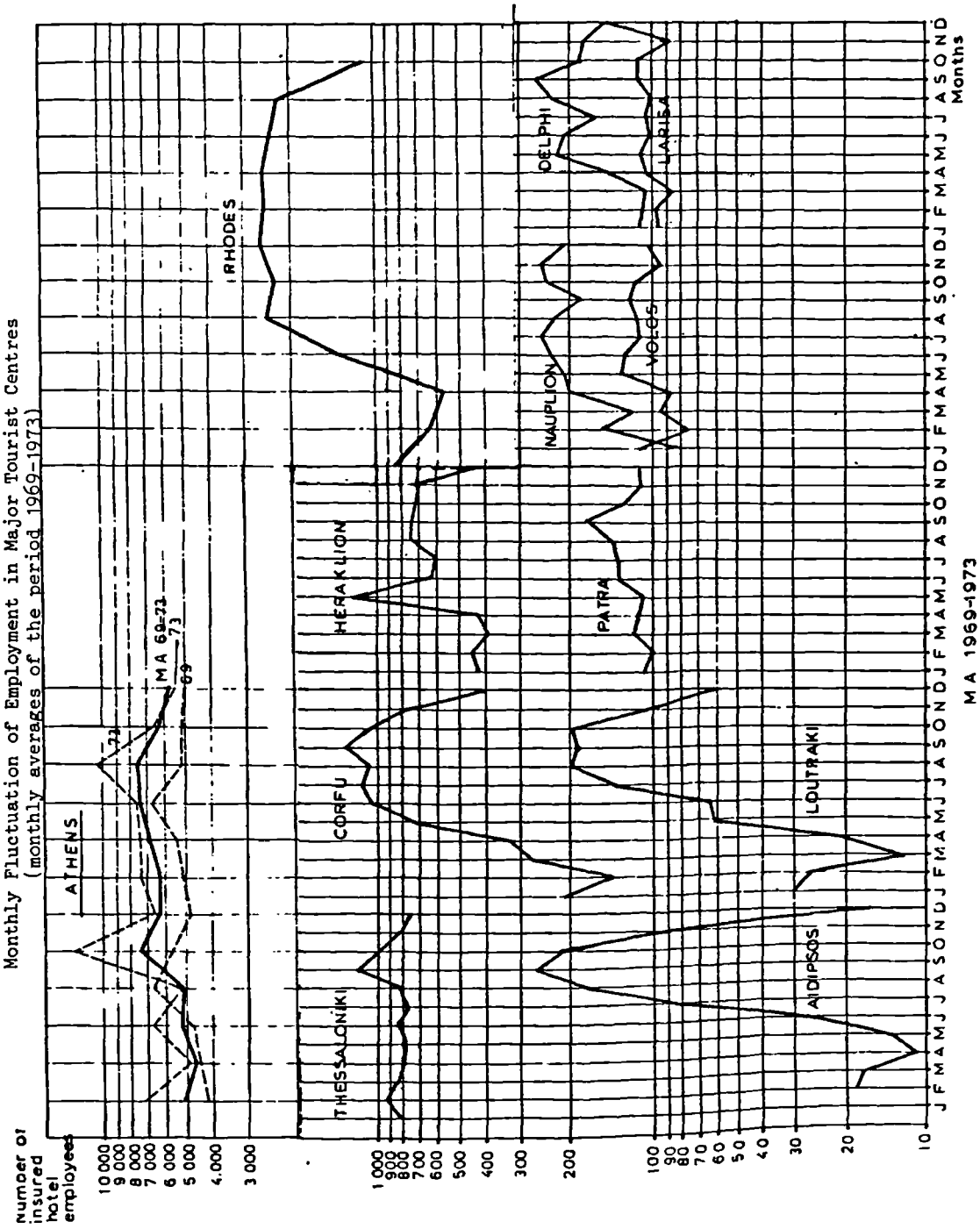
1. Based on Employment statistics provided by ΤΑΞΥ : The Security Fees Pay Office for hotel employees.

Diagram IV - 3

Monthly Fluctuation of Employment in Major Tourist Centres
(monthly averages of the period 1969-1973)



tourist demand (nights spent) to employment (number of hotel employees) differs between peak and non-peak season (see average seasonal figures in Table IV-6). Higher values in the peak period suggest either that the quality of services deteriorates during that period, and there is a decrease in labor intensiveness, or, that the additional needs in personnel are covered by seasonally employed, unqualified and of young age personnel who is not insured by the employers.

The investigation of the relation between population size of the urban centre and monthly fluctuation of tourist employment has shown that there is a positive correlation between these two variables. The analysis indicates (see Table IV-7) that a larger in population centre evidences a more even fluctuation of employment in tourism. Such a hypothesis has to be further discussed, taking also into consideration the issues of employments' urban and/or rural origination and labour mobility.

3.3. Generalized spatial patterns of tourist preferences

Foreign and domestic tourism

Problems associated with the assessment of tourist preferences and the attraction of tourist resources have been discussed earlier in Chapter II. The aim here is to discern and delineate the basic dimensions of an overall spatial pattern of foreign and domestic tourist preferences, which would complement and add on the analysis undertaken so far.

The method employed in this section (see the Appendix B for further elaboration of the methodological procedure) utilizes the trip-ends at each resource location by a particular group of tourists as a preference index for that location. The trip set analysis uses statistical and other information referring to the number of nights spent by either foreign or domestic tourists at various locations, as well as, visitation rates (number of visitors) of domestic tourists from the country's two biggest urban centres, at particular locations visited during week-ends, as well as, Christmas and Easter holidays. The basic assumption here is that the number of visitors, or tourists visiting each location indicates, or suggests a preference rank. Thus, a series of preference indices have been estimated at different spatial levels and with regard to the two major categories of tourists: foreign

Table IV-6

Tourist Employment and Nights Spent in Major Tourist Areas (monthly figures in hotel accommodation - 1973)

Areas		JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	Δ_1[2]	Δ_2[2]
1. Athens	α[1]	437.185	399.789	547.146	761.609	793.604	818.377	1.136.150	1.252.120	1.000.828	768.103	462.104	375.514	4.35	2.39
	β	7.065	4.964	6.791	5.190	12.863	6.750	7.334	7.445	7.706	10.493	6.761	5.808		
2. Thessaloniki	α	94.312	90.881	102.985	126.665	135.283	464.192	156.928	193.032	206.384	129.627	101.889	94.366	6.20	3.77
	β	892	820	1.205	869	1.159	1.317	815	1.001	1.788	1.079	771	755		
3. Patra	α	21.624	19.828	24.968	30.001	30.741	29.367	45.203	57.826	37.086	23.530	20.817	20.654	6.68	5.54
	β	146	114	130	130	116	206	266	199	359	160	150	105		
4. Volos	α	14.568	12.301	15.553	21.527	23.004	21.701	31.925	42.404	27.271	18.805	14.105	19.250	6.15	4.32
	β	163	81	132	86	242	137	183	158	168	158	105	117		
5. Heraklio	α	22.112	23.109	31.032	119.744	129.147	128.846	152.400	181.874	163.939	109.598	30.635	24.727	6.03	1.98
	β	469	492	625	521	813	874	845	949	928	867	991	448		
6. Larisa	α	20.568	19.320	23.440	25.536	25.930	22.949	22.687	25.545	27.620	25.505	20.883	21.821	5.36	5.19
	β	130	117	130	154	225	124	146	152	157	222	184	108		
7. Rhodes	α	45.771	55.384	127.883	355.824	458.488	510.189	574.612	586.997	549.301	405.803	88.894	56.022	4.70	2.23
	β	1.142	1.152	882	2.387	4.548	3.327	3.935	3.743	3.919	3.977	3.207	1.477		
8. Kerkyra	α	8.822	8.550	12.279	81.473	173.986	221.956	282.914	319.703	251.809	94.058	20.024	8.680	4.51	1.16
	β	312	149	771	950	1.274	1.790	1.830	1.655	2.171	1.413	896	471		
9. Nauplio	α	8.388	5.664	12.122	50.870	43.636	49.971	88.087	116.932	57.990	20.493	7.939	9.276	7.76	1.63
	β	173	143	160	218	261	324	299	342	283	257	755	243		
10. Loutraki	α	6.568	9.748	10.997	32.230	49.137	69.947	123.828	158.977	107.993	30.417	8.342	10.273	30.41	23.97
	β	6	51	4	16	60	102	175	254	174	232	93	173		
11. Aediphsos	α	134	120	228	2.265	1.292	7.730	36.870	51.931	39.626	3.258	94	142	19,54	0.40
	β	13	32	9	1	3	70	106	234	281	202	84	9		
12. Delphi	α	6.106	4.741	9.309	27.611	29.615	21.289	43.625	52.784	33.310	18.431	5.622	7.026	3.81	3.06
	β	164	77	29	258	473	312	253	316	309	253	249	205		
Total	α	686.158	649.435	917.942	1.635.355	1.893.863	2.366.514	2.695.429	3.040.125	2.503.157	1.647.628	781.348	647.751	4.88	2.40
	β	10.675	8.192	10.866	10.780	22.037	15.433	16.187	16.448	18.243	19.313	14.246	9.919		

1 :α, β : Nights spent and hotel employees, respectively

2 :$\Delta_1 = \frac{\alpha}{\beta}$ (daily averages-peak season)

$\Delta_2 = \frac{\alpha}{\beta}$ (daily averages-non peak season)

Source: Based on statistics provided by the NTO and ΤΑΞΥ, op.cit.

Table IV-7

Population Size and Employment's Monthly Fluctuation in Major Tourist Centres

		1973					1978				
		I	Δ_I	Δ_π	d	d^2	I	Δ_I	Δ_π	d	d^2
1	Athens	0,913	3	1	2	4	0.913	6	1	5	25
2	Thessaloniki	0.905	10.5	2	8.5	72.25	0.908	10	2	8	64
3	Patra	0.913	3	3	0	0	0,893	15	3	12	144
4	Volos	0.912	5	4	1	1	0.924	2	4	2	4
5	Heraklio	0.905	10.5	5	5.5	30.25	0,901	11	5	6	36
6	Larisa	0.909	8.5	6	2.5	6.25	0.915	4	6	-2	4
7	Chania	0.913	3	7	-4	16	0.913	6	7	-1	1
8	Kavala	0.888	16	8	8	64	0,913	6	8	-2	4
9	Kalamata	0,846	19	9	10	100	0.911	8	9	-1	1
10	Ioannina	0.904	12	10	2	4	0.917	3	10	-7	49
11	Lamia	0.878	17	11	6	36	0.878	19	11	8	64
12	Chalkis	0,980	1	12	-11	121	0.899	12	12	0	0
13	Rhodes	0,893	14	13	1	1	0,884	17	13	4	16
14	Kerkyra	0,890	15	14	1	1	0,880	18	14	4	16
15	Tripolis	0.909	8.5	15	- 6,5	42,5	0.929	1	15	-14	196
16	Rethymno	0,899	13	16	- 3	9	0,898	13	16	-3	9
17	Nauplio	0.910	6.5	17	-10.5	110,25	0,895	14	17	-3	9
18	Loutraki	0.772	20	18	2	4	0.840	20	18	2	4
19	Ag. Nikolaos	0,864	18	19	-1	1	0.890	16	19	-3	9
20	Aedipsos	0.741	21	20	-1	1	0,732	21	20	1	1
21	Delphi	0.910	6,5	21	-14.5	210.25	0.910	9	21	-12	144
						834,50					800

$I = 1 - \frac{\Sigma_X 2}{(\Sigma_X)^2}$, Gibbs - Martin index of diversification, X = the number of employees- monthly figures.

Δ_I = Ranking according to index I

Δ_π = Ranking according to population size

$d = \Delta_I - \Delta_\pi$

Spearman's rank correlations

$r_s = 0.46$ (1973), $r_s = 0.48$ (1978)

tourists and domestic tourists (encompassing summer holiday makers week-end recreation participants, and Christmas or Easter excursionists). Of course, certain problems and limitations of the above approach should not be ignored; for example, the possibility that the existing trip set of each group of tourists might not correspond to the full range of preferences pertaining to that group; or, that the equivalence of preferences with demand fails to consider other than the effective (present participation rates) types of demand. In the approach, it is merely assumed that there is absolute agreement and consistency between participation and preference patterns. However, it should be noticed here that locational preference patterns resulting from such an assumption must be further checked and completed through specific tourist preference surveys, before any planning implications can be drawn.

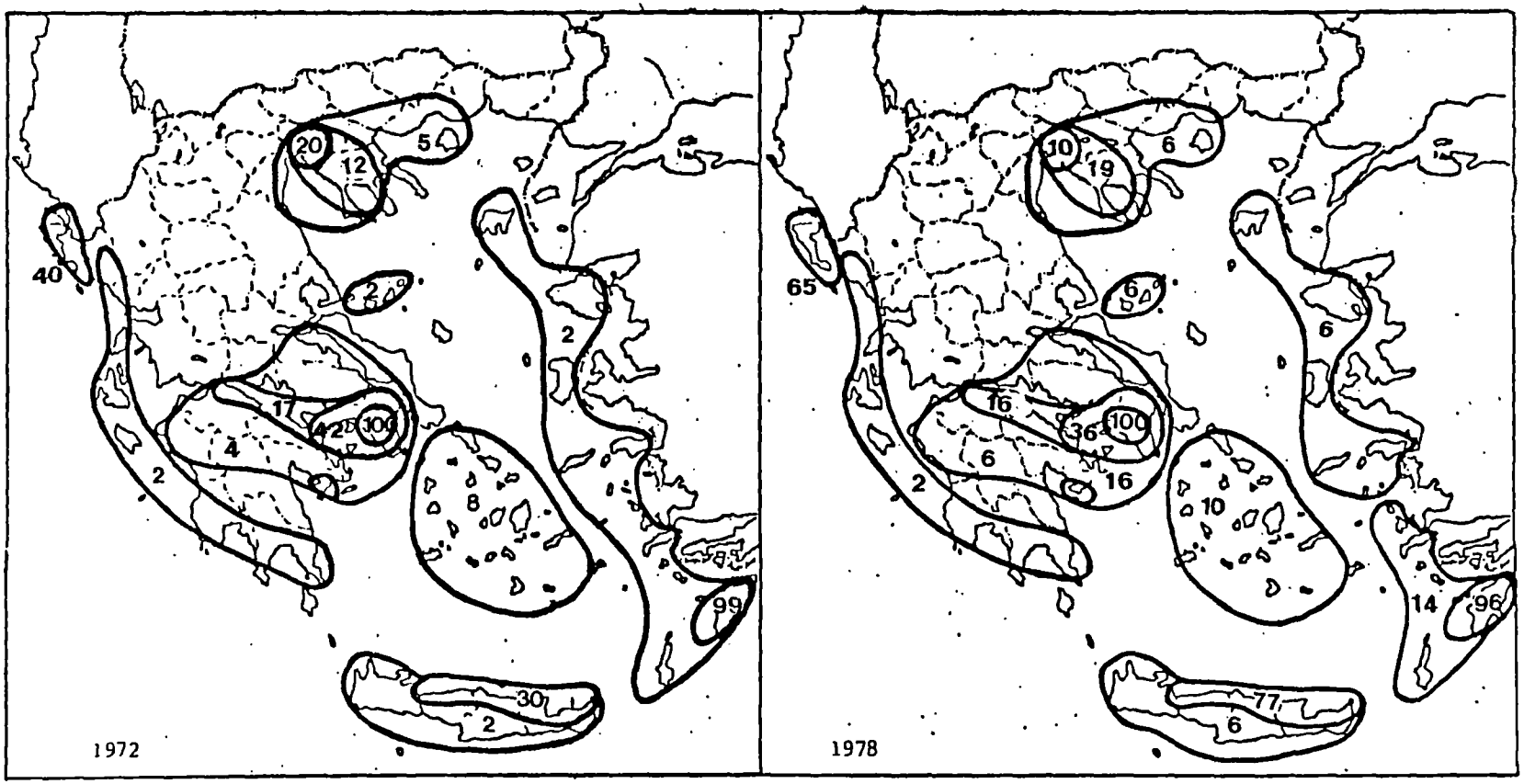
Observing the results of the analyses presented in the Maps IV-7,8 one may notice the following with regard to foreign and domestic tourism.

Foreign tourist preferences are directed, in order of size, towards the following regions: a. Athens proper, b. Rhodes, c. Corfu, Crete - the northern "development axis" of the island (Mallia, Heraklio, Ag.Nikolaos), the Attica region (apart from Athens) and d. Thessaloniki - Chalkidiki (the Kassandra peninsula) and the coastal strip Patra - Korinthos.

With regard to Athens and Thessaloniki, one could observe the following concerning their wider tourist hinterland. Without doubt Athens has emerged as the dominant tourist centre of the country. It owes its dominance not only to its size and concentration of population, services and invested tourist capital, but, also, to its endowment with important tourists attracting cultural resources and its favourable geographical location with regard to either its proximity to other major resource attractions of the country, or, and more important, to its direct links to the international travel system. This growth, however, should be seen and discussed within a historical context; a task to be undertaken in the following chapter. Further, around Athens and linked with the two major national transport corridors, there are several other tourist areas of two types: a) small holiday resorts -

Map IV - 7

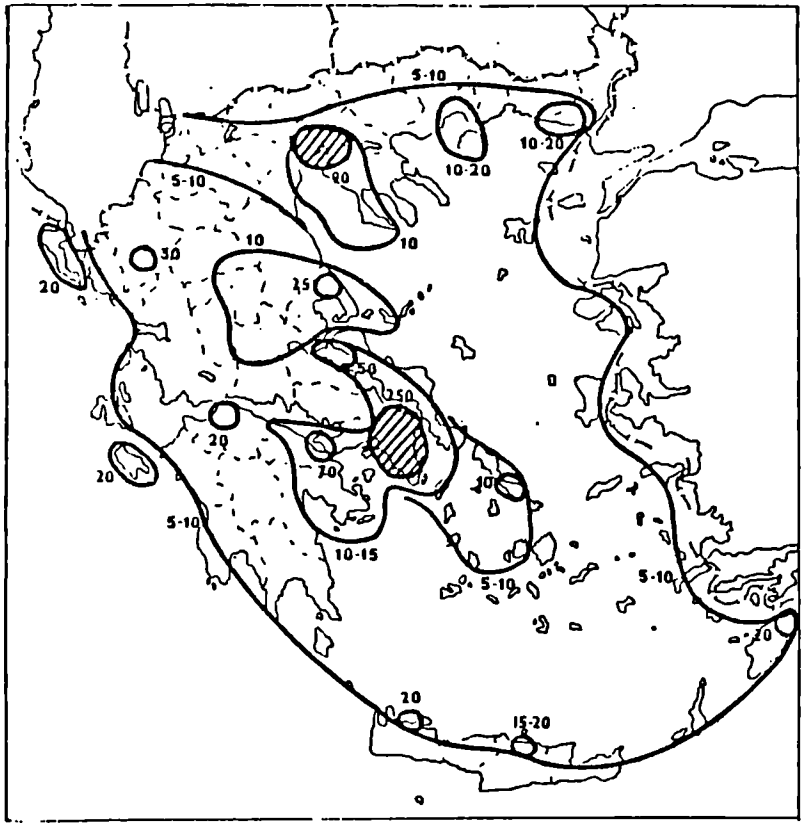
Generalized Spatial Patterns of Foreign Tourist Preferences*



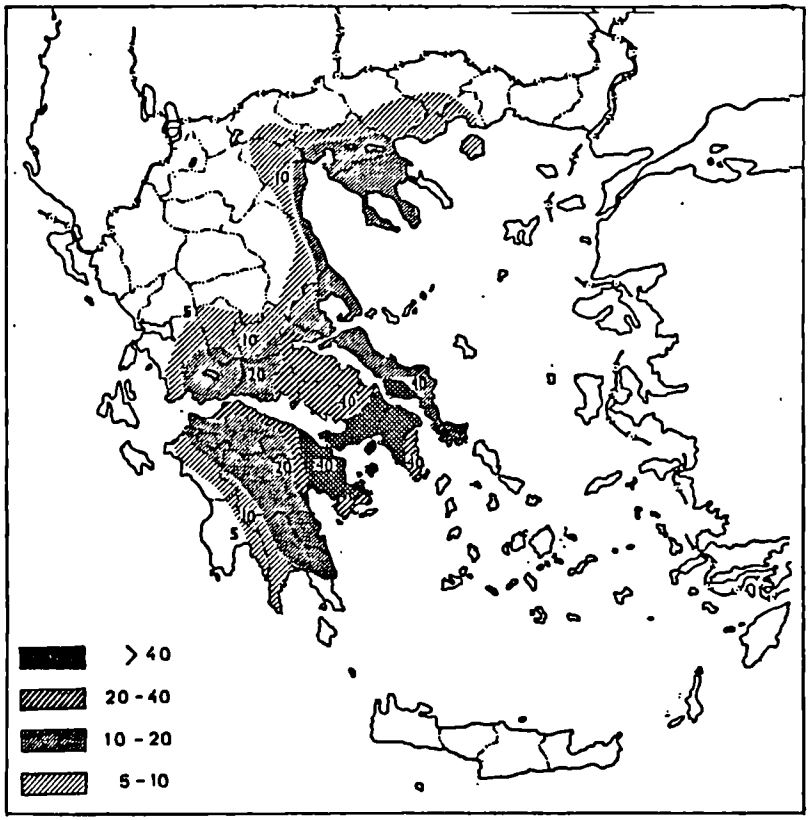
* The isopleths in both maps derive from statistics of hotel nights spent by foreign tourists. The numbers are indicative of the relative size of preferences.

Map IV - 8

Generalized Spatial Patterns of Domestic Tourist Preferences*



* Isopleths on the basis of hotel nights spent by domestic tourists (August, 1973).
The numbers are indicative of the relative size of preferences



* Isopleths on the basis of organized group excursions from Athens and Thessaloniki.
The numbers are indicative of inter-areal differences in visitation rates (1973).

of an intermediate length of stay-character, and b) certain cultural attraction nodes (e.g., Delphi, Mykenae, Epidauros - of a short visit - touring character. Both types of tourist areas seem to be depending upon the Centre for their tourist transport links and logistics (employment, services, etc.).

In Northern Greece, a second tourist region is suggested based on the Thessaloniki - Kassandra development axis and including the coastal areas of Pieria and even the Kavala - Thassos island subregion.

Regarding domestic tourism, week-end and holidays outdoor recreation, a similar approach has been adopted. Here, however, there are some difficulties encountered in the process since the usual nights spent statistics do not provide information regarding the origin place of domestic tourists; additionally, and more important, they refer only to nights spent in hotels and similar accommodation establishments; hence, they cover only part of the whole range of domestic tourist activities and their holidays spatial pattern. The pattern presented in Map IV-8 is indicative only of the relative size in the volume of domestic preferences. Considering this pattern, as well as, the distribution of peak seasonal demand among different categories of settlements, it is worth noticing that domestic tourism (hotel demand) is directed in order of weight to the following regions or areas: a) Greater Athens - coastal Attica. Saronic gulf isles, and certain coastal areas of Argolis and Euboia, b) Thessaloniki and Kassandra peninsula, c) Loutraki and Kammena Vourla - wider and hinterland areas of these two spa - resorts and d) Volos - Pelion, Kavala - Thassos and Ioannina wider areas.

The spatial pattern of outdoor recreational flows has been examined on the basis of the following parameteres:

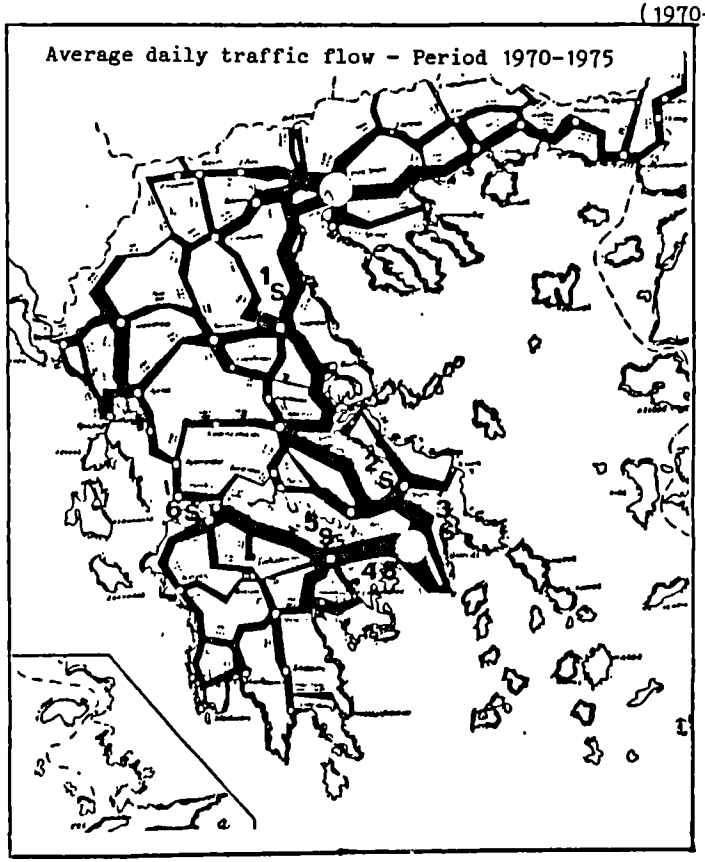
a. The number of trip ends (excursions) of recreationists from Athens and Thessaloniki to various places during week-ends, Christmas, Easter and other national and religious holidays.
b. The volume of traffic flows and traffic composition statistics pertaining to the major transport corridors of the country, namely, the Athens - Larissa - Thessaloniki and the Athens - Corinth - Patra corridors during the above periods.

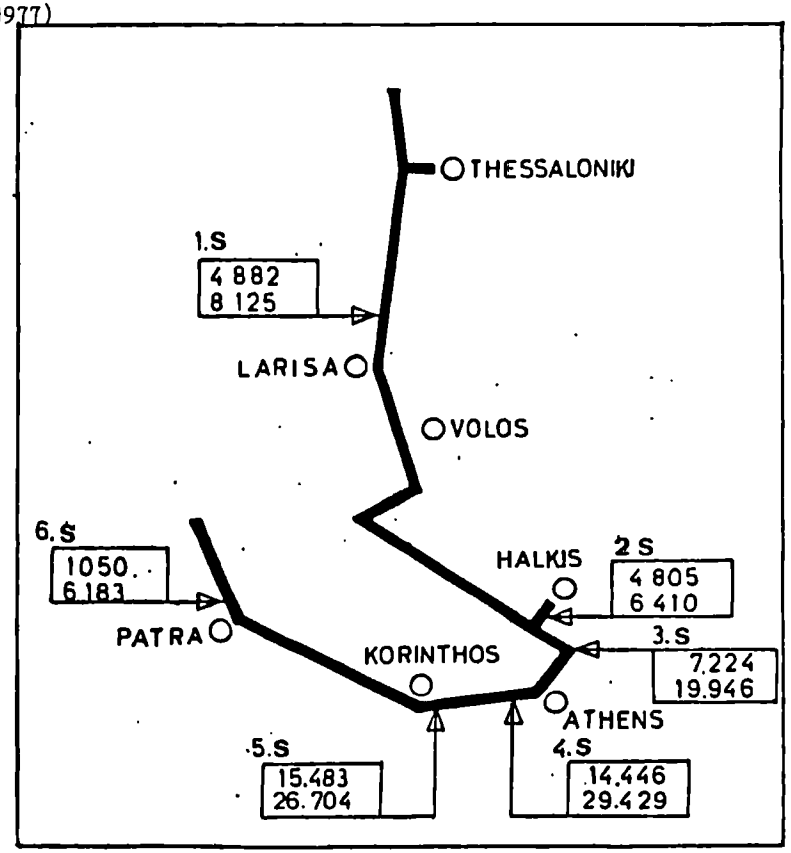
Assuming that the trip ends are indicative of preferences, a generalized spatial pattern of demand for outdoor week-end recreation has been gererated (see Map IV-8) following the same, as previously, procedure. This pattern shows the inter-areal differences in visitation rates, or the relative size of preferences for week-end recreation among various areas.

The organized group - excursionist travel, associated, in general, with the use of public means of transport, seems not to have increased (with regard to the volume of participants) considerably, in comparison to the individual excursionist travel, related to private cars, which has evidenced a spectacular growth. A worth noticing consequence is the enlargement and outwards expansion of the "recreational activity radius". The volume of recreational traffic flows almost doubled between 1971 and 1977 (see Map IV-9), along both the two major transport corridors examined. Although there are seasonal and spatial (among the different measurement stations) variations in the growth of recreational travel, one could discern three major directions of recreational flows originating from the Athens urban region. One direction extends towards and encompasses the Attica coastal and island places and attraction resourses; a second, to the north eastern Peloponnesos, focusing on the Korinthos - Loutraki and Argolis subregions; a third, to the Eastern Sterea Hellas and Eubola subregions.

Map IV - 9

Traffic Flows during Holidays
(1970-1977)





Traffic flows (private cars only) during holidays:
Average daily traffic flow along the major network.

Years: 1971
1977

4. Conclusions and planning implications

The preceeding analysis has covered part of tourist activities and only certain spatial aspects of the tourist phenomenon in Greece; namely, those that can be examined on the basis of the existing data. The lack of pertinent information on many other aspects of tourism - e.g., those concerning domestic tourism and outdoor recreation, or the unplanned sprawl and growth of certain categories of tourist - recreational infrastructure[1] - poses considerable difficulties in providing a more detailed, or complete picture of tourism's spatial pattern. However, even so, it is believed that the basic elements - the skeleton - of tourism's spatial pattern have been outlined according to the particular objectives set in the introduction (Direction B) and this will be further supplemented when, in the following chapter, part of the analysis will focus on investigating its formation within a wider frame.

On the basis of the above, and within the spatial-temporal context employed, certain remarks could be made and conclusions be drawn as follows.

- Tourism's spatial growth in Greece can still be described in terms of a centre-periphery dichotomy growth pattern; a dominant centre, or a large central region, and certain peripheral areas of two types: a) small holiday-resort areas (usually small islands) depending upon the Centre for their tourist transport links and logistics and areas of a "short-visit-touring" character, b) a few areas or regions (Rhodes, Corfu, northern coastal Crete) emerging as "independent" in the sense that these peripheric destinations outside Athens, are supported by strongly seasonal (international tourism) demand and are linked, on a seasonal basis, with the international airbased travel system. This distinction, however, appears to become, progressively, less sharp, in the sense that certain peripheral areas are evidencing higher growth rates, while the centre is stagnating or exhibits slower growth rates.

- The stabibility of demand, or tourist preferences, pertaining to each

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1. Here we are referring to categories such as the "lyomena" - demountable vacation houses built usually on very small pieces of land in the peri-urban areas - and the various types of supplementary tourist accommodation which are not controlled, or formally recognized, by the tourist authorities.

spatial unit seems to have been maintained, in general. There is a relative inertia in the spatial pattern of preferences, or, in other words, well-established places continue for a long time to evidence steady volumes of tourist inflows or attract increasing numbers of tourists. Within the above general temporal - spatial frame of demand evolution, certain differences could be observed, we believe, of a transitory nature. In certain cases, one notices a trend for further accelerating growth in demand, while in other cases, there is evidence for some kind of stagnation or relative decline in the rate of growth (e.g., Athens, Rhodes). The latter phenomenon could be attributed, perhaps, to the fact that certain places have reached, or surpassed, a limit of capacity in their ability to accomodate and cater for an increasing number of tourists. Also, it may be assumed that bottlenecks in services and networks create unattractive environmental conditions which influence negatively the ITO's decisions to include these places in their CIT travel packages.

- In particular cases, we observe distinctive differences and/or similarities in the spatial preferences among nationality groupings, concerning the places they visit and frequent and the degree of concentration - dispersal and spatial mobility they exhibit. Such differences and/or similarities could be explained by both certain location or resource characteristics of the places visited and the values, each group of tourists (nationality), attaches to them; values certainly differing and depending on the diverse economic, sociocultural and, hence, motivational and perceptual, background of each group. They could, also, be attributed to the mode of travel used by various nationality groups. The differences in locational patterns of foreign and domestic tourists which have been distinguished only to a certain extent, could be further elaborated if additional data on domestic tourism were available.[1]

- The identification of spatial demand and supply differentiation and their explanation (which will be considered in the following

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1. National surveys of domestic tourism or outdoor recreation have not as yet (1987) been undertaken in Greece. Such surveys would yield valuable information regarding the holiday behaviour of the country's population.

chapter) has two important planning implications: a) it can help in the formulation of an appropriate marketing policy aiming at attracting the most desirable composite (mix) of clientèle (demand), and b) it can provide usefull insights to the planning and design process, as to the most appropriate articulation of the tourist product offered (supply), or for the assessment of suitable tourism types for each region. More specifically, in the first case, the broad identification of the types of demand attracted towards each of the various regional units, provides a general indication of visitor preferences, on the basis of which to develop appropriate marketing policies for the Greek TP. In the second case, the advanced typology of tourist resources may conduce to a more effective planning of tourist resources, at the national, or inter-regional scale, by suggesting (e.g., to the country's national tourism administration, or to the relevant national and regional planning authorities), among other things, an appropriate mode of differentiating the regional distribution of tourist investments; a distribution which could develop and enhance a region's unique tourism character.

This chapter has focused on describing particular spatial aspects of tourist demand and supply in Greece and has developed certain methodological approaches in order to identify the regional tourist market segmentation and tourist product composition. The lack of pertinent information does not allow the investigation of certain other important aspects and issues of tourism. For example, issues pertaining to the relationship between tourist users, or activities and tourist resources, or facilities; issues of capacity and intensity of use, issues of correspondence between users and resources, in terms of spatial-temporal relations and impact. We have indicated earlier in this chapter the kind of data and surveys needed for a further elaboration and "diversification" of the employed nationality-country of origin variable. The consideration of the suggested socioeconomic variables, would add and enrich, rather than conflict with, the tourist typology employed in this chapter.

CHAPTER V

Explanations of the spatial structure of tourism in Greece

Conceptual frame and methodological approach

The interpretative frame of tourism's spatial structure employed in Chapter V is similar to that of Chapter III: A quantitative analysis which relates specific, regionally, distributions of tourism demand to selected regional attributes, is followed by an approach which explores tourism's a spatial structure within a qualitative, historic frame of analysis.

The aim in this chapter is to search into the factors which affect or relate to the spatial structure of tourism in Greece. As it has been clarified in Chapter I, the term spatial structure embraces considerations of both static and dynamic factors which characterize the spatial distribution of an activity, or a pattern. Thus, the investigation of spatial structure involves also a procedural approach - a search into processes and mechanisms that influence a particular situation - for interpreting a specific problem. In pursuance of the research objectives set out in Chapter I (Direction B), each of the two methodological approaches employed in this chapter deals with specific themes and topics.

The first approach, focuses on investigating specific conditions of tourism's spatial distribution within the logic of a causal model's structure; with all the inherent conditions applying to such a cause-effect system, or model (e.g., irreversibility). The object is here to investigate the influence of several factors on the spatial pattern of tourism's demand. Methodologically, certain hypotheses are formulated and tested, in which the spatial pattern of tourist demand is related to a set of variables and the corresponding patterns of their spatial distribution. The general assumption underlying all work in this approach is that the spatial distribution of tourist demand is a function (linear relationship) of factors such as the spatial distribution, or allocation of tourist resources, public investments and infrastructural works in tourism, employment in the tertiary sector, and the accessibility degree of each spatial unit within the country's dynamic transport system. In this approach, we also discuss critically the usefulness and relevance of the intervening opportuni-

ties model in explaining the distribution of home tourists within Greece.

The analysis in the second approach, focuses on certain aspects of production relations[1] in tourism viewed within a wide relational context, i.e., the country's socioeconomic growth process, territorial structure and international tourism's structure. Our particular aim here is to identify the kind and effect of relations developing within such a context; relations of coordination, or subordination among tourism agents (e.g., ITOs, LTAs, the State) with regard to the means of production (e.g., investments).

The advanced hypothesis discussed is that the very same process and mode of tourism's production and consumption, and consequently the particular role and actions of tourism production agents (foreign or domestic), effecting and developing out of production relations, conduce to a particular spatial structure of tourism. The analytic method employed in this approach places, within a dialectic contexture, the types of relationships developing among the agents of tourism production in their different functions, or roles they exercise, during the process of production, distribution - exchange and consumption of the tourist product. Specifically, we analyse and discuss:

- The general background to tourism's growth in Greece; the growth of tourism in relation to the country's postwar socioeconomic development and territorial structure.
- The pattern of tourist investments; the evolution and spatial distribution of public and private investments in tourism.
- The organization of the tourist industry in Greece; especially with regard to the effect of the industry's agents upon the growth and spatial structure of tourism.

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1. Such relations are being conceptualized here as "a system of positions assigned to the agents of production in relation to the principal means of production" (Bettelheim, 1976).

1. Analytical approach A

The analysis undertaken in this section proceeds in two phases. In the first phase we examine a set of simple linear equations of the form $y = a + bx$, and multiple linear equations, where a larger number of independent variables is examined, employing stepwise multiple regression techniques. In the second phase, we examine several hypotheses pertaining to relations between certain tourist accessibility and potential factors,or indicators,and the spatial distribution of tourist demand.

1.1. Simple and multiple linear equations

In both cases the analysis was based on the spatial division of the country into 10 spatial units of observation (tourist regions, see Map V-1). Such a division, justified mainly on statistical grounds, corresponds to the boundaries of prefectures (Nomi). The nights spent by tourists (foreign or domestic) within a particular spatial unit has been considered as an indicator of tourist demand in that unit (the dependent variable Y in all equations of Table V-1). The major hypothesis in the analysis is that the spatial distribution of demand is linearly related to the following variables:

a. The spatial distribution of tourist resources

Two major resource categories have been considered:
i) Natural - Ecological resources (length of beaches, parks and woodland areas, mineral springs, caves, etc.) and ii) Sociocultural resources (archaeological sites and monuments, traditional settlements, etc.). For each spatial unit an overall index (X1 in equation 1 of Table V-1) has been assessed expressing the particular weight attached to each resource category (see Table 1 in Appendix C).

b. The attraction of tourist resources

This is an alternative index expressing the "preferences" of visitors with regard to the various categories of resources. The index X2 (in equation 2 of Table V-1) corresponds to the average annual number of visitors at the different archaeological sites and monuments of the country.

Map V-1

Tourist Units or Regions
(Regional division for analytical purposes)

Table V - 1

Simple Linear Regressions

Equations	
1.	$\underline{Y = -0,47 + 1,35\ X1}$
	$r = 0,75$ $r/Sr^1 = t = 3,21 > t(student) = 2,31$, $df=8$, $p=0,05$
2.	$Y = 0,84 + 0,13\ X2$
	$r = 0,43$ $r/Sr = t = 1,35 < t(student) = 2,31$, $df=8$, $p=0,05$
3.	$\underline{Y = 0,36 + 0,6\ X3}$
	$r = 0,78$ $r/Sr = t = 3,53 > t(student) = 2,31$, $df=8$, $p=0,05$
4.	$\underline{Y = 0,15 + 0,82\ X4}$
	$r = 0,83$ $r/Sr = t = 4,21 > t(student) = 2,31$, $df=8$, $p=0,05$
5.	$\underline{Y = 0,35 + 0,62\ X5}$
	$r = 0,72$ $r/Sr = t = 2,93 > t(student) = 2,31$, $df=8$, $p=0,05$
6.	$Y = 0,70 + 0,20\ X6$
	$r = 0,50$ $r/Sr = t = 1,63 < t(student) = 2,31$, $df=8$, $p=0,05$
7.	$Y = 0,72 + 0,23\ X7$
	$r = 0,50$ $r/Sr = t = 1,63 < t(student) = 2,31$, $df=8$, $p=0,05$
8.	$Y = 0,41 + 0,44\ X8$
	$r = 0,37$ $r/Sr = t = 1,13 < t(student) = 2,31$, $df=8$, $p=0,05$
9.	$\underline{Y = 0,60 + 0,42\ X9}$
	$r = 0,70$ $r/Sr = t = 2,8 > t(student) = 2,31$, $df=8$, $p=0,05$
10.	$Y = 0,71 + 0,20\ X10$
	$r = 0,52$ $r/Sr = t = 1,72 < t(student) = 2,31$, $df=8$, $p=0,05$
11.	$\underline{Y' = 0,44 + 0,61\ X11}$
	$r = 0,82$ $r/Sr = t = 4,05 > t(student) = 2,31$, $df=8$, $p=0,05$

1. $r/Sr = r/\sqrt{\frac{1-r^2}{N-2}}$

c. The spatial distribution of public investments in tourist infrastructure works

Public investments in tourism cover a wide range of touristic equipment and services; various types and categories of accommodation, engineering and transportation works, recreational infrastructure, conservation of monuments, etc. The average annual volume of public investments has been estimated for the periods 1951-1964 and 1965-1974 (one variable for each period has been employed, i.e., X3 and X4 in equations 3 and 4, respectively).

d. The spatial distribution of employment in the tertiary sector

Tourist demand and activities may take one of two, or both spatial orientations; they may be oriented towards natural resources (beaches, forests, etc.) or towards goods and services with an urban locational character. The average annual employment (of the period 1961-1971) in the tertiary sector which is examined as an independent variable (X5 in equation 5) is closely related with the second spatial category of tourist supply.

e. The relative location of each region within the wider dynamic transportation landscape

The relation between the structure of the transport system and the locational pattern of different tourist activities is quite a controversial and complex issue. Such a relation can be assumed either negative - in the sense that wherever the transport network is inefficient, several constraints and limitations are imposed on the growth of tourist activities - or, positive - in the sense that an efficiently developed network offers diverse opportunities for the growth of tourism.

As it has been also observed elsewhere (Ekström, Williamson, 1971), there are two basic possibilities for assessing the relative location of a region within a wider spatial and temporal context: a) by investigating changes taking place in the volume of flows in every type (air, sea, land) of transport network, and, b) by investigating changes which have occured in the physical structure of the transport network.

Considering both possibilities, five alternative indices have been estimated (equations 6-10) with regard to the transport variable; tak-

ing each network independently or in combination to the others (9, 10). The values of the variables X6 and X7 express average annual volumes of traffic flows in the air and sea transport network respectively, while the variable X8 presents the change in the physical structure of a region's road network (length in kms).

In a final hypothesis (equation 11) we have examined foreign tourist demand separately, with regard to its relation to another transport variable, namely the relative connectivity of each spatial unit within its wider transport network. The values of indices estimated here derive from measurements of the annual traffic volume (1963-1973) in all categories of transport stations interlinking each regional unit of the country with the international transport system.

The results from the calculation of eleven simple linear regression equations (see Table V-1) support most of our hypotheses and show the significance of the variables chosen. In spite of this, we proceeded further to investigate the effect or relationship of a group of variables, at the same time, upon or with the spatial distribution of tourist demand. In the stepwise multiple regression technique used (see Tables V-2-11) each independent variable is added to the linear model by the order it increases the value of the coefficient of determination (R^2). The basic assumption underlying this technique is that an independent variable that effects the dependent one is at the same time partially effected by another independent variable.

On the basis of the above correlation analysis, several conclusions can be drawn as follows:

- With regard to the aggregate tourist demand, it seems that the particularly important factors are: a) the transport variable, in this case an aggregate index expressing the "accessibility" of each region (spatial unit) by air and sea, b) the attraction of resources, a measure of quantitative (size and number of tourist resources) and qualitative (visitation rates) characteristics, and of equal importance, c) the tertiary employment, or the size of the services sector and the size of public investments in tourist infrastructure, allocated among different regions.
- However, as can be observed in the equation of Table V-7 the efficiency of the linear model increases when two other

Tables V-2, 3

Stepwise Multiple Regression

Table V-2

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X5	1.939	0.806	-	-	-	0.958	0.919	0.079	-	-	-
2	X3	1.713	0.624	0.204	-	-	0.954	0.911	0.343	0.374	-	-
3	X1	4.423	0.607	0.419	-0.531	-	0.948	0.899	0.367	0.747	1.210	-
4	X10	3.936	0.640	0.435	-0.407	-0.615	0.937	0.879	0.470	0.888	1.614	0.457

Table V-3

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X4	0.896	0.910	-	-	-	0.95	0.919	0.894	-	-	-
2	X5	1.275	0.466	0.407	-	-	0.96	0.927	0.340	0.301	-	-
3	X10	1.701	0.520	0.494	-0.185	-	0.958	0.919	0.368	0.348	0.307	-
4	X1	1.164	0.509	0.475	-0.211	0.110	0.950	0.904	0.409	0.402	0.379	0.742

Tables V-4, 5

Stepwise Multiple Regression

Table V-4

STEP	VARIABLE	A	β_1	β_2	β_3	β	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X1.X2	5.511	0.018	-	-	-	0.965	0.931	0.002	-	-	-
2	X5	3.923	0.044	0.341	-	-	0.967	0.936	0.006	0.272	-	-
3	X10	4.276	0.011	0.416	-0.116	-	0.96	0.927	0.007	0.343	0.284	-
4	X3	4.279	0.011	0.417	-0.115	-0.001	0.955	0.912	0.008	0.417	0.319	0.420

Table V-5

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X1·X2	5.512	0.018	-	-	-	0.965	0.931	0.002	-	-	-
2	X5	3.923	0.011	0.341	-	-	0.967	0.936	0.006	0.272	-	-
3	X2	3.214	0.009	0.267	0.202	-	0.963	0.928	0.008	0.327	0.420	-
4	X10	3.492	0.008	0.349	0.261	-0.159	0.958	0.918	0.009	0.304	0.463	0.311

Tables V-6, 7

Stepwise Multiple Regressions

Table V-6

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X5	1.939	0.806	-	-	-	0.958	0.919	0.079	-	-	-
2	X8	6.587	1.091	-0.749	-	-	0.974	0.948	0.137	0.320	-	-
3	X3	6.345	0.925	-0.743	0.183	-	0.971	0.943	0.307	0.336	0.300	
4	X2	7.272	0.914	-0.731	0.286	-0.197	0.965	0.932	0.340	0.372	0.622	1.10

Table V-7

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X9	3.397	0.330	-	-	-	0.975	0.951	0.025	-	-	-
2	X5	2.816	0.230	0.258	-	-	0.976	0.953	0.087	0.217	-	-
3	X1	7.129	0.307	0.382	-0.708	-	0.980	0.960	0.097	0.218	0.486	-
4	X3	6.994	0.308	0.387	-0.678	-0.025	0.975	0.952	0.113	0.267	0.840	0.549

Tables V-8, 9

Stepwise Multiple Regression

Table V-8

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X9	2.004	0.799	-	-	-	0.990	0.979	0.386	-	-	-
2	X1	2.435	0.999	-0.243	-	-	0.996	0.991	0.063	0.070	-	-
3	X5	2.217	0.977	-0.392	0.193	-	0.996	0.993	0.057	0.108	0.115	-
4	X3	1.921	0.979	-0.391	0.162	0.058	0.996	0.992	0.064	0.118	0.238	0.377

Table V-9

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X11	2.004	0.799	-	-	-	0.990	0.979	0.386	-	-	-
2	X5	2.435	0.999	-0.243	-	-	0.996	0.991	0.063	0.070	-	-
3	X3	2.103	0.956	-0.392	0.226	-	0.997	0.994	0.057	0.096	0.115	-
4	X1	0.997	0.956	-0.451	0.192	0.203	0.997	0.994	0.055	0.105	0.115	0.172

Tables V-10, 11

Stepwise Multiple Regression

Table V-10

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X11	2,004	0,799	-	-	-	0,990	0,979	0,386	-	-	-
2	X5	2,435	0,999	-0,243	-	-	0,996	0,991	0,063	0,070	-	-
3	X4	2,217	0,977	-0,392	0,193	-	0,996	0,993	0,057	0,108	0,115	-
4	X1·X2	1,736	1,015	-0,357	0,229	-0,002	0,996	0,993	0,077	0,121	0,127	0,003

Table V - 11

STEP	VARIABLE	A	β_1	β_2	β_3	β_4	R	R^2	SEE_1	SEE_2	SEE_3	SEE_4
1	X11	2,004	0,799	-	-	-	0,990	0,979		-	-	-
2	X5	2,435	0,999	-0,243	-	-	0,995	0,991	0,028	0,070	-	-
3	X4	2,103	0,956	-0,392	0,226	-	0,997	0,994	0,057	0,096	0,115	-
4	X1·X2	1,262	1,009	-0,346	0,309	-0,004	0,997	0,995	0,065	0,095	0,123	0,003

variables, namely employment in services and resource attraction, in that order, are added in steps two and three. Accessibility then together with employment in services and resource attraction explain 98% of the observed variability in demand. The testing of the reliability of such estimates (see Table V-12) has shown that the linear model 7 at step 1 was 77.90 percent efficient while it increased its efficiency to 78.40 and 80.00 percent by the addition of the two variables, i.e., employment in services and resource attraction, respectively. In the second best linear model, demand is related with employment in services (X5) and land accessibility (a variable associated with the road transport network of each region, X8).

- With regard to foreign tourist demand, we observe the importance of the two accessibility measures; the first and most important accessibility measure refers to the international air transport links available in each region, and the second to the combined air and sea accessibility of each region. It can be further noticed that the efficiency of the linear model increases when two other variables are added, i.e., employment in services and public investments in tourist infrastructure. It is mainly the first of the two additional variables that when entered, increased the efficiency of the model from 85.60 to 90.6 percent (see Table V-12).
- A final remark is in order and should be stressed here. It concerns the limitations and weakness of the correlation analysis undertaken; not only as to the number and nature of the variables examined but mainly with regard to its explanatory strength in paradigms of cause - effect relationships. Our approach, therefore, here should be considered as of an exploratory nature, i.e., the results of the analysis are accepted as indicative of the relative strength of relationships rather than as predictive and precise determinants of a spatial tourist demand model.

1.2. Accessibility, potential, and tourist demand

The notion of accessibility is used variably to denote either a) a simple measure of distance and the degree of connections between points - as it has been analysed in the previous chapter, or, b) some measure of attraction weighted (divided) by distance. As to the latter,

Table V - 12

Index of Predictive Efficiency

(I.P.E.= 100(1-K), $K=\sqrt{1-R^2}$)

STEPS / EQUATIONS of tables:	1	2	3	4
2	71,60	70,20	68,30	65,30
3	71,60	73	71,60	69,10
4	73,80	74,80	73	70,40
5	73,80	74,80	73,20	71,40
6	71,60	77,20	76,20	74
7	77,90	78,40	80,00	78,10
8	85,60	90,60	91,70	91,10
9	85,60	90,60	92,30	92,30
10	85,60	90,60	91,70	91.70
11	85,60	90,60	92,30	93,00

the accessibility of a spatial unit i to a single resource unit, or to a whole resource range of another spatial unit j, is defined as a measure of its attractive power (a set of quantitative and qualitative resource properties) divided by some function of physical distance, or cost of getting to it.

In the case of tourism, the potential notion refers to different measures of accessibility pertaining to different spatial units and locational patterns of tourist resources. In other words, the tourist potential of a region i (Π_i) is a function of the available resources at different locations j and the distance between region i and all resource locations j. The above assumption can be expressed in the form of $\Pi_i = A_j/d_{ij}^a$ or, introducing the demand variable, as a variation of the gravity model with the expression

$$T_i = T_i \frac{A_j / d_{ij}^a}{\Sigma A_j / d_{ij}^a}$$

The two alternative indices of accessibility employed in this section (see Table 2 in Appendix C) are based on measurements of the capacity (volume of traffic flows, frequency of connections among various nodes) of the existing transport networks interlinking the various spatial units (nomi). A further assumption used here is that the tourist potential of a region i, relative to that of another region j, is equal to the product of a) the tourist resources of region j and b) the accessibility ratio of the two regions, i and j, $(\frac{D_i}{D_j})$. From the above assumption we derive

$$\Pi_{ij} = A_j \frac{D_i}{D_j} \quad \text{or} \quad \Pi_i = \Sigma A_j \frac{D_i}{D_j}$$

On the basis of the above assumptions we have tested several alternative hypotheses (see Table V-13) which related measures of tourist demand (tourist inflows in terms of nights spent) of each spatial unit (nomos) with factors such as accessibility potential and tourist resources attraction. Specifically, the formulated hypotheses are the following:

Case 1 : The volume of tourist flows into each nomos is a function of its resources' attraction and of its accessibility.

Table V - 13

Tourist Accessibility, Potential and Tourist Demand.

		K	α_1	α_2	β	R^2
1.	α. $\Sigma T_J = K + A_J^i + \beta D_J^1$	- 327.36	324.42	—	439.63	0.933
	β $\log \Sigma T_J = \log K \cdot \alpha_1 \log A_J^i + \beta \log . D_J^1$	2.41	1.01	—	0.46	0.753
	γ $\Sigma T_J = K + \alpha_1 A_J^i + \beta D_J^2$	- 345.05	374.19	—	85.46	0.920
	δ $\log \Sigma T_J = \log K + \alpha_1 \log A_J^i \beta \log D_J^2$	2.10	1.12	—	0.45	0.736
2.	α $\Sigma T_J = K + \alpha_1 A_J^i + \alpha_2 A_J^X$	- 184.64	424.51	-3.33	——	0.908
	β $\log \Sigma T_J = \log K + \alpha_1 + \log A_J^i + \alpha_2 \log A_J^X$	2.19	1.36	0.18	——	0.699
3.	α $\Sigma T_J = K + \alpha_1 A_J^i + \alpha_2 A_J^X + \beta D_J^1$	- 379.44	317.63	22.39	461.55	0.934
	β $\log \Sigma T_J = \log K + \alpha_1 \log A_J^i \alpha_2 \log A_J^X + \beta \log D_J^1$	2.39	0.91	0.29	0.52	0.775
	γ $\Sigma T_J = K + \alpha_1 A_J^i + \alpha_2 A_J^X + \beta D_J^2$	- 357.67	373.28	5.54	86.25	0.920
	δ $\log \Sigma T_J = \log K + \alpha_1 \log A_J^i + \alpha_2 \log A_J^X + \beta \log D_J^2$	2.03	1.03	0.29	0.51	0.756
4.	α $\Sigma T_J = K + \alpha_1 \Pi_J^1$	- 432.07	7.40	—	—	0.730
	β $\log \Sigma T_J = \log K + \alpha_1 \log \Pi_J^1$	0.50	0.96	—	—	0.492
	γ $\Sigma T_J = K + \alpha_1 \Pi_J^2$	- 570.44	10.38	—	—	0.572
	δ $\log \Sigma T_J = \log K + \alpha_1 \log \Pi_J^2$	0.22	1.12	—	—	0.446

ΣT_J : Tourist flows (nights spent) in each nomos

A_J^i, A_J^X : Tourist resources of nomos J and of adjacent to J nomoi respectively

D_J^1, D_J^2 : Accessibility indices (cases A and B)

Π_J : Tourist potential of nomos J.

Case 2 : The volume of tourist flows into each nomos is a function of its resources attraction ("internal" attraction), as well as, the resources' attraction of its neighbouring nomi ("external" attraction).

Case 3 : The volume of tourist flows into each nomos is a function of both its "internal" and "external" attraction, as well as, of its accessibility.

Case 4 : The volume of tourist flows into each nomos is a function of its overall tourist potential.

The results of the analysis support our hypotheses and confirm the significant relation of the accessibility and attraction variables with the tourist flows in each nomos. As to the latter variable, one should notice the competitive nature of "external" versus the "internal" attraction factor (see equation 2a in Table V-13). This has been also observed elsewhere (Nijkamp, 1977) and it is suggested that tourist flows into a region are negatively influenced by the resources' attraction of its neighbouring regions.

Concluding the analysis in this section, and in spite of certain limitations (e.g., those pertaining to the available data for assessing the attraction profile, or to the flows data between spatial units), one may note that the regional differentiation in resources availability (attraction), and in the accessibility degree influence significantly the regional growth of tourism.

1.3. The intervening opportunities model: Its relevance and usefulness in explaining the distribution of home tourists within Greece

As an alternative to the accessibility, distance decay and gravity notions and hypotheses discussed earlier, one may consider the intervening opportunity notion which has been employed in studies and models of regional trade-shopping trips, transportation, migration and recreation-tourism.

The intervening opportunity model of spatial interaction was formulated by Stouffer (1940) in studies of migratory movement and residential mobility. In this model, where distance is replaced by intervening opportunities, Stouffer suggests that the number of trips from an origin to a destination zone is proportional to the number of opportunities available at the destination zone, and inversely proportional to the number of intervening opportunities between these two zones.

Certain re-expressions, or variations of the model have been undertaken by Wilson (1974), in the formulation and testing of shopping models, and in several studies (e.g., Cesario, 1973, Cicchetti, Fisher and Smith, 1976), which incorporate measures of competing destinations: differing attractiveness of destinations, or differing levels of supply which cause the "shifting" of demand from one destination to another. In this respect, certain models analysed in the previous sections (equation 2β, 3δ of Table V-3) may be considered as variations of the intervening opportunities model; since the tourist flows into each region have been considered in relation to the resources' attraction of its adjacent (and alternative, or competing) regions.

Models of intervening opportunities have been employed in the USA to study particularly outdoor recreational travel in parks and recreation sites. For example, in a study reviewed by Wall (1978), the assumption of intervening opportunity acting as a barrier was found more acceptable in the case where most visits to a park were part of a single destination trip. More specifically, depending on the type of the trip, or purpose of the visitors (single, or multi-destination trips), certain recreation sites, or parks assume a barrier function (in the case of recreation participants undertaking a single destination trip), or assume a complementary role, acting as "stepping stones rather than barriers" (in the case of a multi-destination goal of recreation participants).

The intervening opportunity hypothesis and travel to urban recreation centres has been studied by Smith (1980). Focusing on a selected urban area (four neighbourhoods and fourteen public recreation centres in Dallas, USA), Smith has demonstrated that the intervening opportunities models are more appropriate than distance decay models for explaining recreational travel in urban areas. However, we believe that this assumption should be tested further within different urban contexts in order to ascertain its wider applicability. In general, what seems to be needed is a further application of the model in relevant studies and, what has been observed elsewhere (Thompson, 1974), a more rigorous testing which is still lacking; in order to ascertain the model's potential for the study of recreational travel.

With reference to empirical studies as those outlined above, we

should observe that the application of the intervening opportunities model requires origin-destination data and/or data collected usually on the spot (parks, recreation sites) using specially designed structured questionnaires. Generally, in studies of international and domestic tourism within a European, or nation-wide perspective one of the main problems concerning the application and empirical testing of the intervening opportunities model, as well as, a reason of its limited applicability, seems to relate to the lack of pertinent data and to the difficulty of identifying and measuring "intervening opportunities". Thus, apart from several general and qualitative statements and descriptions, the intervening opportunities notion has not been "operationalized" and empirically tested against actual situations to explain, or predict the spatial distribution of international, or domestic tourist flows.

However, in connection to the above it is worthwhile noticing the frequent association of the intervening opportunity notion to that of accessibility and distance decay. According to Murphy (1985) "intervening opportunities are always developing in tourism as new destinations and attractions enter the markets, truncating existing travel flows and market areas". Murphy relates this notion to accessibility, indicating that a region, or a particular resort destination becomes an intervening opportunity, in relation to another destination, when it is less distant, or more accessible from a major tourist market. To these two notions we may add that of complementarity; the latter being related to the tourist product (or supply attributes) being offered and differentiating origin and destination countries. For example, in the case of Greece, the country's potential to receive tourists from a group of N.W. European markets should be seen as a function of a) distance or accessibility, b) the extent to which Greece's tourist product offers complementary tourist opportunities from those available in the observed group of N.W. European markets and c) the existence between Greece and the specific markets of other intervening destinations offering similar, or different products.

According to Pearce (1987), there are few examples of comprehensive studies of inter-regional flows of domestic tourists based on complete matrices of origin-destination data. This is attributed to the fact that "considerable investment in time, money and effort are

required to undertake nation-wide surveys which are sufficiently representative and reliable that the sample results might be weighted by some population factor to arrive at an estimate of total flows between regions". In the case of Greece, we have noticed earlier the lack of statistical data on domestic tourism and suggested the undertaking of nation-wide tourism surveys of the type undertaken in France or Italy[1]; surveys where the data collected can be expressed in the form of matrices of both origin and destination regions. Such a national survey would identify and describe main characteristics, broad trends and regional dimensions of domestic tourism by analysing inter-regional flows. Also, it would constitute the basis for further detailed studies as well as, the background for an explanatory analysis of the domestic tourist flows pattern.

Within the above perspective, and provided there is pertinent data, we would consider the application of intervening opportunities model, in studies of domestic tourism, particularly useful in the case of the Athens and Thessaloniki urban regions: to study outdoor recreation trips from the country's two major urban centres, locations of domestic demand, to specific resort areas, or recreation sites within their wider regions.

Studies and explanatory models to analyse the spatial distribution of home tourists (vacationing, or summer holidays) within Greece, would relate to and demand the consideration of a more complex set of underlying factors and assumptions than those pertaining to the intervening opportunities model. In this case, we would consider the following:

a) certain socioeconomic factors, especially income, age, education and family size as significant variables to distinguish basic underlying subsets in the vacation patterns of the Greek population (see also relevant discussion in Chapter IV);

b) the distribution by nomos, or planning region, of vacation homes

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1. In France, these are annual surveys undertaken by the INSEE (Institut National de Statistiques et d'Etudes Economiques); In Italy the relevant survey was undertaken in 1975 by the Central Institute of Statistics (Instituto Centrale di Statistica, 1977).

and vacation-related real estate ownership patterns, to identify the vacation potential, or attraction of each region;

c) certain sociocultural motivators (e.g., visits to friends and relatives), to identify particular regional ties and vacation habits of the urban population; vacationing in the home region, or in places and villages of origin, etc.

d) the mobility (car ownership) and tourism-related transport systems to analyse (along the lines indicated in Chapter IV) existing and potential flows and determine the accessibility potential of each region.

2. Analytical Approach B

The analysis in this approach covers two major issues; the first, providing the relational context for discussing the second. The first issue deals with defining the general background to tourism's growth and to the formation of the tourist product, i.e., it deals with those underlying factors that characterize the country's postwar development (and territorial structure). The second and major issue, covered in this approach deals with an investigation of certain aspects of the production, distribution - exchange and consumption process of the Greek tourist product. The focus is on a spatio-temporal analysis of public and private investments in tourism and on identifying the role and function of, certain agents of tourism production - the state, international and local tourism agents. A major question here is how the distribution of tourism investments and tourism's spatial growth relates to the role of, and to the particular relations developing between the state, the local and international tourism agents?

2.1. The general background to tourism's growth in Greece: socioeconomic growth and territorial structure.

2.1.1. Greece's postwar socioeconomic growth and the growth of Tourism

Major dimensions of the socioeconomic structure

The rapid growth of Greek tourism during the last twenty years (see Diagram V-1) particularly from the mid sixties to the mid seventies, should be observed both within its wider geographical setting - analyzed earlier in Chapter III - and within the country's postwar development. The latter, however, i.e., an analysis of Greece's socioeconomic growth and structure, would be a task that surpasses the research objectives of our study.[1] Since it would involve, at least, a critical analysis of various and divergent views as to cause - effect relationships among the major parameters characterizing and de-

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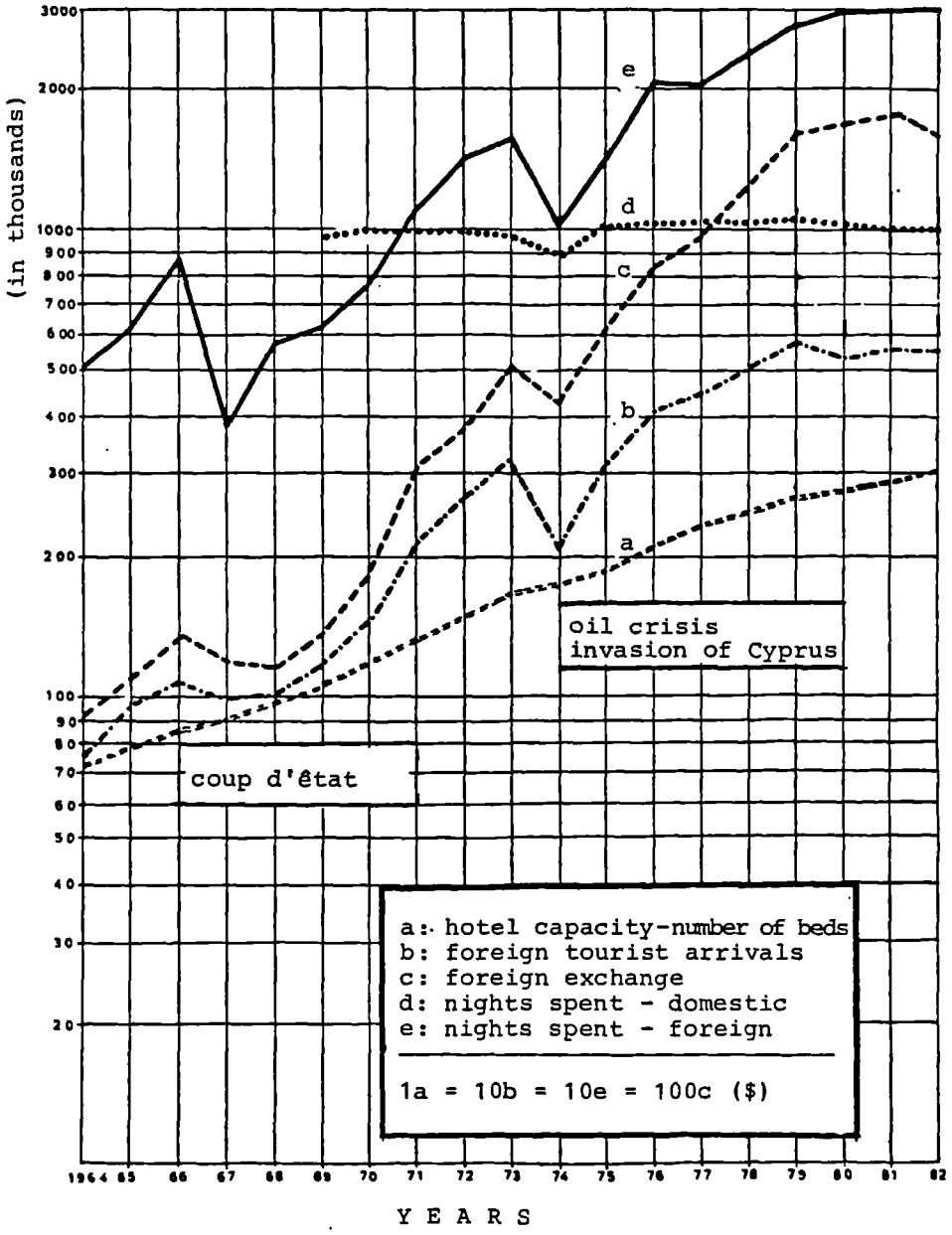
1. However, from the relevant literature and the numerous approaches undertaken to analyze, characterise or explain Greece's postwar economic development, one could selectively suggest: a) Negreponti - Delivani, 1979; Sakkas, 1984: for a general analysis of structural-developmental problems within a cause-effect context, and b) Gianitsis, 1983; Zacharatos, 1984: with regard to industrial development (or underdevelopment) and tourism's structural relations to the economy, respectively.

Diagram V-1

Major Tourist Indicators

(1964-1982)



termining the structure of the Greek economy; or, the different views and emphasis given to such issues as the internal structural constraints, the country's dependence on imports and its peripheral role within a core-metropolitan capitalist context, the role of the state and capital, etc. Here, therefore, we only outline briefly certain structural characteristics of Greece's postwar development, which are thought to constitute a general relational background to tourism's growth.

Regarding the structure of production, a major characteristic is the overgrowth of sectors producing non-traded goods (construction, housing, commerce, services, etc.) as against sectors producing traded goods[1] (e.g., manufacturing, agriculture). It is widely accepted that the manufacturing sector is spite of its growth, exhibits serious problems with regard to its sectoral structure (predominance of traditional branches, consumption goods), its low technological level and its dependence on foreign multinational capital concentrated in a few, technologically advanced, branches, and with a few intrasectoral or intersectoral - nationally or regionally - linkages.

The substantial decrease of agricultural employment during the last 20-30 years has not been accompanied by significant increases in manufacturing employment; as against considerable increases in sectors producing non-traded goods. Percentagewise, the active population employed in manufacturing is substantially smaller in Greece than in other OECD countries.[2] Another characteristic is the high percentage of self employed (own-account workers) in the total number of economic active population, as against that of employees.

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1. This is substantiated through international comparisons of the participation (percentagewise) of manufacturing, residential buildings, services, etc. in the formation of GDP. Greece appears as a special case where the output from ownership of dwellings as a percentage of GDP at factor cost is very large. See: a) OECD, National Accounts of OECD countries - Various issues, b) UN, International Statistical Yearbook - Various issues.

2. For example, employment in manufacturing (plus mining and quarrying as a percentage of total active population was (1975) 19.65 in Greece; as against 25.5 in Portugal, 27.5 in Spain, 33.63 in Italy and 37.2 in W.Germany. (See OECD, Labour Force Statistics, 1966-1977).

The industrial growth is characterized as capital intensive, while production increases are attributed mainly to increases in labour productivity than to increases in employment (Fakiolas, 1969). However, the structure of employment should be related not only to the growth of production sectors but also to the prevailing social conditions in rural (e.g., underemployment in agriculture, lack of social infrastructure, etc.) and urban areas to the role of migration in Greece - net population and labour force growth remained almost static due to sustained emigration. Tourism, a seasonal employment's sector has drawn its required labour from both the underemployed or selfemployed, low cost and low skill labour reserves in rural areas and the urban labour market.

The analysis of investment flows evidences the same pattern; investments tend to concentrate in the non-traded goods sector, predominantly dwellings. This is attributed (Giannitsis, 1983) to the prevailing conditions favouring higher returns on investments and the realization of higher profits in non productive, often "parasitic", sectors.

General considerations of tourism's socioeconomic effects

Tourism's importance to the national and regional economy, generally, or its relations (linkages) with other sectors of production in particular, have been, so far, studied very little in comparison to other sectors.

Regarding the structural effects of tourism it has been discussed (Maroulis, 1981) and supported theoretically, but not empirically, that tourism's expansion has a detrimental effect on the rest of the traded goods of the economy; on the basis of the argument that the increased supply of foreign currency generated by tourism makes the exchange rate overvalued relatively to other traded goods (industry, agriculture).

Certain estimates of tourism's interlinkage with other production sectors (backward linkages) differ considerably. Recent estimates (Zacharatos, 1984)of the direct demand inputs from other sectors show such inputs to be higher than 30% of the gross value of the domesti-

cally produced tourism consumption; in contrast to earlier studies[1], where the percentage was estimated in the region of 13%. Although regional estimates do not exist, one could generally imply that tourism's impact on the local-regional production system, or the contribution of the region's sectoral inputs to the gross value of the regionally produced tourism consumption, varies considerably from region to region. Of course, an assessment of such differences presupposes a detailed analysis of each region's particular consumption profiles and productive structure. However, here relying only on certain developments observed in the regional evolution of the agricultural and manufacturing sectors[2] and the particular types of production relations developing in tourism (discussed later in this chapter) we want to advance the argument, even in the form of an untested hypothesis, that in many peripheral areas, or regions, the tourist product is formed and consumed in a way that fails to mobilize, to any considerable degree, local-regional resources, thus conducing to the other sectors' regional growth.

In two other important areas, i.e., tourism's contribution to employment - tourism as a factor generating employment at either the national or regional level - and to the balance of payments, the existing information and research background is very limited indeed.

There are only "rough" estimates[3] of the total volume of employment, direct and indirect, generated by tourism which are not supported by any detailed survey in this area. As to the seasonal fluctuation of employment, it has been referred (Zacharatos, op.cit) that from the total labour force employed in tourism (100%), during the peak season, only 35% are permanent employees on an annual base, while the rest are employed for shorter (2-3 months) or larger (6-8 months) periods. Our analysis earlier (Chapter IV) has shown that the largest urban centres are evidencing a more even seasonal fluctuation of em-

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1. See Five Year Development Plan (1976-1980) of Greece, Special Report on Tourism, KEPE, Athens, 1976.
2. Observations refer to Regional Statistics evidencing the decline of production and/or employment in Agriculture and Manufacturing in certain of the tourist regions (nomi) of Greece.
3. In various studies and planning documents; e.g., see Five Year Development Plan (1976-1980) and Regional Statistics, op.cit.

ployment, as against certain tourist resort areas and smaller centres. On that basis and from certain regional reports[1] there is ground to support that, regionally, there exist significant variations as to the extent of the unqualified and uninsured personell being employed, or being drawn locally, or from the immediate vicinity; or, still further, as to the extent of the employed qualified and skilled personnel originating outside the region. From the above one could perhaps imply that the various regional Tourist Products, not only become "activated and operative" at different periods of time but, also, assume different qualitative "service" characteristics on the basis of the human resources being mobilized and employed. Such characteristics are to a large extent supported by, and dependent on direct state intervention[2], the types of tourism consumption profiles being deveped and the organizational structure of tourism enterprises: the scale and type of operation, the technology employed, the extent to which economies of scale are being achieved.

The contribution of foreign exchange (FE) earnings from tourism is usually limited to descriptive presentations of a series of statistical tables showing or comparing tourist receipts' percentile share or growth rates to the balance of trade and the current account receipts or, with receipts from shipping and emigrant remittances[3]. Additionally, FE benefits accruing to the country (and planning objectives to achieve higher rates of FE inflows) have been associated with one particular category of tourists, i.e., high income and spending capacity groups, without investigating before hand which type of tourism consumption profile would yield the greater net benefits; for example, low total volume, higher income groups, high per caput gross

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1. Various reports prepared by the Nomos' services for the Five Year Development Plan 1983-1987.

2. Unemployment subventions to hotel employees provided by OAED, a public Organization for Labour Employment.

3. Over the period 1960-1980 tourist receipts' contribution to the trade balance increased from 19,7% in 1960 to 31,2% in 1980. Their contribution to the current account receipts increased from 10,2% to 16,5% while tourist receipts as a share of invisible earnings, increased from 18,0% in 1960 to 28,1% in 1980. Source: Monthly Statistical Bulletin, Bank of Greece, Athens, various issues.

receipts but also high currency leakages, or larger total volume, middle income groups, medium per caput receipts and lower leakages? The unsuitability of tourism receipts data renders considerable limitation in clarifying important issues in this area. For example, what is the correspondence between the FE inflow and the real tourist consumption, or, how does the value of FE inflow relates to the value, in domestic currency terms, of the tourist consumption? Equally limited is information on two other issues, i.e., the import content of tourism[1] - the import cost of a whole range of items (leakages) required to service tourism - and the extent of FE inflows' dependence on exogenous factors - since the consumption conditions of the Greek Tourist Product are largely exogenously determined.

It is interesting to note here that the state's tourism policy has been formulated and exercised under the influence, predominantly, of one factor; i.e., foreign exchange limitations, or balance of payments deficits (the worsening trade deficits) have been considered of great significance in all macroeconomic policy formulations. Thus, general figures of tourism's "performance", as those mentioned above, were considered and projected prima facie for encouraging the sector's rapid growth.

2.1.2. Greece's territorial structure: Major elements of its physical structure.

Territory and physical space itself is a major differentiating element, an input element, which affects the formation of the Greek TP and its placing within the international tourist market in two ways:

a. Through the country's geographical location (peripheral) within the European territorial structure. In this respect, location-wise, Greece should be considered disadvantageous, regarding its distance from major European metropolitan centres-origin regions of international tourism and with regard, additionally, to the existing international transport networks. The importance of this factor has been evidenced in our analysis in chapter III.
b. Through particular features pertaining to the country's physical and human geography, its insular nature, or to the character of its resources (cultural landscapes), or to modes of space utiliza-

1. See, eg., Singh, B., The Impact of Tourism on the Balance of Payments, A case Study of Greece, KEPE, Athens, 1984.

tion and space consumption, historically determined.

With regard to the latter it is in place here to delineate major characteristics of the country's spatial organization of its territory.

Greece's regional structure, the critical problems of the Greek territory have been approached from various angles. The usual approach of many planning reports and development plans[1] has been to assess, within the existing regional - administrative or planning divisional frame levels of "development", or a region's "performance", on the basis of a series of socioeconomic and technical infrastructure indicators; the latter being suggested as significant variables instrumental to the country's regional development. Other approaches pertain to sectoral analyses, predominantly industrial, or focus on physical planning issues, e.g., settlements structure, land uses and transport networks. In the approach we undertook recently during the preparation process of the last (1983-1987) Five - Year Development Plan[2] there was an effort to extent the analysis of spatial structure at different spatiotemporal levels (e.g., different levels of spatial aggregation) to cover issues and factors that either transcend, or should not be analysed only in terms of the standard administrative or planning units; the basic assumption being that a search for explanation (clarifying interelationships and cause-effect relations) implies an approach based on the diallectic unity between physical space and production sectors' structure.

At the urban level (urban regions, larger settlements), the rather weak industrial structure and the enormous growth of tertiary activities, described earlier, took place within an uncontrolled, to a large extent, expansion and transformation of built-up areas and the urban fabric. This should be contrasted to the different scale and type of industrialization, reorganization of the productive system and service sector in many West European countries; where the

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1. For example see: Regional Development Programme of Greece, 1981-1985, KEPE, Athens, 1981.
2. Ministry of Planning, Housing and the Environment, Five-Year Development Plan 1983-1987, Physical Planning Policy, Final Report, Athens, November, 1982.

strength of industrialization supported by a complementary and proportional service sector, an organized distribution of industrial investments and equipment took place within a (more or less) controlled and controlable expansion of the urban fabric.

Such a differential pattern of growth may be related to the size, type and spatial direction of infrastructural investments; the latter being organized in a way supportive of the urban and regional structure, and contributive to the intensification of the capital factor in the productive process; as against infrastructural investments and works in Greece which were lacking or unable to follow the high urban population growth rates or, were, spatially and socially, unequally distributed within the urban region. It may be further related to the efficiency and effectiveness of the state's organization, its administrative machinery and institutions to regulate and influence the socioeconomic development process and consequently the organization of space. More concretely, with regard to the type and effectiveness of spatial planning policies and practices, such a differentiation may be attributed not only to the nature (scope and efficacy) of the available and applied planning instruments per se, but also to the supporting political attitude and action towards public participation; to the administrative, or the bureaucracy's capability to incorporate and accommodate in its programmes certain consensus over a relatively broad spectrum of interests and needs; as against planning decisions taken and interventions realized, following the inclination of only certain interest groups - usually the economically powerfull and/or those availing access to political power. Finally, the differential pattern of growth may be related to specific differences regarding the property system of land, or the land use practices and legislation. A characteristic worth noticing here concerns a particular form of urban development which is evidenced mainly in the urban fringe; namely the illegal development and utilization of space. The widespread phenomenon of illegal buildings - construction (illegal settlements at the urban periphery) evidenced also in other South European and Latin American countries, is considered a constituent element of the capitalist space production and utilization process; expressing the imperfections of and antitheses within a system, unable to cope with the internal migratory movements towards the big cities,

and the underlying conditions (structural decline of pre-capitalistic agriculture) in rural areas.

At the rural level, the interlace of demographic - depopulation (emigration) problems, specific problems of the agricultural sector, problems of production and social relations created todays situation and structural problems of rural Greece. A situation which certainly differs regionally depending on factors such as: a) the prevailing local conditions in the agricultural sector; structural (available resources, production, investments and employment in agriculture) and organizational in nature; b) the existing employment opportunities in other sectors and the available accessibility to socio-cultural resources and services, and c) the particular type of relations developing between rural producers (farmers or farmer coops) and the urban private commercial enterprices, as well as, the banking system and public agencies. The above factors and relations, apart from contributing to a continuous transfer and concentration of commercial and rentier capital at the urban centres, define the country's rural profile; which manifests characteristic structural quantitative and qualitative disparities (e.g., productivity in agriculture measured in terms of output per ha, forms of land tenure, etc.) when contrasted to the equivalent of certain other European countries.

2.2. The pattern of public and private investments in tourism: spatio-temporal aspects

The detailed analysis of public and private investments in tourism (see Tables V-14,15) over a longer period (1951-1974)[1] reveals three major characteristics which are discussed in this section.

2.2.1. Temporal differentiation as to the type and volume of public and private tourist investments.

While, during the period 1951-1964, the largest part in the flow of investments (cir. 60%) is directed towards the construction of tourist accomodation works (the state builds and manages hotels), during the period 1965-1974, public investments in tourism are directed main-

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1. Information on tourism investments after this period are presented in a more general form and not covering the same exactly spatial units (see Table V-16), to provide a basis for comparisons.

Table V-14

Public Investments in Tourism

(by category*[1] of investment - works, in thousands of Drs)

Period 1951 - 1964

Spatial Units*[2]	A	B	C	D	E	Total	%
1	59,950	3,956	51,325	19,000	1,700	135,931	12.1
2	39,235	10,542	19,645	6,480	-	83,902	7,5
3	20,225	5,125	610	2,050	350	28,360	2.5
4	33,000	8,316	2,652	13,445	-	57,413	5.1
5	273,858	138,851	54,496	49,229	31,424	547,858	48.9
6	63,823	750	7,355	-	50	71,978	6.4
7	55,371	21,550	6,332	7,550	2,475	93,278	8.3
8	31,278	3,682	7,455	5,030	-	47,445	4.2
9	17,650	2,225	1,450	20	-	21,345	1.9
10	32,640	800	1,500	-	-	34,940	3.1
Total	627,030	203,797	152,820	102,004	35,999	1,122,450	100,0%

Period 1965 - 1974

Spatial Units	A	B	C	D	E	Total	%
1	5,115	85,015	35,300	24,980	-	150,410	4.67
2	80,542	137,127	22,440	113,892	53,763	407,764	12.67
3	6,588	3,680	9,420	19,200	-	38,888	1.21
4	37,750	67,913	56,098	92,018	54,000	307,779	9.56
5	100,343	1,208,586	122,978	76,885	154,610	1.663,402	51.68
6	29,345	15,294	8,225	13,860	500	67,224	2.09
7	150,793	153,036	18,360	17,335	-	339,524	10.55
8	78,536	27,521	2,953	25,230	-	134,240	4,17
9	16,050	6,852	6,780	350	600	30,632	0.95
10	14,500	51,944	1,000	10,370	1,200	79,014	2.45
Total	519,562	1,756,968	283,554	394,120	264,673	3,218,877	100.00

*[1] Categories of investment - works

A: Tourist accommodation (hotels, motels, guesthouses, etc.).
B: Tourist infrastructure (restaurants, tourist information centres, marinas, organized beaches, etc.)
C: Engineering works and services (roads, water, electricity).
D: Conservation of monuments, spas, parks and caves, etc.
E: Land expropriation and administrative expenses.

*[2] See Map V-1.

Table V-15

Private Investments in Tourism

(fixed capital investments by spatial unit - see Map V-1)

	1954 - 1964						1965 - 1974					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Spatial Units	Total* Invest.	% (T.C)	Loan	% (1)	Own Capital	% (1)	Total* Invest.	% (T.C)	Loan	% 7	Own Capital	% 7
1	41,562	2.9	20,400	49.1	21,162	50.9	2,069,480	7.6	1,241,688	60.0	827,792	40.0
2	13,069	0.9	6,780	51.9	6,289	48.1	1,742,720	6.4	1,045,632	60.0	697,088	40.0
3	10,414	0.7	5,280	50.7	5,134	49.3	462,910	1.7	277,746	60.0	185,164	40.0
4	31,360	2.2	13,830	44.1	17,530	55.9	1,933,330	7.1	1,159,998	60.0	773,332	40.0
5	932,781	65.6	444,300	47.6	488,481	52.4	11,981,200	44.0	7,188,720	60.0	4,792,480	40.0
6	23,445	1.7	11,130	47.5	12,315	52.5	1,061,970	3.9	637,182	60.0	424,788	40.0
7	48,553	3.4	28,980	59.7	19,537	40.3	3,213,140	11.8	1,927,884	60.0	1,285,256	40.0
8	5,914	0.4	3,150	53.3	2,764	46.7	408,450	1.5	254,070	60.0	163,380	40.0
9	27,097	1.9	13,890	51.3	13,207	48.7	326,760	1.2	196,056	60.0	130,704	40.0
10	288,560	20.3	155,130	53.8	133,430	46.2	4,030,040	14.8	2,418,024	60.0	1,612,016	40.0
Total Country	1,422,755	100.0	702,870	49.4	719,885	50.6	27,230,000	100.0	16,338,000	60.0	10,892,000	40.0

* In thousands of Drachmas

Source: Bank of Greece - For the period 1965 - 1974 the total amount of column (9) has been allocated among the spatial units according to each units' percentile share in the total volume of hotel beds. It is also assumed that the ratio loan/own capital is the same for all spatial units.

Table V-16

Regional Distribution of Investments in Tourism

(Loans and approvals of private investments in tourism - Laws 1116/81, 1262/82)

Planning Regions	Approval of Loans*[1] (1972-1979) Loan (drs)	%	Approval of Loans Investment (Drs)	%	by 11.10.1982*[2] Grants	Hotel Units
1. Epirus	951,445,000	8.52	2,270,024,000	20,98	543,647,452	38
2. Eastern Macedonia	18,200,000	0.16	458,030,000	4,23	118,158,780	11
3. Central and Western Macedonia	715,519,000	6,41	417,160,000	3,86	99,099,880	11
4. Thrace	212,199,000	1.90	728,640,000	6,73	213,041,600	14
5. Thessaly	224,875,000	2.01	584,146,500	5,40	156,385,631	16
6. Eastern continental Greece and Cyclades	3,354,667,000	30.05	1,105,012,000	10,21	267,084,363	25
7. Peloponese and Western cont. Greece	611,800,000	5,48	1,194,650,000	11,04	248,327,721	36
8. Crete	2,799,524,000	25,07	1,545,057,000	14,28	273,821,535	30
9. Eastern Aegean Islands	2,276,478,000	20,40	2,517,918,999	23,27	766,238,013	51
Total Greece	11,164,707,000	100.00	10,820,638,707	100,00	2,685,804,975	232

*[1] : Source: Information provided by major Banks - ETBA, EKTE

*[2] : Source: Ministry of National Economy

ly towards infrastructural works. Such a reorientation of policy should be observed in connection with the investment behaviour of the private sector; during the same period (1965-1974) this sector undertakes a more active role in tourist accommodation (mainly hotels construction) assisted generously by governmental incentives and the banking system. (The state's policy towards the private sector is discussed later on in this section).

The above changes, however, are not realized autonomously, but are related to the country's socioeconomic growth process outlined earlier in this chapter. It should be pointed out that, during the period we are observing (1951-1974), the Greek economy underwent considerable changes. Till the end of the decade 1950-1960, the economy shows the classical characteristics of underdevelopment (low productivity in agriculture, overdevelopment of a services-tertiary sector, low contribution of the industrial sector to GNP, its inability to absorb surplus labor from agriculture, etc.). Major characteristics of this period are the reluctance of the private sector to invest either in the more dynamic industrial branches or in large scale tourist projects (housing construction absorbs the largest part of private investments), as well as, the public sectors investment concentration in transport and technical infrastructural works (particularly from the middle of the decade onwards).

Against such a background the relatively significant turn during the sixties, and even early seventies, of the private capital towards tourism may be attributed to certain factors such as:

a. The real fact that the country's overall infrastructure (particularly in transport), as well as, the specific tourism related infrastructure has been considerably improved and extended.
b. The extremely favorable terms provided to private investors; noticing in this respect that the annual rates of increase in the volume of tourist loans, provided by commercial banks, were 11,3% and 26,7% for the periods 1960-1966, and 1966-1973, respectively.
c. The repatriation of Greek capital from Middle Eastern and African countries, as well as, capital investments from emigrant remittances and shipowners.
d. The spectacular increase of international tourism demand during

the sixties and early seventies, particularly, in the Mediterranean region.

2.2.2. Spatial differentiation of tourist investments: intensification of geographical inequality in the distribution of tourist investments.

Geographically, or spatially, the distribution of public investments tends to become more uneven. Thus, comparing the two periods, one notices that the uneven concentration of capital investments in space is accentuated. Although during the second period (1965-1974) the annual height of public investments more than triples (from 1125 mill. Drs. in 1951-1964 to 3220 mill. Drs. in 1965-1974), the share of the Athens tourist region increases (from 48.9% to 51.68%). Additionally, only few regions and subregions evidence larger growth rates of investment, namely Crete, the Thessaloniki and Chalkidiki subregions and N.W. Peloponnese (Nomi Elias and Achaias).

The above evolution shows that public investments have not been instrumentally planned within an overall regional investments orientation frame (regional guidelines policy frame); aiming at attracting or gearing private investments to desired locations.

On the other hand, private investments, during the same period, continued to concentrate further in "established" places; with the exception of a few new regional units evidencing higher rates of growth. Such an evolution is not unrelated to the public investments' regional pattern outlined above. It may be attributed to the fact that private investors favored the relatively better equiped, with infrastructure areas, or areas which would secure a safer, quicker and higher return on investments. Still further, it may be related to the ineffectiveness of the regional policy measures undertaken by the central administrative - planning authorities to promote a more even[1], regionally, distribution of investments. Finally, it may be consider-

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1. The rationality of even, or uneven distribution of investments (on political, economic, social, or regional development grounds) is not argued here. Instead, the fact is pointed out that all regional planning policies and measures (regional incentives) adopted were intended in conducing to a more even regional distribution of investments and hence tourism development.

ed to depend on foreign tourist clientele's (demand) regional orientation which is in turn affected by the International Tour Operators; who select and promote particular regional destinations in their holiday packages.

2.2.3. Changes in the quantitative relations (participation share) between public and private investments.

During the observed period, the relation between public and private investments in tourism becomes more unbalanced, in the sense that the growth rate of new hotel buildings is not accompanied and supported by an appropriate infrastructure; an infrastructure that would enhance the overall environmental quality of the tourist landscape but, also, and equally important, would help increase the average annual occupancy ratio of tourist equipment, improving thus the return on investments.

The unbalanced structure between private and public investments[1] can be attributed not only to the lack of coordination between the central governmental agencies[2] responsible for policy formulation but, also, to the overall economic conditions (e.g., financial and fiscal measures) favouring a rapid expansion of tourist supply.

2.2.4. Foreign investments in tourism

Foreign investments in tourism seem relatively limited. During the period 1953-1981 foreign investments in tourism covered 5,8% of total foreign capital inflows ($ 1.750 mill.), as against 64,4% and 26,9% in industry and transportation, respectively[3]. One point worth noticing here is, what has been observed elsewhere (United Nations, 1982), that TNCs in tourism and the hotel sector are behaving and impacting differently from TNCs in other sectors; their impact being

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1. The relation public to private investments (PU/PR) was 1.0/1.5 and 1.0/9.0 in the periods 1951-1964 and 1965-1974, respectively.
2. Predominantly between the National Tourist Organization (NTO), responsible for public investments' allocation policies, and the Ministry of Coordination (now the Ministry of National Economy) responsible for regional development policy.
3. Source: Ministry of National Economy, Athens, 1984.

not so much through investments[1]. However, one should notice here that foreign tourism investments assume, spatially, a highly selective and concentrated pattern towards either a few major and well established resort areas (e.g., Corfu), or predominantly towards the Athens region. Apart from variation in the locational preferences among international hotel chains, what it is significant to refer is the widespread growth of the parahotellerie sector, the total investments towards which are difficult to assess quantitatively and qualitatively. The rise in price of traditional tourist accommodation, (hotels) and certain factors[2] negatively affecting foreign and domestic tourist expenditures and consumption behaviour, have been the driving force behind the growth of this sector; which has assumed, spatially, a more dispersed pattern favoured also by a rather widespread, socially, landownership pattern and the rentier capital growth.

The above pattern of tourist investments, as well as, the whole spatial structure of tourism analyzed so far will be further considered in the following chapter, which aims at discussing the state's planning activities with regard to the spatial organization of tourism. Relying on the analyses so far, one could remark here that the regional pattern of tourism investments, as it has evolved, does not seem to correspond to certain planning objectives stated in various development plans and programmes; the whole spatial pattern of tourist supply can be described, at this preliminary stage, as lacking in long term rationale from both a regional development and environmental point of view.

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1. According to a U.N. report "The main mode of involvement of manufacturing and resource-based transnational corporations, namely, direct or equity investment, is not the form usually chosen by hotel companies. Only about one third of the foreign-affiliated hotels are owned or partially owned by transnational corporations. Foreign capital participation in the hotel industry usually takes the form of minority equity participation. Foreign involvement may also take the form of loans from a variety of sources, including international agencies, transnational banks, the international capital market, land and property development companies, airlines, tour operators or even individuals unconnected with the hotel business". See: United Nations, Transnational Corporations in International Tourism, U.N., New York, 1982, p. 7.

2. For example, those related to economic recession in Greece and W. European countries or those related to the ITO's new product development processes and CIT package sales policies.

2.3. The organization of the tourist industry in Greece

A tourist industry encompasses all firms and establishmenta which serve diverse tourist activities and derive income from tourists. Within the study's context, the organization of the tourist industry in Greece is viewed with reference to a) the existing supply of tourist facilities and services and b) the agents involved in the production and provision of such a supply. In this section we describe mainly the spatial dimensions of the industry's structure, providing the background for the analysis and proposals, in subsequent chapters, of relevant to physical planning issues of tourism's spatial organization.

2.3.1. The industry's infrastructure: The accommodation sector; tour operations, travel agencies and tourism-related transport services

The accommodation sector in Greece is made up of a large number of small independently-owned units of different categories. The phases of the sectors's growth are outlined in Table V-17. In spite of the growth in size of the hotel sector proper, and in the number of hotel firms operating more than one units, the sector's size structure is one where the major part of the bed capacity is provided by small establishments. More important, the growing part of the bed capacity is progressively provided by the supplementary and informal[1] accommodation sectors. This may be due to several reasons. The growth of cost pressures on hotels turns many investors to self-catering accommodation. International tourism demand for supplementary, or non-hotel types of accommodation increases faster than demand for hotels and tour operators in several regions of Greece favour and promote in their packages, this type of accommodation. Also, it may be the case that the uncontrolled, or illegal growth of this accommodation category attracts those investors who seek to avoid the formal planning procedures, related to the location of tourism establishments, as well as, to evade taxation.

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1. Under the term informal we include all those accommodation categories (apartments, villas, rooms for rent, etc.) which are not registered as tourist accommodation per se, i.e., develop and operate in an uncontrolled, or illegal manner.

Table V-17

The accommodation sector in Greece :
Phases and characteristics of its growth

Phases	Agents and types of growth	Investments and product characteristics
Phase A: 1955-1965	• Selective and controlled growth of the hotel sector proper by both the private and public sectors • The state builds and manages model hotels in selected locations	• Public and private investments grow almost proportionally • Early stage of resort development (beach holidays) and growth of urban tourism-touring-sightseeing (cultural attractions)
Phase B: 1966-1974	• Enormous growth of the hotel sector by private agents predominantly • State support of hotel accommodation through a "generous" incentives system • A relative smaller increase of supplementary accommodation	• Disproportional growth of public vis-à-vis private investments • Spontaneous growth of coastal resorts with deficiencies in supportive infrastructure; predominance of the hotel component in the indifferentiated, inter-regionally, tourist product
Phace C: 1975-1985	• Continued growth of the hotel sector with lower generally growth rates; further concentration in "established" regions (e.g., Crete, Corfu, Rhodes) and relative decline of Athens region • Parallel and considerable growth of supplementary accommodation: paraho-tellerie and the informal sector	• Continued disproportional growth of public versus private investments • Further and more varied growth of accommodation in coastal resorts with accentuated infrastructure and environmental problems; small scale development of winter sports, spas and marinas facilities, as well as, conversion-renewal of buildings in traditional settlements.

Sizeable firms and concentration of ownership (ownership of groups or chains of hotels, motels or other accommodation categories) are not as yet a widespread practice in Greece; although possibly the situation might change with the country's entrance into the EEC and the abolishment of all protectionist barriers after 1992.

The growth of the non-hotel accommodation sector is viewed by the hotel industry's representatives with concern. They argue, asking the government to undertake appropriate measures, that such a growth in causing a decrease in the nights spent by tourists in the country's hotels, lower occupancy rates, as well as, lower foreign currency inflows. Against these arguments, local pressures on government in favour of non-hotel accommodation categories seem powerful; explaining perhaps to a certain extent the government's lack of a clear-cut policy in this area. Although this issue will be discussed further in the following chapter, it is in order here to add the following.

From a regional development point of view, the gains or benefits accruing to a local community from the growth of certain accommodation categories of the non-hotel sector, may be larger than those resulting from hotel developments. In this respect, and in the absence of specific studies of the Greek situation, one could refer to relevant impact studies and input-output models undertaken, or employed elsewhere (e.g., see our review in Chapter II and particularly Archer, 1973). In these studies, among the assessed income multipliers, which vary by accommodation category, the bed and breakfast/farm house category was found to have the highest multiplier. Of course, there are counter arguments developed in this area which refer to the narrow viewpoint of this type of impact analyses: local tourism multipliers disguising the benefits accruing beyond the study area's boundaries, or to other parts of the regional and national economy.

However, in connection to the above, we believe that any measures taken in this area should be carefully planned. A uniform on a country-wide basis approach to confine the growth of the non-hotel sector may be not the best solution to the problem, since the conditions in each region differ. Instead of a "blanket coverage" response to the situation concerning the growth of different accommodation categories,

the government should differentiate its accommodation policies by region and according to both regional development and national-economic growth objectives.

Apart from the accommodation sector, travel agencies and tour operations, as well as, tourism-related transport firms constitute the other sector of the industry's infrastructure. Greek tour operations and travel agencies perform three major functions: a) provide various services to foreign tour operators, acting as intermediaries between a tour operator and the different elements of the tourist product, b) organize various tours within Greece, c) organize travel packages for Greek nationals traveling abroad. The distribution by category and regional unit (nomos) of tourist enterprises is presented in Table 3 of Appendix C. However, this table includes only a part of the existing enterprises. There is a plethora of small "offices" (3000 according to estimates by the sector's representatives) with an average employment of 2-4 persons each. The large number of offices and the lack of an officially organized registry, which renders the observation of their activities and practices difficult, are attributed to the inadequacies of existing legislation (Law 393/1977). Furtermore, this kind of organization seems to contribute to an increase of the "internal" friction and competition among firms which frequently resort to reducing the price and to lowering the quality of services offered.

Among the tourism-related transport organizations and firms, those pertaining to air transport play the most significant role[1] due to the location of Greece vis-à-vis the country's major markets. Unlike its Mediterranean tourism competitors (e.g., Spain, Yugoslavia, Italy), Greece does not border, with the exception of Yugoslavia, any other country of significance as a market of international tourism. Thus, the country is dependent on air transport and on the kind of

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1. During the period 1972-1982 the percentile share of foreign tourist arrivals by air, in the total number of tourist arrivals, increased from 65.2% to 70.5%. Also, during the same period tourist arrivals by charter flights increased from 662782 to 2383974. In 1982 charter arrivals represented 43.6% in the total number of tourist arrivals and 67.2% in arrivals by air.
Sources: Based on statistical data of the National Tourist Organization and the Civil Aviation Service of Greece.

air connections with the major W.European centres-sources of international tourism. The national air carrier, Olympic Airways, serves about 20% of the country's foreign market, while charter traffic is carried exclusively by foreign companies linking Greece's regional destinations, mainly on a seasonal basis, with the major W.European markets.

Within the W.European context, sea travel (liner services) has declined in importance to day. Only ferry traffic (car ferry services) plays a significant role, e.g., in the English Channel and the Baltic, Adriatic and Ionian seas. The significance of ferry traffic lies in the fact that almost half of the European holiday tourists use a car on their holidays. However, in the case of Greece sea travel and specifically the car ferry link with Italy, sea cruising in the Aegean, and the sea liner services connecting the numerous Greek islands with the mainland are of major importance for both international and domestic tourism, as well as, for promoting regional development.

The organization of the "sea-tourism" industry in Greece is based predominantly on numerous (individual, or family-owned) enterprises and, to a lesser extent, to the so-called "Companies of Popular Base": Joint stock companies of a wide participation and equity distribution among the local population. These companies are established (under Law 849/1978) to improve sea transport (passenger and freight) to the islands (e.g., Crete, Lesbos, Chios, etc.). According to the "Shipowners Union of Passenger Ships"[1], in their union belong 24 shipowning enterprises with 32 ships of 15000 beds capacity. Such a fleet is serving mainly the sea-cruising (Mediterranean and Aegean) and car-ferry (Italy-Greek link) markets. Although the sea-cruising's percentile share in the tourist market is relatively small[2], sea-cruising is considered quite significant because first, it serves a relatively wealthy clientele, second, it exhibits a more even seasonal

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1. See Proceedings on the "Panhellenic Congress of Tourist Enterprises", Athens, March, 1984, p. 90.

2. The percentile share of sea-cruising tourists, in the total tourist arrivals, was 10.8% and 7.9% in 1972 and 1982 respectively. Source: National Tourist Organization.

distribution (May-October), and, third, it serves regional development purposes by spreading tourist expenditures over a relatively large number of places.

The growth of nautical tourism and yachting seems to lag considerably behind that of other Mediterranean countries, especially France and Italy, with a strong domestic market, a well-organized and equipped network of marinas, chartering and renting agencies, as well as, the development of supporting leisure and pleasure boating industries. In spite of its attractions and the fast growing demand in the Mediterranean, the country is inadequately organized in terms of the available and necessary infrastructure (marinas network, ship-chandler services, sailing schools, etc.), as well as, with regard to the regional distribution of facilities (over 50% concentrated in Greater Athens).

Road transport related to international tourism concerns mainly a relative small and declining percentage of tourists arriving by private cars[1], as well as, the various tours within the country organized by private bus and car-hire companies. In both cases, apart from arrivals statistics at the main gateways (port, or stations of entry) and the dominant position of Athens (as the centre of most coach tour circuits around the main archaelogical and historic attractions), little is known about what foreign tourists do, or where they go after they arrive at particular locations. The spatial distribution of motorized tourists, the main routes taken, or the volume of traffic and the nodes-centres of touring attraction are issues that need to be explored. We have analysed, earlier in Chapter IV, a very broad pattern of home tourists outdoor recreation and week-end traffic along the country's main national road axis (Thessaloniki - Athens - Patras). There are indications that this major development corridor of the country attracts, along with other activities (industrial, services and commercial), the bulk of tourism and recreational movement by road, and related facilities and services. However, both

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1. During the period 1972-1982 the percentile share of foreign tourist arrivals by road, in the total number of tourist arrivals, decreased from 19.1% to 15.2%.
   Source: National Tourist Organization of Greece.

a more comprehensive and several detailed studies of touring patterns are needed; in order to acquire additional information for the purpose of local and regional planning of tourism. The analysis in the preceding section of this Chapter had a static character: Observed and recorded (time, or region - specific) volumes of demand were correlated to selected demand and supply variables, or location attributes. The study (description and explanation) of dynamic tourist movement (intra-national, or inter-regional) patterns would require and presuppose the undertaking of special surveys of motorized visitors like those undertaken elsewhere (e.g., see Carter, 1971, BTA, 1976, Pearce and Elliot, 1983).

With reference to the organization of coach tours, one should particularly remark a situation - a large number of tourist buses and their heavy concentration in Athens - which is similar and related to the situation of travel agencies described earlier. According to the President of the Tourist Buses Owners Confederation, "we have today 4280 buses, while tourism needs only 2000 in this country"[1]. This may be another case of an excess capacity in supply, or, possibly a case whereupon this supply category does not serve exclusively specific tourist demand situations but it may satisfy demand for services of other sectors, e.g., the educational (school busing) sector.

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1. See "Panhellenic Congress of Tourist Enterprises", op.cit. pp. 136-137.

2.3.2. The tourist industry's agents: Local Tourist Agents (LTA) the State (government agencies) and International Tour Operators (ITO)

We have discussed earlier in chapter III the organizational structure of international tourism, the specific activities, roles and functions developed and assumed by its major agents, in relation to the means of tourism production. Within such an organizational structure the ITO act as intermediaries between the tourist clientele and the TP affecting, through the packages and programmes repertoire marketed, both the volume and type of tourism consumption and the spatial frame of tourist demand allocation. It has been supported (U.N., 1982) that the extent of dependence of a destination country from the ITO, and its ability to moderate or diminish their bargaining power, or the "demand constraints" they impose, relates to the particular tourism development strategies the destination country promotes, to the effectiveness of the policy measures it undertakes, or, to the whole organization structure of its public and private tourist enterprises.

In the case of Greece the role of ITO who act as intermediaries between the Greek TP and the foreign tourism clientele, and the problems associated with their activities have not been investigated. Certain general observations and discussions that have been made pertain to the bargaining power and price-setting practices of ITO with particular reference to Rhodes (Logothetis, 1977) or to a theoretical approach of core-periphery relations (Komilis, 1981). Recently, however, such problems,which appear to draw the attention of Greek tourist agents and enterprises, may be due to the increasing problems that the tourist sector is facing. Their representatives consider[1] such problems as a "natural and inevitable consequence" of the rapid growth of the hotel sector, the excess hotel capacity and the inefficiency of the air transport infrastructure and services. They support the view

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1. See Proceedings of the "Panhellenic Congress of Tourist Enterprises", Athens, March 1984, pp. 31-38.

that such factors, together with an inefficient organization and marketing policy of the private sector, led to an increased reliance on ITOs; a reliance which is thought to affect negatively not only the structure of the Greek TP and its evolution, but also the very image of Greek tourism in the international market and, even further, the volume of foreign currency inflows. The various arguments in this area revolve around two major themes as follows. In the first place, it is argued, that ITO conduce to the creation of a standardized tourist product by marketing the most profitable to them stereotypes of tourism consumption; they further conduce to a continuous growth of tourism in already developed areas, causing saturation and environmental deterioration problems by avoiding, or hesitantly selecting new destinations - and the risk of cost this would involve - as against established, well tried, or tested resorts. In the second place, the arguments focus on the dominant bargaining position that ITOs hold in their transactions with LTAs (e.g., hotel price fixing, contractual arrangements, etc.) and, also, on their negative economic effect regarding foreign currency inflows; the argument being here that through their practices[1] conduce to the reduction of foreign currency inflows.

The above discussion, however, would be limited and one-sided if it does not consider certain additional and significant parameters of the problem; namely, those pertaining to certain structural characteristics of the Greek TP as they relate to the role of ITO, LTA and the State.

Comparisons of the competitiveness of the Greek TP with that of other countries, mainly Mediterranean, seems to be a very complex and controversial issue. First, it would be very difficult to assume, that within present day reality pertaining to the organizational structure of the tourist trade[2], there is "perfect competition in a

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1. Such practices pertain to methods of payment by ITO and to their direct or indirect support of certain accommodation forms in the parahotellerie sector.

2. Within this context one should observe: a) the structure of tourism service which is owned and controlled by the tourism generating countries (Cleverdon, 1979); b) the "competitive advantages" enjoyed by TNCs in tourism vis-à-vis tourism enterprises in destination countries (UN, 1982); c) the "oligopolistic behaviour" of ITO in certain European markets, e.g., the W. German (Hochreiter, Arndt, 1978).

free market". Secondly, even more important, there exist certain difficulties pertaining to the very nature (the non-homogeneity) of the TP, as has been earlier suggested, and hence, to defining comparative relations of "price-quality" among different tourist packages that are offered for consumption in the international tourist market. Thirdly, the available information on a plethora of factors[1] and related research on cause-effect relations among such factors are limited. Under such conditions there are obvious weaknesses in the following analysis which does not focus on the competitiveness issue per se, but attempts to draw a general cost structure characteristics of the Greek tourist package.

The analysis of Greek tourist services' costs, making up various tourist packages (excluding transport costs) during the last twenty years (see Table 9, Appendix A) shows that such costs have remained, in comparison to equivalent of other countries, at low levels. What can be argued in this respect is the following. If the final price of a Greek tourist package offered today to the foreign tourist-consumer is considered high, relatively to an "equivalent" package of certain competing countries, then this is mainly due to the transport cost factor and to the high percentage of the ITO's service cost (and profit) component that it contains; or, to the service cost (and profit) of those agents intervening between the ITO and the consumer.

On the basis of data provided by the Greek NTO's offices abroad, and concerning various Charter Inclusive Tours (CIT) packages of major tourism origin countries, one may observe (see Table V-18) certain differences among countries regarding the price levels of the Greek TP; while price differences among Mediterranean destinations seem to be less pronounced. Further, comparisons[2] among prices of CIT packages,

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1. For example, factors and issues such as a) costs corresponding to the diverse tourist services and packages offered and standards of living differentials between origin and destination countries, b) practices of payment arrangements in contracts between ITO and LTA, c) inflation and exchange rates differentials between origin and destination countries and their impact on the price of the tourist package, etc.

2. Comparisons with data from 1983 show, e.g., the following:
   a) foreign currency receipts inflow is estimated at $ 350 per capita (Bank of Greece).

Table V-18

Cost of the Tourist CIT Package

(average weekly cost in national currencies, 1983)

From Origin / To Destination	Spain	Portugal	Italy	Yugoslavia	Greece
USA*	$ 400	$ 370	$ 500	$ 320	$ 460
Scandinavian Countries	Sk 1750 (Mallorca)	Sk 2195 (Algarve)	Sk 1750 (Rimini)	Sk 2365 (Dubrovnic)	Sk 1995 (Rhodes)
United Kingdom	£ 100 (Palma)	£ 120 (Algarve)	£110 (Venice)	£ 125 (Dubrovnic)	£ 140 (Corfu)
Federal Republic of Germany	DM 1100 (Costa del Sol)	-	-	DM 1120 (Dubrovnic)	DM 1250 (Crete)
Netherlands	DG 1353 (Mallorca)	DG 1388 (Algarve)	DG 1242 (Rimini)	DG 1123 (Dubrovnic)	DG 1307 (Peloponese)
France	FF 2355 (Baleares)	FF 3170 (Algarve)	FF 3355 (Sicily)	-	FF 3190 (Athens)
Switzerland	SF 1400 (Mallorca)	-	SF 1988	SF 1246 (Dubrovnic)	SF 1505 (Crete)
Austria	SC 9600 (Mallorca)	SC 12380 (Algarve)	SC 9390 (Sicily)	SC 7920 (Dubrovnic)	SC 9330 (Corfu)

* Without air fares cost

Source: Survey of the Greek NTO offices abroad, 1983.

foreign currency receipts and estimates of the share of the "Greek services" component to the total price of the CIT package suggest that, percentagewise, a large share (40-45%) of the total cost of the CIT package remains at the destination country (receipts of ITO and airline companies).

Although there is not sufficient empirical evidence to explain or support certain distinct patterns, regarding the behaviour and practices of either ITO or LTA in Greece, one could, perhaps, assume that there is no uniformity in the behavioural patterns of either of these two agents. This can be based on observations of hotel (or tourist services, in general) differential pricing practices; e.g., various hotel services of equivalent standards are differently priced by the different hoteliers, or the same hotel service while sold at the same price to different ITO is differently priced in the packages offered by them.

ITO through their strength to set the conditions for the distribution-disposal-appropriation of the TP and through their price fixing power are exerting an indirect pressure on tourism factors (particularly labour) remuneration, the extent of which cannot be assessed. Obviously, this pressure is further channeled through the LTA upon the hotel, or other tourism employees as well as governmental agencies. LTA raise claims that hotel operating costs contain a high percentage of labour costs[1], thus affecting negatively the international competitiveness of their services. They ask from the state supportive measures, or recourse to cost cutting measures (e.g., firing employed, or hiring unqualified, personnel); assisted in the latter case by the lack of appropriate legislation concerning the staffing

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b) The average price of the holiday package "Greece", sold as CIT abroad, is estimated at the price of $ 625 per tourist (estimates by the Greek NTO offices abroad).

c) The "Greek services" component of the final CIT package (of average duration) is costing to the ITOs $ 200-250; or, the percentile price share of "Greek services" to the total package price is 35-40% (estimates by representatives of Greek hotel enterprises and travel agencies).

1. According to information provided by the Panhellenic Federation of Hotels, labour remuneration expenses cover 39,4% of the total expenses.

with personnel of tourist enterprises (minimum standard requirements).

The antagonism among LTA, which always existed, becomes today more intensive, due to the prevailing internal conditions (inflation, rising costs), and as ITO increase their pressure in order to achieve better prices for accommodation and services, and, thus improve the attraction of their "packages" within a more price competitive tourist market. It is characteristic that LTA lately[1] demand the state's involvement and committment in their bargaining transactions with ITO; supporting a closer cooperation between the state and ITO in the marketing and distribution of the tourist product and even measures for curtailing the bargaining power of ITO and "monopoly" conditions.

Within the relational context of ITO, LTA and the State, the role of the latter is briefly described here while certain aspects of its activities (those relating to the planning process) are discussed in Chapter VI.

The state is not directly involved in any form of arbitration between ITO and LTA. It is also not involved in the commercial practices (e.g., issues of profits, transfer prices, imports and appropriateness of technologies brought by international hotel chains, etc.) adopted by foreign tourist organizations. The range of hotel prices set annualy by the NTO is indicative, not legally binding and in any case of minor significance as an instrument to support the bargaining position of local tourist agents, particularly the small and medium sized ones. Even in specific problems appearing "occasionally", e.g., that of overbooking, the state reacts and approaches the problem as if it is an internal affair of particular tourist enterprises, pertaining to their organizational structure and not as a consequence of the prevailing unequal exchange system - bargaining mechanisms between ITO and LTA.

On the other hand, although the state, through the network of the NTO's offices[2] abroad, or through various policy measures undertaken

1. See Proceedings... op.cit. pp. 31-38.

2. Greece operates 21 offices abroad, while it is second, after Spain, regarding the expenditures for promotion and advertising. See: The Economist Intelligence Unit, "National Tourist Offices: The role and functions of an NTO abroad", Special Report No. 46, International Tourism Quarterly, No. 2, 1983.

at home (e.g., those relating to fiscal and transport policies, etc.), seeks to promote a particular image of the country abroad and the competitiveness of the Greek TP, it does not succeed in overcoming the structural weakness of the supply sector, or in influencing demand factors. During periods of crises in tourism, the state reacts arbitrarily in two directions: a) by seeking to unite and achieve consensus among all interest groups - employers' and employees' organizations and representatives - around a common platform; basically the need to maintain the price competitiveness of the Greek TP, and, b) by providing guarantees to ITO about the price stability and quality of the TP offered; in this case NTO's top officials are, even personally, seeking to improve liaisons with ITO.

Relations between LTA and the state have always been close; private tourist bussinessmen having frequently a direct say in government, or in circles of senior administrative officials. Representations of particular private tourist interests in various administrative committees (established to suggest policy measures in tourism), and consultative bodies, appear powerfull and effective; in contrast representatives of labour appear as poor relatives.

Concluding the above brief analysis, one should suggest the need for a systematic investigation of the role and effect of ITO in Greece; an investigation that would consider ITO within the frame of social relations, within which they operate, and which effect their actions.

2.3.3. Examples of ITO's and LTA's spatial behaviour

a. International Tour Operators

A central issue, which follows and falls within the context of the above discussion, pertains to the effect of ITO on the spatial structure of tourism in Greece. An initial attempt to search into the factors and define the criteria according to which ITO select and promote various destinations has been discussed in Chapter III. Extending that discussion one could restate and point out further that certain factors assume considerable weight in the decision-making process of ITO, regarding the holiday resorts and

regions they promote in their programmes. Thus, the "experience of tried-tested resort" and "price competitiveness" seem to be among the most important factors. On the other hand, many "new holiday resorts" do not enter frequently into the programmes of ITO (1-2 per year), while many ITO undertake considerable research and planning before hand in selecting new destinations. Among those factors which play an important role in their selection and decision-making process seem to be the following:

i. Cost of going into a new destination in conjunction with the price competitiveness of the new destination in the tourist market.

ii. Estimate of demand for various destinations and studies on their clientele's tastes, trends in their choice of destination, changes in popularity ("in" and "out" places).

iii. Policies of other competing tour operators, their booking levels, market diversification and/or specialization.

Thus, we can make a general concluding remark, even in the form of an untested hypothesis, that ITO support or favour those regions (tourist products) from which they gain, or expect to attain, higher profits.

Focusing on one tourist clientele - the British - we have analysed the programmes of 78 British Tour Operators who include in their programmes the package "Holidays in Greece or Greek Tourist Resorts". From the analysis (see Tables V-18,19) we observe the Greek tourist regions included in the programmes, and the degree with which these regions are "preferred" by the ITO; merely on the basis of the number of tourist enterprises patronizing and promoting each region. Such differences in "preference" among ITO could be, also, implied from the analysis of tourist demand's spatial distribution undertaken earlier in Chapter IV. What is, however, worth noticing here is the significant correlation between demand figures (nights spent by British in various regions) and the number of British ITO marketing holiday packages for those regions. The volume of tourists directed to each particular tourist resort is directly related to the number of British ITO marketing that particular resort.

Tables V-19,20

British Tourist Demand in Greece

Table V-19

	Greek Tourist Regions or Resorts	(1)	(2)	(3)	(4)
1.	Attica - Athens region	56	144.0	719.4	5.0
2.	Delphi	7	13.0	15.6	1.2
3.	Evia - Eretria	4	4.3	34.2	8.0
4.	Thessaloniki-Chalkidiki	14	11.0	54.9	5.0
5.	Mykinae-Epidauros, Nauplio	7	9.9	34.5	3.5
6.	Saronic gulf isles	24	29.6	147.9	5.0
7.	Cyclades	17	10.8	54.2	5.0
8.	Crete	44	62.7	501.3	8.0
9.	Ionian Islands - Corfu	55	132.3	1.058.6	8.0
10.	Dodecanese - Rhodes	44	43.1	345.1	8.0
11.	Kavala - Thasos	3	5.4	21.5	4.0
12.	Olympia	5	10.0	12.1	1.2

(1) Number of British TOs marketing the various Greek resorts in their holiday packages.

(2) Number of British tourists-arrivals (in thousands)

(3) Number of British tourists-nights spent (in thousands)

(4) Average length of stay (number of days).

Sources: - Holidays Tour Index, Travel Trade Directory, 1978. Morgan - Grampian House, Calderwood Str. London.

- The Greek NTO.

Table V-20

Hypothesis:

British tourist demand,for the specific regional units or resort areas in Greece,is related to the number of British TOs. patronizing or including in their programmes the specific regional units. The two alternative cases examined pertain to the tourist nights spent (Y_1) and arrivals (Y_2) respectively.

C A S E I

Model Equations	a	b	R^2
$Y_1 = a + bxi$	104.961	15.210	0.844
$Y_1 = a.b^{xi}$	16.158	1.076	0.946
$Y_1 = a.xi^b$	2.304	1.364	0.876

C A S E II

Model Equations	a	b	R^2
$Y_2 = a + bxi$	-10.763	2.162	0.825
$Y_2 = a + b^{xi}$	5.613	1.057	0.935
$Y_2 = a.x_i^b$	1.295	1.027	0.865

It is evident that the above brief and limited in extent analysis provides only an indication as to the effect of foreign ITO on the spatial distribution of tourism, or as to a regions' dependence on external factors. Conclusions of general applicability, or wider implications, can be drawn only after extensive research covering not only major segments of foreign tourist clientele in Greece - and different samples of foreign ITO marketing the Greek TP - but, also, existing relations among ITO and LTA, particular regional conditions regarding foreign land and real estate ownership patterns (e.g., those of British in Corfu) and the activities, the state undertakes to assert national and regional development priorities.

b. Local Tourist Agents

The importance of Athens as the gravity centre of Greek tourism and the dependence of many regions from the centre can be clearly shown in the case of private tourist firms' spatial distribution. In the analysis, we have assumed that the seat of a firm together with the place of its activities (e.g., the location where the hotel of a particular firm is established) are two parameters which indicate a region's tourism potential. The analysis of different categories of tourist enterprises revealed that, percentagewise, the Attica region, or Greater Athens, attracts the largest share; 48,4% and 57% of the hotel branch proper and of all other tourist branches respectively (see Table 3, Appendix C). The places where most hotel firms, with seats in Attica (295) establish their activities (hotel buildings) are in order of importance:

a. The Ionian islands and predominantly Corfu.
b. The Dodecanese (Rhodes), Crete (Heraklion, Aghios Nikolaos).
c. The Cyclades, Thessaloniki and Eastern Aegean islands.

Apart from Athens, tourist firms have set up their seats in a few other regions, or regional capital centres, namely, Rhodes and Corfu, Heraklion and Thessaloniki (in that order of importance), while the places of their activities are usually established in the same centre - region or in an adjacent region (e.g., Chalkidiki region for Thessaloniki).

An additional evidence of the dominant character of Athens is derived from the analysis of a series of statistical information per-

taining to hotel building permits issued by the Greek NTO during the period 1975-1978[1]. Such permits refer to: a) the private investor's place of residence or seat of the hotel firm, and, b) the locality where the hotel will be built. The analysis has shown that 44,5% of all hotel beds (cir. 72.000) which were granted building permit belong to investors who reside in Athens. This percentage is even greater (53%) when high rank hotels are taken into consideration.

The above two examples illustrate certain aspects of the private tourist enterprises' activities pattern, offering some further insight to understanding the spatial structure of tourism. An attempt, however, to analyze such patterns in depth would lead us, inevitably, to discussions of particular regional problems or problems of regional inequality in peripheral areas; to the analysis of certain underlying factors pertaining to the monopolization of credit, commerce and trade by the centre, or to processes of transfer and accumulation of capital at the centre. In other words, it would lead us to such approaches which look at the problems in terms of certain internal colonialism models (Gonzales-Casanova, 1965, Hechter, 1975), or in terms of political economy.

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1. See Table 4 in Appendix C.

3. Conclusions

Concluding the analysis in this chapter, one should outline certain points that emerge from the discussions so far; points referring to the factors influencing the spatial structure of tourism in Greece and are thought to have either wider planning implications and/or merit further investigation due to their importance.

3.1 The growth of tourism demand and its regional orientation seems to have been strongly influenced by regional accessibility attraction and "serviceability" factors; the latter pertaining to the whole netting of tertiary employment, infrastructural works and services, and fixed capital investment in tourism proper which have assumed predominantly an urban-central orientation. It is pertinent to remark that the growth of tourism, starting by the early sixties, was favoured by efficient at that time infrastructural investments and works in transport, concentrated, however, in a few regions. Additionally, it was favoured by an overall economic environment which gave emphasis and promoted buildings-construction, real estate and rentier capital, as well as, import commerce and services expansion.

The significance of transport and accessibility factors for tourism development implies that transport and tourism planning objectives and policies should be closely related and coordinated at various spatial levels. At the national level, Greece's location within the W. European context, and the way the country is connected with, and dependent on the international air-travel system, suggest the need for a careful inter-sectoral, or combined (transport - tourism) strategy towards increasing the efficiency and competitiveness of the country's international air-transport connections, as well as, improving the quality of the transport component making up the Greek TP.

Also, at the national and regional level, the development of sea-travel and touring infrastructure, as well as, of related types of tourist activities, could serve as a means of mitigating overreliance on resort and mass tourism, and, hence, dependency on air-transport. Additionally, the extension and build-up of

sea-travel and road-transport infrastructure would conduce to the diversification and enhancement of the TP, a better regional distribution of demand and the promotion of domestic tourism.

Drawing on the relevant literature pertaining to the intervening opportunities model, we have critically examined areas and cases of its application and its relevance within the Greek context. Here, we have indicated usefullness, or explanatory potential, of the intervening opportunities hypothesis particularly in the areas of outdoor recreational travel, and defined the data required; suggesting also the nature of surveys and the research issues that should be undertaken and explored.

3.2 The analysis of public and private investments in tourism revealed specific aspects of its structure and the underlying temporal differentiation in the role of the state. During the boom period of tourism's growth, the state supported an expansionist supply policy favouring large scale development in the accommodation (hotel) sector, and conducing, through its incentives, public investments and other tourism-supporting policies, to the concentration of tourist supply in a few regions. The parallel growth and the relative dispersal of small, or medium-sized hotel establishments should be seen as a result of the very favourable financial and fiscal measures provided. From the mid-seventies onwards one way observe certain changes in the spatial investments behaviour of the state, or private agents. Changes which affect the growth, type and distribution of tourist investments and which seem to be related to: a) the awareness of the problems created by the rapid growth of hotel accommodation (lower occupancy ratios, increasing operational costs, etc.), b) the slower growth rates of international tourism and the ITO's policies favouring or promoting non-hotel types of accommodation, c) the state's effort towards developing new forms of tourism and diversifying the TP; albeit such an effort lacks in clarity of scope, or in sufficient capital investments and in technical-managerial support needed. However, even during this period, when we observe high

growth rates in a few new peripheral regions and a faster growth of supplementary and informal accommodation types (vis à vis the growth of hotel accommodation), the traditional, or established places continue to expand their accommodation capacity and attract steady volumes of investments.

Recapitulating our earlier discussion of possible reasons underlying the concentration of investments in established places we may add and indicate the following:

- It may be the case, that in established, as against other places, revenue grow faster than costs, as a tourist concern advances its operations there; in places where, it may be argued, external economies of scale are reaped by new tourist firms locating there.
- The markets (the clientèle from generating countries) and the ITO continue to orientate their preferences towards established destinations and thus, possibly, conduce to the destination's expansion of accommodation capacity.
- Also, in relation to the above, what possibly affects a continuing concentration of investments is the lack of an appropriate supply strategy of devising-designing and developing-promoting new products, or "enriching" existing ones which would "pull" both private investors and demand to new locations.

The observed uneven spatial distribution of public investments and the inhabalance, or lack of proportionality between private and private investments, may not constitute a problem as such. The problems arise when and where the tourist superstructure (hotels, or other accommodation) is growing without the supportive and complementary growth of infrastructural works and services (technical, sociocultural, environmental); a course of growth affecting negatively the quality and the very attractiveness of the regonal tourist product.

What is emerging from the analysis of investments distribution, and the related behaviour of the tourist agents involved, is the need for a more effective regional tourist policy comprising:

a) an incentives systems directly related to the tourist public investment programmes (implying coordination among the relevant central governmental departments) and/or an incentives system which offers "strong" enough advantages which outweigh the relative better conditions in infrastructure, services, or labour supply, existing in developed areas,

b) public investment programmes of two kinds: programmes built around major new product categories and/or including facilities and services which enrich existing products; programmes of basic infrastructural-engineering-environmental works geared towards either less developed regions, or towards upgrading and enhancing the environment in the developed resorts.

3.3 In the analysis of the tourist industry's organization in Greece we have attempted to identify characteristic elements of the industry's supply structure and especially the role and function of the major agents involved in the production, supply and regional distribution of facilities and services. We may summarize the emerging conclusions as follows:

a) The Greek tourist industry may be characterized, in general, as highly fragmentary with reference to the providers of diverse facilities and services. Also, it is characterized by a relatively high degree of spatial concentration, regarding the location of the providers and, especially, the location of economic agents, or those agents pertaining to the tourist organization (government) and to the sectoral (official or voluntary) organizations. In the private sector, the plethora of firms, their small size and scale of operations, the inadequate legislation, concerning their establishment and operation, are also interdependent factors which seem to affect adversely the industry's competitiveness and its ability to diversify and enrich the tourist product, or to expand and invest in less developed-peripheral or new regions. In these regions, we have observed that the relatively few investment initiatives originate, in considerable proportions, from the centre's tourist agents; presumably supported by a centralized banking system and tourist administrative organization.

Here, however, certain changes have been introduced over the last few years, as we shall see in the following chapter.

b) The international tour operators are behaving and impacting in a way that regulates the price levels of certain input components making up the Greek TP, and hence the extent to which the factors employed are remunerated. Also, we have observed that, by promoting particular packages, and by determining modes and frequency of transport connections with selected regional destinations, the ITO influence the spatial-regional orientation of their clientèle (demand) within Greece, the volume of tourists and intensity of tourism consumption at certain places, and even the types of accommodation used or supplied.

c) Observing the role and activities of the industry's major public agent, i.e., the National Tourist Organization, we cannot discern, apart from ad hoc and spontaneous arrangements, any formal frame of cooperation between the NTO and tour operators, or local tourist agents. More important, it should be noticed (this point shall be discussed further in the following chapter) that the NTO has not developed, as part of its operations, any long term marketing strategy, as a comprehensive and orientation frame to coordinate its own policies and measures and/or guide the tourist industry's activities towards desired goals. For example, such a comprehensive marketing strategy would include a market segmentation, or concentration strategy (selection or concentration on specific client groups, or market segments) related to a continuous planning and new products introduction or diversification strategies. Also, it would involve a combination and application of various marketing instruments to achieve market specific goals for the growth of Greek tourism.

Drawing certain planning implications in this concluding section, we have extended our conclusions in the area of planning suggestions. Obviously, these suggestions are preliminary, the issues raised here will be explored further in the light of discussions following in the next two chapters; where planning parameters are introduced and related to tourism's spatial structure.

CHAPTER VI

Paradigms of physical and tourism planning practices in Greece: Conflict and convergence between planning objectives and actual development processes

Scope and thematic content

Research objectives of Direction C are dealt with in this chapter, where we attempt to relate issues of tourism's spatial structure to planning parameters. A major relevant question raised here is: What is the role and effect of physical and tourism planning practices and how they relate to the spatial structure of tourism ? The "effectiveness" of planning practice (selected plans at various spatial levels) is discussed, in this chapter, with reference to a plan's "internal" consistency, or, in relation to the process of development and to the legal-statutory, administrative and political frame. Thus, the scope of Chapter VI is to explore the "range of influence" of planning intervention and the shortcomings of tourism and physical planning. Specifically, the purpose of the analysis undertaken is to identify major conflicts and convergencies that may exist between planning objectives and current actions, or decisions of different development agents; through a descriptive analysis of selected paradigms of planning practice and a general appraisal of its effectiveness.

Physical planning practices[1] are viewed, within the present analytical context, as action oriented activities or processes, i.e., processes of spatial regulation, or control, for changing the physical environment, initiated by, and undertaken within a certain political and administrative-institutional frame. It is assumed, in other words, that such a process involves structures of action and decisions, on the part of several public or private actors, which relate to the major phases of the planning process: a) understanding-interpreting phenomena and

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1. Practice is considered here, conceptually, equivalent to praxis; the latter conceived as a process of direct or indirect change and transformation of the physical and social environment through human action. Practice or praxis is also examined within the context of a theory's application or that of a professional activity. Praxis and theory, praxis and knowledge (learning process) form a diallectic unity and a diallectic contradiction. See, e.g., Klaus, G., Wörterbuch der Kybernetik, Fischer, Frankfurt am Main, 1969, pp. 482-484.

identifying problems, b) establishing-evaluating different courses of action, strategies, goals and means or regulatory controls, and c) decision taking and implementation or mobilization of several kinds, of resources.

The paradigms of planning practice analysed in this chapter refer mainly to five-year and physical development plans and policies. The selected cases, which correspond to specific spatial units, are viewed in terms of the existing superstructural framework (legal system, administrative organization, etc.) and in relation to the underlying socioeconomic and physical-environmental development processes.

The connection between planning processes, or specific practices, and their outcomes, or impact situations, is approached in a way which places these two major "variables" within a broad matrix of relevance and interrelationships (a relational frame); employed as an organizing tool to examine and present data on particular aspects of both practice and impact situations, to identify qualitative links between them.

Thus, Chapter VI provides, in its first section, a descriptive overview of the physical planning process, as well as, of planning practices in tourism. The second, third and fourth sections, deal with paradigms of planning practice at each spatial level (national, regional, local) attempting to set the context of planning process at each level, and then critically appraise the nature, or the effect of planning practice; with reference to the plan's "internal consistency" (national planning paradigm), or, in relation to the process of development (regional planning paradigm) and the statutory administrative and political frame (local planning paradigm). The final section of this chapter, offers a critique of, and reflections on, the practices described. It attempts to present and discuss certain conlusions that derive from interpretative arguments of the practices' relational context (e.g., practices and the role of the state).

1. An overview of the physical and tourism planning process and practices in Greece

1.1. Major characteristics of the physical planning process

1.1.1. The basic approach of economic and regional or physical planning issues

The ideology and methodology of developmental planning has been impregnated by economic thought and approaches which were, and are still to a large extent, aspatial. Although certain spatial considerations, or dimensions in developmental thinking have been introduced in the mid-60's[1], the conceptions and approaches followed - that can be observed in various planning documents, or practices - reveal that spatial, or regional planning considerations have been of secondary or supplementary importance. In practice, regional economic and mainly physical development considerations were included in separate chapters - in the form of "regionalization" of the programme, or "physical planning implications" of developmental policies - often uncoordinated with the major body of the planning document (e.g., five-year development plans). In this connection, the role attributed to regional physical planning and to the related agencies may be seen as that of distributing and arranging the physical layout of activities and projects; as managerial instruments expected to operate and intervene, usually, after major decisions have been taken and responsible for micro-locational arrangements, or even, for beautifying existing undesirable, environmentally, conditions.

The above situation may seem to contrast, or contradict with the fact of an existing large stock of regional and physical development plans and studies, which have been produced over the last 20 years and were never implemented. But exactly this situation is particularly significant, within the political decision-making context, because

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1. The 1960-1964, and mainly the 1966-1970 Five-Year Development Plan, marks the first comprehensive attempt at planning. Historically, before that, after the 2nd World War, a number of planning reports on economic development were prepared by state officials or individuals. For an overview of past planning practices, see: Sakkas, D., Die Ursprünge des strukturellen Ungleichgewichts und seine Wirkung auf den Entwicklungsprozess Griechenlands, Peter Lang GmbH, Frankfurt am Main, 1984, pp. 26-54.

it suggests the extent of public influence over regional planning; or the latter's social acceptability and to certain degree political feasibility.

1.1.2. The administrative-organizational frame and the information domain for physical planning

The administrative-legal frame of the physical planning system in Greece has been documented (more described than critically evaluated) in various reviews and reports[1]. Within such a descriptive context certain of its major characteristics could be outlined.

The formal establishment within the central administrative apparatus of separate governmental agencies responsible exclusively with physical and regional economic planning originated rather late. From the beginning, early '70's[2], there was an organizational differentiation between physical planning on one hand, and regional economic development planning on the other. This differentiation remained within the same ministry (Ministry of Coordination or Ministry of National Economy recently) while other ministries, i.e., the Ministry of the Interior, or the Ministry of Planning Housing and the Environment (MPHE) assumed at times, responsibilities for national and regional physical planning; some functional differentiation being provided by law (Law 360/1976) according to the spatial level of planning (e.g., national or regional). Such a differentiation (between regional economic and physical planning), as well as, the occuring overlap and duplication of physical planning functions among different central agencies should not be considered as problematic per se. Perhaps, it is the lack of appropriate statutory provisions and administrative mechanisms for promoting the coordination among central departments and agencies that have rendered many planning efforts in-

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1. For example see: a) Technical Chamber of Greece, Legal and Administrative Framework of Physical Planning, A committee's report, Athens, 1976, b) Lagopoulos, A., "The administrative and legal frame of the physical planning system in Greece", in City and Region, Journal of Spatial Studies, No. 1 Thessaloniki, 1981, pp. 47-66.

2. It is also during this period that new planning legislation is being introduced (LS 1262/72) to replace - only theoretically but not in practice - the basic law statute (LS 17/7/1923) which was instrumental in the shaping of the Greek cities.

effective. Such issues will be discussed at length in the following sections.

The scientific and technical background for regional physical planning can be delineated by its three major components. First, the educational system had not provided any formal academic training leading to recognized physical planning (urban and regional) qualifications; such qualifications being acquired at the departments of architecture, or abroad. Still further, within the same system other desciplines related to physical planning (e.g., geography, sociology) have been only recently recognized as independent fields of inquiry. Secondly, there still exist considerable limitations in knowledge and information on the physical space's utilization and capability and on the spatial dimensions of many socioeconomic activities; due to the lack of an organized physical planning infrastructure (land registry, data bank, maps). Thirdly, and as a result of the above, urban and regional planning research, or, urban and regional research has been indeed very limited; as against the production of a large series of plans at different scales that can be considered, at best, as planning exercises.

1.2. The planning process and practices in tourism

The preceding analysis provides a wider relational setting, the background of planning dimensions in Greece conducing to the understanding of planning process and practices in tourism; to clarifying what aspects of tourism's spatial growth are subjected to the planning process, or to identifying who plays what role in making planning decisions in tourism.

Tourism has been considered in all five year plans as a "market service", as a major economic sector; particularly important to the balance of payments, as a foreign exchange earner. The whole set of goals and policy measures had both a quantity and an one-dimensional orientation from the point of view of: a) ignoring the sector's complementarities to other sectors, and, b) failing to consider the entire range of needs (the emphasis was on hotel and resort facilities) for both foreign visitors and the local population, as they relate to the country's resources limitations and capacity. Although several regional economic planning goals were set in the various plans, and

certain policy measures implemented in order to achieve a more "balanced distribution" of tourist facilities, it is unclear how effective, or how sufficiently effective, the policy measures have been, in relation to the goals set, or the size of the regional problems. However, in this connection, it is in order here to focus on one major regional policy instrument applied and attempt to understand its effectiveness.

1.2.1. Tourism planning policy measures: The case of regional development incentives

Regional incentives for the tourist sector, have been included within the same battery of incentives provided for the manufacturing sector, and covered mainly favorable credit terms and tax treatment, as well as, reductions in certain operating cost items of the hotel units. The system of incentives, which is designed and applied by the Ministry of National Economy underwent, during the last 10 years (from 1972 (Law decree 1313) to 1982 (Law 1262)) certain structural changes and spatial differentiations; regarding the geographical coverage, or, the division of the Greek territory into zones where the range and strength of assistance was varying (e.g., high, medium, low).

During the period up to 1975 (1968-1974), there were state guarantees for loans provided to private investors by the banks, while the NTO, played an advocatory role, i.e., had a say in support, or not, in the distribution of credits supplied.

The incentives system changed considerably after 1975 (Laws 289/1976, 849/1978) with regard to: a) the volume of credits flowing into tourism - there was a relative decline -, b) the selection of tourist enterprises to be provided with credits - it became an internal affair of the banking system without any interference by the NTO - and, c) the state guarantees to loans provided by the banking system - they were abolished for all areas with the exception of one category.

The entrance of Greece into the EEC marks a third period of regional incentives in tourism. The last two laws (1116/1981, 1262/1982) had to be brought in line with the principles of regional development incentives adopted by the EEC; a basic "innovation" being the intro-

duction of the investment grants[1], a type prevailing in EEC countries. Additionally, the "old" financial (interest rate subsidies) and fiscal (e.g., tax allowances for profits) incentives have been retained.

The incentives law in power today, (1262/82), manifests certain differences from previous ones; mainly with regard to partly decentralizing the process of investments approval, or, introducing certain changes as to the range and type of firms and activities enjoying the incentives (small and medium sized firms, municipal enterprises, etc.).

Any critical evaluation of the regional incentives system (which has been briefly outlined above), or an appraisal of their effectiveness and contribution to regional development, would be a task that surpasses the limits of our research work. Certain critical evaluations of the incentive systems undertaken lately (Hadjisokrates, 1982, Economou, 1983), have focused on the manufacturing sector. However, very little is still available relating to the overall net effects of regional policies pursued over the last 10-15 years in Greece, either in the field of incentives, or, in other fields. Of course, there is wide recognition of the difficulties and problems involved in assessing such overall effects, or effects in specific areas. Apart from data limitations, (e.g., reliable estimates of the cost effectiveness of the incentives in question) such problems pertain mainly to the appropriateness of methodological approaches and techniques developed and employed (OECD, 1977). Methods that can be employed for analysing major variables characterizing the socioeconomic situation of the regions towards which regional policy measures are directed; for isolating or disentagling the effect of individual policy measures from others (which influence the major variables of that particular situation), for analysing and identifying (ranking, weighting, quantifying, etc.) the goal variables set within a plan or programme which sup-

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1. Grants, as a percentage of total expenditure for the productive investment in fixed capital, were provided and differentiated according to the type, size and class of the tourist facility, and according to certain prerequisites, e.g., the incompatibility of grant investments with the tax allowance incentive, the number of jobs created or retained, etc.

posedly, the specific policy measures aim at attaining.

Thus, in view of the above, certain general observations can be drawn related exclusively to the spatial aspects of the incentives system. In both regional economic and physical planning terms, the approach followed in all incentive policies with regard to geographical differentiations and divisions was basically the same. Space, the Greek territory, has been treated as a flat, abstract and uniform accounting unit for distributing and administering credits and investments. Such a leveling and zonal delineation failed to recognize the dynamic of the growth process, its underlying structural elements (demographic, socioeconomic, physical); that conduce to particular settlement and land use patterns,or regional structures. Furthermore, it did not seem to correspond,or relate to the adopted (in various five-yeal plans or programmes) regional strategies, physical planning policies,or sectoral policies, even if such policies have been, at times, vaguely defined.

1.2.2. Physical planning practices and the administrative organization of tourism

Physical planning practices in tourism do not depart from those marking the entire physical planning process described earlier. Outlining major characteristics of the physical planning practice,one may observe the following:

a. A "restrictive" planning practice in the sense that it relies on a series of control measures to contain physical development; controls being largely determined by central authorities and confined mainly to building regulations (plot ratios, heights, etc.) and road alignments.
b. The production of a plethora of physical development plans, of different scale, by the central authorities,which are accompanied with very few instruments or means to implement them. It is worth noticing, in this connection, that the numerous tourism studies and development plans commissioned by central agencies[1] to private

1. The Ministry of Coordination commissioned in the mid-sixties (1964-1966), only for the island of Crete, ten tourism development studies, mostly of a subregional scale. See also following section: Paradigms of planning practice.

consulting firms, or, prepared by the NTO's central services,[1] have never been implemented; although one should not ignore that certain of the above studies may have served, as supporting and informing documents, the activities of both the relevant public planning agencies and the interests of private investors.

c. The limited public participation in the drafting of plans and national regulations; legal provisions for consultation being confined to provision for the public to object to a plan after it has been prepared[2].

Tourism and the related planning activities have assumed, within the public administrative apparatus, a highly centralized form of organization. The Greek National Tourism Organization (NTO), established in 1950[3], is the central executive and advisory agency of government tourism policy, administratively attached to the Ministry of the Prime Minister's Office. According to the existing statutory provisions, the NTO has a broad spectre of aims, functions and competence which, however, have been assumed or exercised to a very small extent. The NTO's principal activities to date have centered on:

a. Designing, building, managing and controlling-regulating (setting building and design standards, granting permits, etc.) the tourist infrastructure proper, mainly hotels. As an example, one could mention here, the recently "enforced"[4] provisional measure of

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1. According to information provided by the NTO (NTO, Directorate III-Technical, Physical Planning Studies Section B/3), more than 60 tourism development studies and plans were prepared during the period 1968-1978. These studies included specific development projects - most of them concerned with the development of the NTO's real estate property - and general surveys or tourism development reports of smaller islands and coastal areas.

2. With recent, however, legislation, particularly the LS 1337/1983, certain changes have been introduced in this area.

3. The legislative statutes which define the NTO's responsibilities are: LS 1565/1950, LS 1624/1951, LS 201/1974.

4. See relevant decisions issued in Government Gazettes; Nos. 286B/30/5/83, 763B/30/12/83. Such an "enforcement", however, may be considered as partly successful since there are cases which "deviate" from imposed controls or cases where tourism entrepreneurs build "holiday" appartments instead of hotels to avoid such restrictions.

"tourism saturated areas"; a measure aiming at discouraging (restraining or suspending the issue of building permits for a period of two years) tourism development in certain areas. The measure applies only to urban centres and smaller tourist settlements where the overconcentration of tourism is thought to create several problems: e.g., in Corfu, Rhodes, Iraklio, etc.

b. Advertising and providing publicity and information about Greece through a network of offices abroad and tourist information centres at home; preparing and financiallly assisting the organization of various festivals, exhibitions, etc.

c. Producing various plans, and implementing a series of projects and programmes related to supplementary tourist infrastructure (eg, the construction of marinas) or, to specific types of tourist accommodation, e.g., renewal-conservation of historic buildings and traditional settlements[1] (conversion into guesthouses of traditional buildings).

d. Proposing annual or five-year public investments programmes and approving investors' applications (issuing site suitability permits and approving architectural plans); a prerequisite for receiving bank loans, or, the benefits provided by the incentives system.

However, within the above context, one should observe that most of the NTO's energy is generated into advancing its relations with the travel trade and into promotional campaigns. The NTO's research and planning activities include mainly the keeping of statistics and the preparation of physical development plans or surveys. Even the above-mentioned "traditional settlements" programme, which appeared very ambitious in the mid-seventies, has been actually limited to a few build-

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1. The term traditional applies to all settlements of the preindustrial era; predominantly agricultural settlements, of historic architectural and cultural interest. Out of a total of 11.692 settlements of Greece (5.500 are very small on mountainous and semi-mountainous locations) 2.238 settlements have been classified as worth protecting (most of them in clusters forming homogeneous areas on the basis of natural-morphological, socio-economic and cultural characteristics). From these, 616 settlements were selected as the most important, that need, partly or entirely, protection. See: Ministry of the Interior, Planning Directorate, Tables of traditional, worth-protecting settlements, Athens, 1977.

ing conversions[1].

A set of tourism related functions administered by the Ministry of Planning, Housing and the Environment (MPHE) and the Ministry of Culture relate to the conservation of ancient monuments, historic buildings and traditional settlements[2]; while other departments administer certain functions such as national parks and outdoor recreational areas (Ministry of Agriculture) or maritime transport and yachting (Ministry of Commercial Shipping). The MPHE assumes, additionally, responsibility in regulating tourism's physical development, especially in the countryside; by setting out norms and control measures for the location of all touristic installations and buildings[3].

Observing the various "tourism" functions of certain central departments it is pertinent at this stage to point out the arising problems of coordination and conflict of different levels. Such problems which will be discussed in the following sections of this chapter pertain to:

a. The spatial regulation of tourism infrastructure proper; various conflicts between all three "actors": the MPHE, the NTO and private investors.
b. The tourism investments and incentives system: the relation of the incentives zones, or of the investments approval-allocation- monitoring procedures, to the particular tourism spatial control measures, or generally, to tourism development policies.

At the regional and local levels the administrative structure of tourism is weakly organized and ineffective. Regional offices[4] estab-

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1. According to information provided by the NTO, during the period 1975-1984, 350 mill. Drs. were invested for converting 60 buildings into guesthouses (total capacity: 380 beds) in a few settlements (e.g. Mesta-Chios, Ia-Santorini, Areopolis etc.).
2. Traditional settlements and "building aesthetics" are protected by the Law 622/1977 which states that "through Presidential Decrees, issued after a recommendation by the MPHE, buildings, entire settlements, or their parts, can be declared as protected areas, subjected to special building regulations, different from those of the Building Code".
3. For example see the Presidential Decree of 12/5/1984 issued in the Governments Gazette No 384Δ/27/6/84.
4. Among the seven Regional Services - Thessaloniki, Volos, Heraklion,

lished by the NTO are simply "outposts" with limited role and autonomy; in comparison, say, to those quasi-governmental organizations in Britain, e.g. the Tourist Boards, planning tourism strategies and designing region-wide marketing policies. Local authorities (LA) in Greece neither avail the means nor do they have any statutory obligation to provide services for the tourist; or, still further, to prepare their own tourism development plans. LAs are receiving funds from central agencies (e.g., the Ministry of Interior) to cater for certain environmental health issues important to the functioning of tourism. Actually, most tourist developments in their area of jurisdiction are taking place without their consultation or approval - with regard to the impact they might have on the local community; tourist developments and projects being only subjected to routine technical control at the city planning offices of the country's major urban centres.

At the central planning level, domestic tourism has never figured prominently in the NTO's policies and priorities. Generally, in this sphere - leisure and outdoor recreational activities of the population - one should notice that a comprehensive planning consideration is virtually non-existent. The NTO's "social tourism" policies[1], although too recent to evaluate, do not seem to have been conceptualized within a comprehensive planning strategy for domestic tourism, or even, within a coordinated battery of policies designed to meet the unsatisfied holiday and travel needs of the most socially deprived groups of the Greek society.

Piraeus, Rhodes, Patras, Corfu - only the first was assigned wider responsibilities on the basis of administrative decisions issued by the NTO's General Secretary. The established recently (1984) Prefectural Committees of Tourism are expected to undertake certain of the Centre's responsibilities.

1. The "social tourism" programme initiated in 1983 by EOT has been estimated to cover, during 1984, 100,000 people of low income strata, predominantly workers and pensioners, offering weekly holidays at reduced prices in various hotels of the country. The programme is financed by both the NTO and the Ministry of Labour. These two agencies are subventioning a series of hotels with which they have come into arrangements to charge their client ("social tourist") 1/3 of the price for services rendered. See also: a) the No. 538636-249-25/11/83, Decision of the Ministry of the Prime Minister's Office, b) various decisions and information bulletins of the NTO's Directorate of Social-Domestic Tourism.

2. Paradigms of national physical and tourism planning practices

National planning takes place predominantly through the preparation and approval of medium term (five-year) plans. Such a process is initiated by the central government (Ministry of National Economy), which sets out basic socioeconomic development objectives and defines major directions of macroeconomic policy. The Centre of Planning and Economic Research (KEPE), the country's main planning and economic research institute, is responsible for the "technical preparation" of plans.

The analysis which follows is concerned with paradigms of physical and tourism planning which refer to the last two Five-Year Socioeconomic Development Plans (1978-1982, 1983-1987). Following the general objectives outlined in the introduction, the aim in this section is to discern major physical and tourism planning issues at the national level.

2.1. An example of the general context: Guidelines of policy in the 1983-1987 Socioeconomic Development Plan

One of the main targets of the recent Five-Year Plan is the restructuring of the economy and its institutional framework. The realization of this broad target is related to certain strategic policy objectives, such as the modernization of the public and private sectors, the decentralization of the decision making process, and the participation, at different administrative-organizational and spatial levels, of various social groups and interests.

The process of modernization, as it is envisaged in the Plan, involves the restructuring of productive capacity in industry, agriculture and services (in order to increase their competitiveness), the improvement of the public sectors' productivity and efficiency, and the development of human resources. According to the Plan, the above objectives will be realized through the following measures:

a. A system of investment incentives (Law 1262/1982), the rationalization of credit and interest policy, the rehabilitation of the so called "problematic" (heavily indebted) firms, the promotion of research and development in industry, as well as, the introduction of new technology in key sectors.

b. The upgrading of social services (specifically health and education), legal reform and administrative-managerial reorganization of the public sector (Socialization Law 1365/1983).

Decentralization, according to the Plan, is associated with deconcentrating the public administrative apparatus, as well as, that of public utilities enterprises. It is also associated with economic (increase of funds) and legal means provided to local authorities, in order to increase their competence and independence. Still further, decentralization is promoted with a series of measures that create employment opportunities, or, encourage the relocation of labour in certain areas, or regional centres.

The issue and policy objective of participation was given particular emphasis; in the very same process of the Plan preparation, i.e., the formulation of government policy and of budget decisions at the central, regional and local levels; in the reorganization and management of public enterprises (Law 1365/1983) and in the enlargement and strengthening of the cooperative movement.

2.2. Content and basic directions of physical and tourism planning policies

2.2.1. The 1978-1982 Plan

The Physical and Regional planning policy, in the 1978-1982 Plan, is analysed in four separate and unrelated to each other subsections: physical planning, regional development, problematic areas, and land uses. Here, such a separation, for which criteria have not been specified, seems arbitrary, if it does not reveal a conceptual confusion[1]. However, apart from the above conceptual ambiguity, it is important to note the absence of any reference in the Plan, to how such policies interrelate or, how they will be coordinated on different spatial levels.

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1. "Regional development" seems to be conceptualized as identical to "regional policy"; while actually the second should be considered as a "means" to attain the first. For a general discussion of relevant issues see Hadjimichalis, C., "Towards an alternative theory and practice in regional development: a preliminary approach", in City and region, Journal of spatial studies (G) No. 2, 1981, pp. 39-52.

The basic policy directions for regional development in the 1978-1982 Plan seem to rely, as in previous plans, on the "growth pole" concept with supporting arguments such as: limited resources available, increased resources effectiveness, as a result of their concentration in a few centres, external economies, diffusion of development to the region's hinterland, beneficial effects resulting from such a concentration, due to the expected decline in the growth rates of Athens and Thessaloniki. Thus, the goal, according to the Plan, will be "to achieve a significant acceleration of the rate of development for Patras, Volos-Larissa, and Heraklion-Chania. For Eastern Macedonia and Thrace, Epirus and South-Western Peloponnese, the selection and characterization of the centres of development will take place during the further elaboration of the Plan and following careful study"[1]. With regard to the "growth pole" idea promoted in the Plan one should make two points here: a. such a policy pronouncement has never assumed a concrete "operational" form; in the sense that the various programmes and policy measures are being coordinated and geared towards supporting that specific policy, and, b. the underlying theoretical-empirical base, as it particularly applies to Greece seems quite obscure; in the sense that such a policy approach is being backed and enriched by substantial research work and discussions of relevant issues and questions as those dealt in Chapter II.

While the policy measures envisaged in the Plan for the regional development centres are of a quite general nature - e.g., the promotion of large scale social and technical infrastructure programmes necessitating large amount of investments -, the policy for average-sized and small towns in even less clear; consisting, according to the Plan, "in the reinforcement of local specialization and promotion of cultural initiatives in accordance with the resources and comparative advantages of the towns and prefectures"[2].

Within the above regional policies framework, the basic direction of tourism policy includes, according to the Plan the curbing of fur-

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1. Economic and Social Development Plan 1978-1982 Preliminary Guidelines, KEPE, Athens 1979, p. 92.
2. 1978-1982 Plan, op.cit. p. 93.

ther concentration of tourist activities in areas of significant tourism growth (e.g., Athens, Thessaloniki, Rhodes, Corfu, etc.), the organized extension of tourism in a number of zones, and the reinforcement of tourism activity in areas where the possibilities of developing other sectors are limited. Another direction of tourism policy pertains to environmental conservation and capacity problems with general statements (in both the Preliminary Guidelines and the Final Plan) of the type: "the tourism development projects will be planned in accordance with the particular conditions of each region so that tourist equipment can be adapted to and incorporated into the natural, social and cultural environment"; or, that "particular attention will be given to limiting the social problems caused by the attraction of a disproportionate number of tourists"[1].

What is worth noticing, in connection to the above, is that tourism's development potential and its resources capacity are considered as considerable assets for future economic development. Assessing the capability of the Greek economy and the existing "wide range for a comparative rapid development", the 1978-1982 Plan considers that although "the accurate measurement of a particular region's capacity for tourism is very difficult, because commonly acceptable measures, or models, have not as yet been formulated, all indications point to the fact that the tourist capacity of natural and historical areas of Greece is considerably larger than the present tourist traffic"[2].

2.2.2. The 1983-1987 Plan

The discussion here follows and relates to the outlined earlier, in section 2.1, guidelines of policy in the 1983-1987 Socioeconomic Development Plan. Physical and Regional planning policies in this Plan, although they seem to avoid some of the conceptual ambiguity of the earlier plan, they remain nevertheless, in certain areas, at the same level of abstraction and generality; with the exception of specific development projects being proposed for each region, or nomos, and a more detailed and broader in scope urban policy.

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1. 1978-1982 Plan, op.cit. p. 94.
2. 1978-1982 Plan, op.cit. p. 37.

What is worth noticing, is the absence, in the Plan, of an inter-regional policy or a policy dealing with an overall regional-strategic guidelines framework directing or orienting the intra-regional development programmes proposed in the final section of the plan. Thus, in this connection the plan includes: a) an inter-regional resource allocation programme (tables of basic projects and investments for each of the nine planning regions), and, b) development programmes for each sector with no reference, except in a few cases (e.g., industry), to regional or physical planning aspects, or, with no indication of how each sector is being related to, or coordinated with, another at the regional level.

Another worth remarking point concerns the division of the Greek territory into nine planning regions and the problems associated with it. Problems pertaining either to the regional divisions and boundaries per se (e.g., the problem of comparability between arbitrarily determined spatial units), or, to the significance and role of such units (e.g., their irrelevance to planning since they don't have any statutory responsibility as spatial units of public administration, or local self-government). Thus, although such problems have been recognized at an early phase in the Plan-preparation process[1], the same Plan (final document) contradicts its earlier assumption by adopting the above-mentioned regional divisions and by formulating specific Regional Development Programmes.

With regard to the sectoral tourism policy, it is quite important to emphasize what has been clearly stated in the Plan[2], namely that the only policy differentiation, as against previous five-year plans, pertains to the larger share of public investments within the total volume of tourism investments[3]; a result of the "new policy of tourism development". The new investments policy, emphasizing the role of pub-

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1. Five-Year Programme of Socioeconomic Development 1983-1987 Preliminary Guidelines, KEPE, Athens, 1983, p. 77.
2. Five Year Programme of Socioeconomic Development 1983-1987 Final Document, KEPE, Athens, May 1984, p. 61.
3. The ratio of private to public investments for the period 1983-1987 is 41,0/34,5 bill. Drs. This should be compared to our earlier discussions of investments and incentives policy, in Chapter V.

lic investments, may suggest, if compared and contrasted to previous policies analysed earlier in Chapter V, a significant turn in the evolution of tourism policies. However, considering the entire tourism policy, one may observe that certain issues have not been explicitly delineated; e.g., issues pertaining to tourism's regional objectives; or, to the interelationships among different policy measures; or, the conditional frame for implementing the suggested measures. On the contrary, what is quite clear is that we have a supply policy which focuses on increasing, through public investments, the attractiveness of the Greek TP and hence its "international competitiveness"; a major objective of tourism policy stated in the Plan. What it is also apparent is the lack of attention given to the demand side and to relevant issues pertaining to the organizational conditions of the international tourism market (e.g., the role of ITOs); issues which are also related to the competitiveness of the Greek TP.

2.3. A preliminary critique of the practices described: Issues of "internal" consistency and of interrelationship among planning tasks

On the basis of the preceding description, and from further analysis of the two planning documents, several observations could be made as to the way the basic planning tasks (diagnosis of problems, goals and objectives, policy measures) are approached; as to their content and interelationship.

One category of observations and arguments concerns the nature and relevance of the problems identified, the specificity of goals and objectives, and the operationality of policy measures. Problems, or development constraints, as they are stated, evidence often a low degree of clarity; in the sense that a situation, cited as problematic, is not always related to its causal factors, or its effect in several areas; they are not ordered hierarchically, in the sense of attributing different weight or significance to each problem; still further, they are not related, usually, to a period of time, by discriminating short-term from medium-, or long-term problems. In certain instances, there is only reference to the "sources", or causes of problems, without the latter being explicitly stated or identified.

What can be argued in connection to the above is that the identi-

fication of a problematic situation (the weight or significance attributed to it) is indicative of the ability and/or the intentions of all those involved in the planning process to make value judgements (choosing among several problems) and to interpret or analyse facts within the existing planning-administrative and information domain.

Goals and objectives appear very often as desirable situations exactly the opposite of those identified as problematic. For example, in the case where the identified problem is, e.g., "the asymmetrical growth of tourist facilities and overconcentration in a few areas", the cited, objective is "the supply of tourist services should be more balanced and aim at a rational geographic distribution". Thus, the ambiguity of notions and terms like symmetrical, balanced, rational, etc., employed to suggest, or characterize certain situations, remains in the formulation of objectives. Still further, goals and development objectives seem rarely to relate to specific development principles, or theoretical models, or even to empirical analyses of concrete situations. In cases where such a relation is suggested, or implied, their validity and relevance to the specific situation can be questioned; an issue that will discussed later.

A discussion of the nature of goals and objectives examined, or any explanation of the form they assume, could follow different directions. One may develop the same argument outlined earlier with regard to the identification of problems. It may be argued also, that certain goals, e.g., social goals, due to their nature cannot be specified in full detail; or, that such a specification should be realized progressively, during the planning process, with the active participation of various social groups. Additionally, it can be argued that the lack of specificity in the formulation of goals may be politically expedient, since it avoids an early committment to specific goals which could prove non-feasible or unattainable; necessitating in both cases a certain corrective action (this being more a political than technical process), for lowering or raising the aspiration levels on social goals.

Policy measures appear in both plans examined so numerous and diverse (legal, fiscal financial, organizational), and assume such dif-

ferent forms, that it becomes often difficult to comprehend their correspondence to problems and objectives. In certain cases, policy measures are not measures as such, but assume the form of simple suggestions, intentions, or envisaged action to be undertaken in a particular area (e.g., introduction of new legislation, establishing new forms of administrative organization, etc.). The absence of a time horizon setting out the implementation stages of several policy measures is a characteristic feature of both planning documents examined. Thus, it may be observed that numerous of the proposed measures are identical in both the 1978-1982 and the 1983-1087 Plans[1]. However, regarding the latter Plan, one should notice, that it introduces considerable changes in the planning process by specifying for the first time a series of investment projects at the sectoral or regional level; in spite of the fact that it is difficult to discern how several of the above projects relate to and support the stated measures and objectives.

The issue of interrelationship and correspondence between problems and facts identified, objectives formulated and policy measures proposed, is quite complex and poses many questions. It is very difficult to assess, e.g., to what extent, the observed in many cases lack of correspondence between the above-mentioned planning tasks, affects the credibility of the Plan per se, or, gives rise to doubts about the feasibility and relevance of the proposed measures. Here, however, one may only suggest that even in cases where the plan, or the planning process, is characterised as "indicative", there is an obvious need to determine a set of policy measures, which corresponds to the basic skeleton of strategy, or to major policy objectives chosen, as well as to the identified problems. A relevant example would be in order here. In the case where "the oligopsonistic power of foreign tour operators in setting the price of the TP" is identified as a major problem[2], then one would expect, or, there is a need that certain objectives and policy measures are envisaged in the plan that would tackle such a problem. The observed absence of such measures may in-

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1. For example compare 1983-1987 Plan, Preliminary Guidelines, pp. 74-75 with 1978-1982 Plan, Final Document, pp. 64-65.
2. 1978-1982 Plan (Final document) op.cit. p. 63.

dicate the acceptance of a "given condition", where nothing can be done; or it may, further, indicate the inability of the planning agency to suggest appropriate measures and/or the unwillingness of decision makers to commit themselves to certain courses of action.

3. Paradigms of regional physical and tourism planning

3.1. The general context

Following the discussion in this chapter, on the major characteristics of the physical and tourism planning process and practices, an important point, that needs further elaboration here, concerns the administrative-organizational structure of regional planning.

Greece is divided into 51 administrative areas, the prefectures (nomi) which differ in size and population. Traditionally, at the sub-regional level (the Nomos), administrative and planning responsibilities were, and are still, carried out by the prefect (governor of nomos); who is appointed by the central government (Ministry of Interior) and is supported by the nomos' directorates, the "decentralized" services of various ministries. The prefect is responsible for the implementation of ministerial decisions and the coordination of public authorities at this level. The prefectural agencies enjoy a certain degree of autonomy in selecting and constructing various nomos projects, however, up to a specific total cost-budget. Although certain decisions may be taken on the nomos level the funding is appropriated from the money available for the nomos programmes by the Ministry of Interior.

At the regional level, the 51 nomi are grouped by the Ministry of National Economy into nine planning regions; each of which has a regional development service with a role limited to carrying out assignments of the centre and with no statutory responsibility in decision making and in exercising an inter-sectoral coordinating function at this spatial level. Additional problems of coordination arise, at this intermediate tier of administrative organization, due to the fact that each Ministry has its own regional offices, with geographical boundaries of juridiction, different from those of another, or those of the nine planning regions.

Recently introduced legislation (LS 1235/1982), has constituted an advisory body, the "Nomos council" with certain responsibilities in the areas of planning and public participation. However, in spite of such changes and of the envisaged further transfer of responsibilities from the centre to the nomos, provincial of local levels, there is still a long was to go towards decentralization, regional autonomy and self-government, or, towards the development of local authority institu-

tions with functions and responsibilities comparable to those of other European countries.

Thus, regional or local physical planning practices in Greece may be viewed as undertakings initiated to a large extent by the centre (the central government) and managed centrally. Over the last 25 years there have been prepared various kinds of development plans of regional, sub-regional or local scale covering almost the whole Greek territory. For the region, or island of Crete alone, there have been prepared since 1967, apart from certain regional studies, 19 urban development plans and tourism studies, commissioned by central authorities and all prepared by private consulting firms.

3.2. The paradigms of Crete: Cases of comprehensive and sectoral regional planning

3.2.1. The 1965-1975 Development Plan of Crete: Tourism within a comprehensive regional development approach

The 1965-1975 Development Plan of Crete[1] is one of the first Regional Planning Studies[2], which started in the early '60s. During this period, three Regional Development Services (Epirus, Western Peloponnese and Crete) and the Central Regional Development Service had been already established; while regional problems were assuming significant weight following the years of post second world war and civil war reconstruction, and in front of the alarming signs of the rapid growth of Athens and depopulation in most parts of the country.

Following an earlier discussion about the relation between economic and regional or physical planning practice, one should remark that the Development Plan of Crete presents perhaps a unique case of a comprehensive planning approach, where both economic and physical planning

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1. This study was sponsored by the OECD and was undertaken by the Israeli Agricultural Development Company Ltd. (Agridev) in coopetation with the Ministry of Coordination and the Regional Development Service of Crete (YPAK).

2. It has been supported that the interest of certain foreign institutions to "study" Crete should be attributed among other things to the strategic importance of the island in military terms within the Eastern Mediterranean Region. For example, see: Vasilakis M., "Many studies for Crete but few projects", in Vema, daily newspaper, special issue on Crete, Athens, June 19, 1979, pp. 7-16.

considerations interrelate; where the region is recognized as the territorial unit in which human needs, resources, demands on land, land use conflicts, are most diverse and widespread, and the need for a balanced growth, in terms of economy, ecology, and social welfare, most pronounced.

A. Basic parameters of socioeconomic and regional development objectives

The basic proposals of the 1965-1975 Plan are presented in Table VI-1. We have attempted in this table to juxtapose two major elements: The socioeconomic and sectoral development objectives and physical regional development objectives (contained in separate parts of the planning document). The aim here is:

a. To identify the major "links" that seem to synthesize, or integrate these two elements and, further,
b. To discern a methodological confrontation-antithesis, or convergence in the Study's approach of socioeconomic and physical development aspects. The major points that emerge from such an attempt may be outlined as follows:

Point one: Regional development strategy, urban development and settlements policy

The proposed in the Plan intra-regional organization of the islands territory (the pattern of physical development) is based on a division into small and large subregions ("self-sufficient economic, social and environmental units") defined by, and functionally interrelated with the network of urban centres and rural settlements; each centre or settlement differing in size and socioeconomic functions. This approach seems consistent with, and supports both socioeconomic and sectoral objectives, since it contributes to the "full utilization and development of the local productive forces and resources" and conduces to "overcoming social and economic gaps between different subregions or between rural settlements and large urban centres".

Point two: Landscape development-enhancement and conservation policies

The landscape proposals constitute perhaps the most salient feature of the Plan. Although such proposals are based on an "idea" orig-

Table VI-1

Basic Parameters of the 1965-1975 Development Plan of CRETE
(Matrix of socioeconomic and regional development policy objectives)

Sketchplan for the Regional Development (the A. Glikson report) Major Components of the Plan / General framework of basic development objectives - policies - priorities	Regional Development Strategy:	Regional Landscape Plan:	System of Touristic Circulation and Rest:
I Basic assumptions - prerequisites: secure water resources (potential); carry out land consolidation (agricultural plots) schemes; secure qualified manpower for plan implementation; secure flow of public and private investments	- ten urban centres are organized to receive the major influx of rural population - 100.000 p.	. prevent damage by floods and soil erosion by planting ecologically suitable plant associations . improve water suply for irrigation	
II General socio-economic goals: double average per capita income in ten years; raise living standards and modernize human activities patterns; utilize efficiently labour force, reduce unemployment and emigration	- proposed development centres classified and organized according to population targets and economic function:	. re-create the indigenous mountain landscape an asset of cultural importance . improve micro-climatic conditions	. develop touristic resources to the advantage of both local population and tourists . disperse touristic movement to the benefit of most areas
III Sectoral objectives: - Agriculture and afforestation: increase production (from 2.5 to 4.8 bill. Drs.) and decrease by 1/3 number of farm families; double their income; increase productivity through irrigation, land consolidation, agrotechnical improvements and up-grading of crops and livestock; Forests: improve existing coverage (35000 ha) and extent by 8250 ha.	. centres and towns with a strong agricultural sector	. increase wood production and afforestate areas unsuitable for permanent pasture; . protect agricultural land	
- Industry: increase employment by 18.000 people and average income/worker by 50%; promote growth-expansion of existing small enterprises, processing of agricultural products, selected non-agricultural branches (e.g, building materials, carpets, etc.)	. industrial centres, moderately industrial towns, industrial villages . develop industrial estates		
- Tourism: increase employment by 6.000 and hotel accommodation by 3.000 beds; develop auxiliary equipment-infrastructure (buses, restaurants, roads, etc.); increase length of stay of tourists and develop personnel training programmes	. towns with strong touristic or recreational development	. develop along the trail camping grounds and tourist accommodation in near by villages but not private villas	. base upon, and coordinate with, the proposed system the programme of hotel construction
- Services - Transport and communications: promote post - elementary education (vocational training) to integrate graduates into island economy; enlarge network of regional hospitals and clinics; expand-modernize network of banking and commercial services; develop selectively ports, avoid large investments in roads and improve communications	. diversified towns - services predominate Iraklion, the major town should assume only function and services of a regional capital	. increase the importance of hospitable and accessible mountain landscape for general habitability and recreation	. fully integrate the System with the proposed pattern of urban settlements and road network
IV Development stages - priorities: develop simultaneously all three sectors but concentrating investments, in stage one, on water resources, irrigation systems, modernization of existing infrastructure and industrial plants	. within the 1965-1975 period only a "Skeleton" of new settlement structure can be created; to be realized in 3-4 years action stages		

Source: CRETE, Development Plan 1966-1975, AGRIDEV - Agricultural Development Co. and Regional Development Service of Crete - YPAK, 1965

inating and applied elsewhere[1], they seem to be suitable for the region of Crete due to the prevailing there physical-environmental conditions. Additionally, and most important, the proposals have a multipurpose orientation; serving many of the stated socioeconomic, as well as, sectoral objectives (see Table VI-1).

Point three: Tourism policies

The role attributed to the tourism sector, or, the weight that this sector should assume, seems to converge with the overall objective for a balanced inter-sectorally growth; in contrast to the proposals of the "Basil Study" we describe in the following section. The organized "dispersal of touristic movement" and tourist infrastructure is spatially related to the proposed settlements pattern, roads network, as well as, to the landscape conservation system. The proposed tourism policy considers the interests of both the local population and foreign tourists, and supports the objectives of a balanced intra-regional growth, and of avoiding overconcentration of tourism in a few places.

B. Major policy measures of the Plan

With regard to the policy measures and "suggestions on planning and implementation for regional development", the following statements (excerpts from the text of the planning document) illuminate the previously outlined objectives and provide the background for the discussions in the following section.

1. Inter-sectoral distribution of investments

> "Most of basic investments in agriculture must of necessity be public (e.g., irrigation, water resources). However, in certain branches (orchards - intensive plantations - vegetables, livestock) investments are private or require adequate credits. It is necessary to create a suitable medium

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1. "This proposal is based upon the idea of Benton Mackaye, the originator of the Appalachian Trail in the U.S., passing through a continuous protected mountain landscape, from New England to Florida. Planned forty years ago, the Appalachian Trail is proving today a tremendous asset to life and landscape in the eastern U.S. In the case of Crete, the whole 'backbone' of the Island could be turned into a 'National Park'". See Glikson, A., Sketchplan for the Regional Development of Crete, in Crete Development Plan, 1965-1975, Vol. I, Summary, AGRIDEV, Tel-Aviv, 1965, p. 192, and also Glikson, A., The Ecological Basis of Planning, ed. Mumford, L., Martinus Nijhoff, The Hague, 1971, pp. 73-75

that will enable small enterprises to obtain credit covering 50-60% of required investment".

The particular emphasis given to agriculture is evidenced in the following Table

Table VI-2

The 1965-1975 Development Plan of Crete

Proposed intersectoral distribution of investments (in mill. drs.)

	total	public	private
. agriculture	6,125	5,090	1,035
. industry	4,100	2,325	1,775
. housing	4,000	1,000	3,000
. tourism	700 (6,000)	200 (1,320)	500 (4,680)*
. other services - mainly transport and communications	3,650	2,010	1,640
	18,575	10,625	7,950

* Investments proposed in the Basil Study.

2. Land policy

"Land speculation has began in some parts of the island. It is the gravest danger for the successful implementation of regional planning affecting efficacy and/or economy of location of new and existing industrial, commercial, recreation, agricultural and landscape development".

3. Industrial Estates

"In order to promote industrial investments in the development regions, most serious considerations should be given to construction of a series of industrial estates".

4. Housing

"To avoid irrepairable damage to the urban pattern of Crete (by building monotonous non-descript 3-4 storey appartment buildings start immediately with surveys and studies of living habits, dwelling forms and existing residential development of Crete; some densely populated and extremely well integrated urban quarters such as the old town of Ierapetra should be surveyed and the adaptability of these systems to contemporary conditions should be studied".

5. Tourism

"The estimates and projections of the Basil report should be evaluated on the basis of a general economic plan, while the locations of touristic development should be closely coordinated with a Regional Development Plan".

"Close attention should be given to the social implications of a rapid tourist development for the population of particular locations especially where large concentrations of high class touristic developments will be proposed".

3.2.2. The Tourism Study of Crete: a case of sectoral (subject) planning

Another study of Crete commissioned about the same time (1962) by the Ministry of Coordination to the international engineering firm of F.Basil Inc. was focusing exclusively on Tourism.

The Tourism Study of Crete had according to the terms of reference, three major objectives[1]: a) to survey the available resources and determine the feasibility of tourism development, b) to assist the government in its effort to attract international financial assistance,and c) to introduce Crete to foreign investors.

Reviewing the relevant planning documents one should first observe that this Study had a completely different development "philosophy". As it was clearly stated, "the guiding philosophy of the overall problem was to view Crete as a "product" to be sold; accordingly all efforts were concentrated on undertaking a market survey and a product analysis"[2].

Following such an approach, the proposed programme of tourism development was turning almost the entire coastal Crete into a tourist zone: "Ten tourist zones covering the entire island, each zone having a number of tourist centres where the majority of all proposed installations would be concentrated"[3].

Tourist accommodation and investments were, in comparison to those

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1. Crete Tourist Development Study, Summary Report, F.E.Basil Inc., Consulting Engineers, Athens, 1964, p. IX.
2. Crete, op.cit. p. X.
3. Crete, op.cit. p. 105.

proposed in the 1965-1975 Plan almost tenfold. Specifically, according to the Tourism Study, 15.000 hotel beds should have been added by 1975, and the volume of tourism investments should have reached 6.000 mill. Drs. These figures should be contrasted to those of: a) the 1965-1975 Plan (3.000 beds and 700 mill. Drs. investments, see Table IV-2) and b) the actual development that took place: 6.500 new hotel beds and 2.250 mill. Drs. have been added and invested by 1975 (see also Chapter V).

Concluding the above brief description one may observe that such on ambitious programme was quite consistent with the underlying basic objective which "was centered on the idea of attracting as many tourists as possible, having them stay as long as possible, and inducing them to spend as much as possible"[1]. However, the consideration given by the consultants to the programme's implementation was minimal. Instead, of analyzing and suggesting specific policy measures or instruments, the Study provides only general statements of the type: "assuming that the legislative path is clear for the undertakings of the program ..."[2]. Finally, what is worth noticing is the way of approaching developmental problems and problems of natural and socio-cultural resources use. This Study offers perhaps a unique example of what may be called a systematically planned "one-way" exploitation of a region's resources.

3.3. Planning practices and aspects of actual regional development

This section discusses aspects of actual regional development which deal with and relate to those major issues analysed in the planning paradigms earlier.

3.3.1. Aspects of economic - sectoral development

Agriculture and mainly industry have not developed to the extent envisaged in the 1965-1975 Development Plan; as against an emphatic tertiarization focusing on tourism and housing. However, on the basis of employment statistics[3], Crete is still an agricultural region; the

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1. Crete, op.cit. p. 103.
2. Crete, op.cit. p. XIII.
3. Regional statistics are very scarce in Greece, particularly those

primary sector absorbing about 50% of the total employment in comparison 30% of the tertiary sector[1]. Comparing the proposed, in the 1965-1975 Development Plan, inter-sectoral distribution of public investments with actual figures, one may observe, that the primary sector absorbed, proportionally, a smaller share of the allocated public investments than the tertiary (mainly transport and communications).

During the '70s employment in industry remained stable while the rate of growth of the sector's output has declined in comparison to other regions of Greece. The limited growth of industry in Crete is attributed[2] to certain "obstacles" such as the large number of small units using old fashioned technology, the "absorption of investible funds by tourism" and lacking infrastructure (the only industrial estates legally established, LS 4458/1965, are those of Iraklio and Chania).

The growth of tourism was quite spectacular. Hotel-beds capacity increased from 1.558 (1965) to 10.338 (1974); an average annual growth rate (1965-1974) of 23.4% for Crete, as against 9.46% for the country, during the same period[3]. The large volume of private investments directed to tourism may be attributed, among other things, to the very favorable credit terms provided especially to large scale tourist enterprises of Athens, or of the island, which were favoured and able to meet the required bank guarantees (see earlier discussion in Chapter V).

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covering earlier periods. The lack of a well organized regional information infrastructure, creates considerable problems in regional analysis, and in elaborating, or exercising a coherent regional policy. The various statistical figures employed here are drawn from:

a. The Regional Development Programme of Greece, 1981-1981, KEPE, Athens, 1980.

b. Figures-Tables of unpublished statistics of the National Statistical service of Greece (NSSG), 1981 Population census, KEPE, 1983.

1. As against 70.2% and 15.6% in 1963. See 1965-1975 Plan, op.cit. p. 28.

2. See Regional Development Programme, op.cit. p. 165.

3. Doxiadis Associates, National Physical Plan and Programme of Greece, Report 17, Vol. III, Athens, 1976, p. 363.

3.3.2. Aspects of physical development

The population influx into the urban centres took place without parallel securing the integration, or interconnection of the various productive and social activities (housing, industry, tourism and recreation) to, or, with the existing urban fabric and basic infrastructure networks. What happened was, either an expansion of (legal or illegal) built up areas, taking place without an elementary provision of social and technical infrastructural works, or, a transformation of the urban built-fabric; a result of an unplanned introduction of new uses - often in conflicting proximity - or, the development of multi-storey appartment buildings and high residential densities. Very often both cases occured, a typical example being the city of Iraklion[1].

Land use conflicts in peri-urban and rural areas are widespread but appear more intensive along the northern development axis (e.g., Iraklion-Mallia, Ag.Nikolaos-Elounda) and in certain small strips of flat, fertile agricultural land, along the coast (e.g., Ierapetra-Mirtos), where small scattered vacation homes are occupying agricultural land. The new tourist structures, in the form of either hotel buildings, vacation villas, second homes, or, other tourist establishments, disrupted in many cases not only the old built fabric, but also their immediate wider environment: agricultural land parcelation, historic sites and the rural landscape.

Within the relational frame set by the above points, and the discussions of both Chapter IV and V, one may discern and outline here three categories of tourism space production and consumption (utilization), which distinguish the physical structure of the region's TP. The first and most typical category of tourist space production and consumption, assumes, location-wise, a predominantly urban or peri-urban orientation. It follows the general pattern of a town's growth.

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1. Apart from Athens and Thessaloniki, the nomos of Iraklion evidences the largest number of "unauthorised" buildings (7.698) among the other nomi of the country. The figures could be larger since the relevant statistics concern only those buildings which have been "declared" according to the LS 1337/1983 of the MPHE. See: Technical Chamber of Greece, Information Bulletin, Issue 1279, Oct. 1983, p. 30.

Hotels are the usual type of accommodation, in this category, which develops through, more or less, "legal" procedures.

The second category, is realized under conditions of illegality and arbitrariness. It pertains either to the production of vacation houses, along the same line of mechanisms followed in the illegal settlements creation, or, to the utilization of various types of accommodation (villas, appartments, rooms), in the "parahotelerie" sector, that are not controlled or registered officially to operate as tourism establishments.

A third category of tourism production and consumption, assumes an "internationalistic" character. It is a resort type of development assuming a coastal, and, usually, non-urban orientation. In terms of consumption touristic space is utilized predominantly by foreign visitors, while for its production both foreign and local inputs are used; the later in certain cases involving the vernacular built-fabric or folkloristic and traditional elements.

The above physical development process, should be viewed in relation to the existing legal frame and the whole range of planning instruments that, either have not been introduced in due time, or, whenever applied, have been often rendered ineffective. A characteristic example of the second case is the earlier-mentioned Presidential Decree (12/5/1984) enacted by the MPHE, and setting out new conditions and norms for the construction of hotels outside the approved by town plans areas. This Decree faced the strong opposition[1] not only of tourism operatives, but also of technical-professional associations (e.g., the Technical Chamber of Greece) and was withdrawn for revision a few months after its introduction.

What, however, becomes most evident, at the regional level, is the lack of coordination between central departments in their attempts to regulate or promote tourism development. We have here three parallel, frequently non-convergent activities:

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1. See: Tourism and Economy, monthly tourism review, Athens, September 1984, p. 13.

a. The MPHE attempting to introduce planning-permits and locational-requirements procedures for tourist installations outside urban or built-up areas.

b. The NTO applying provisional measures (tourism "saturated" areas) to discourage the development of tourism within certain urban areas.

c. The Ministry of National Economy designing and applying an incentives system with tourism incentive zones which do not seem to reflect, or suggest any regional development policy; while there are cases whereupon the approval-allocation of tourism investments in certain locations does not conform with, or "deviates" from, the spatial control measures applied by the other central agencies.

3.3.3. Aspects of tourism's sociocultural impact

With regard to the "social implications of a rapid tourist development" an issue that should be given, according to the 1965-1975 Plan (Glikson report), close attention, an attempt is made here to interpret, certain relevant views expressed in two reports by social workers in the prefectures of Iraklion and Lassithi of Crete[1]. Thus, in a summary form, the two reports may be presented as follows:

Report A:

"The arrival and stay of tourists with low income and social or moral values creates two kinds of problems. On one hand, these tourists, in order to secure money for living, commit various statutory criminal offenses, such as mugging, larceny, pushing drugs, etc; as a result, the local police and courts, in their attempt to secure low and order, must deal, in excess to their usual work, with such offenses. On the other hand, the behaviour of these tourists has an adverse effect on the social values and habits of the local residents, especially the young people; who frequently immitate the bumming behaviour of the tourist. Thus, one witnesses altered social and moral habits such as indecent appearance, drinking sprees, sexual promiscuity, etc.".

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1. The reports were issued in 1979 by the Directorates of Social Welfare of the two Prefectures and were addressed to the Ministry of Social Services, Directorate of Social Work. What we present here is a brief and "free" translation of the two documents.

Report B:

"For the last ten year, the abrupt economic growth brought about by tourism in an area, which traditionally was ranking among the lowest in the standard of living, created several social problems. The behaviour of foreign tourists, based on social and moral prototypes totally different from those prototypes of the host local community, had an unfavorable impact on the behaviour of the average local citizen. Specifically, there are cases whereupon a young man residing in the village, whose daily employment is to look after the sheep, deserts his family in order to seek employment in the city as a waiter, a dancer in night clubs, a male escort, etc. This village man, who for years has been following the existing moral and social values, is lured to the city - only for the tourist season which lasts 3-4 months - by the behavioural insinuations of a type of tourist woman, who is carrying her everyday activities in the city almost in the nude. There are also cases whereupon the emigrating to the city young man soon discovers the use and pushing of narcotics (both criminal offenses usually covered by the family), or, cases whereupon this man returning to his home discovers that he has been contaminated by a venereal disease; often failing to report this to local authorities for proper treatment".

The above presentation of the two reports aims at neither supporting the "bad" effect of tourism on the Cretan society, nor rejecting the validity of such observations. It simply purports to show how the social issues of tourism are approached "officially" by a certain echelon within the administration. Obviously, such observations do not involve an analysis of some cultural and social responses to tourism among local residents; which is the case of another attempt to investigate similar issues elsewhere in Greece (Stott, 1978).

However, even if such examples constitute isolated observations, which to some extent may be not free of biases, the major issues which arises is not whether the cases presented are, geographically or socially, representative samples. The issue, instead, is to what extent changes in social and cultural mores can be attributed to tourism alone; (see also the analysis of the sociocultural impact of tourism

in Chapter II); or, whether such changes can be confined to the study of a few interactions, with foreigners, and observed in isolation from the broader socioeconomic development and technological change taking place within the host region (e.g., TV, educational system, popular national culture, etc.). An attempt to suggest a broader in scope frame of analysis, for issues such as the above, is undertaken in the next chapter.

3.3.4. Concluding remarks

Viewed within the context of the spectacular growth of tourism in Crete from the mid '60s onwards, or, in relation to the Basil Study, the 1965-1975 Development Plan may be considered as another planning document, with interesting pronouncements, but, nevertheless, failing to play any significant role in the touristic development, or better transformation of the island. Moreover, it could be argued that the 1965-1975 Development Plan, in comparison to the estimates of the Basil Study, failed to interpret "correctly" certain international tourism demand factors; to anticipate the significance of Crete's direct linkage with the international, air-based travel system and the islands attraction to certain growing European markets and ITOs.

On the other hand, it could also be argued, that the 1965-1975 Plan has emphasized agricultural development and intentionally has opted that tourism should not be the leading sector in the long term development of the island; assuming apparently, that such a strategic option, and the policy objectives attached to it, would be adopted and actively pursued through an appropriate state intervention.

However, a "verification" of the above-outlined arguments, which indicate possible reasons of non-convergence between specific planning practice paradigms (or, the objectives proposed and norms set in specific plans) and aspects of actual development, would demand an attempt to consider broader questions and issues; pertaining to the nature and scope of planning in relation to the role the state assumes, within the shifting conjectures of politics and socioeconomic growth processes.

4. Paradigms of local physical planning

Local planning, like regional planning, is an affair of the central government. Here, we have again a central planning agency (MPHE) practicing physical planning for urban, or rural development. Planning practice at the local level actually involves only certain procedures for the implementation of approved plans and the granting of building construction permits. The relevant services at this level are responsible, mainly, for following the implementation of the Building Code.

The analysis in this section deals with planning practices at the urban or local scale. It does not intend, however to discuss extensively the established ways of urban planning, or to explain them in the light of external or internal influences, i.e., the entire range of factors affecting postwar development in Greece. Instead, the analysis focuses on presenting certain paradigms of the current planning practice after a brief discussion which sets a general historic context of development and planning within which such paradigms can be understood.

4.1. The general context

The years of reconstruction, following the second world war and the civil war (1945-1949), witnessed a small relatively population growth but a very significant process of population (migration) and urbanization. Emigration was not only confined to a few mountainous areas and island communities, which were almost abandoned, but was spatially widespread[1], affecting many regions (e.g., Macedonia, Ionian and Aegean islands, etc.) and conducing to spatial inequalities in the development of the Greek territory. Internal migration which was most pronounced during the sixties was attributed (Reppas, 1977) mainly to the inability of both the agricultural sector, to secure a satisfactory income to the farmer and the secondary and tertiary sectors, to absorb locally the surplus or underemployed labour. Additional causes were the prevailing conditions which pertained to a decreasing farm labour demand (due to the mechanization in agriculture), and

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1. According to migration statistics of the National Statistical Service of Greece (NSSG) total emigration during the period 1958-1974 was 1,1 mill. people, most of who were of the 18-35 age group.

to the dispersal of population among a large number of small rural settlements, lacking in technical and social infrastructure.

The intensifying urbanization process in Athens and Thessaloniki, initially, and in the country's major urban centres, later, together with the non-existing, at that time, land use and land policies created the conditions for the accumulation of huge profits. The abundancy of relative cheap labour, land speculation and parcelation, and new building legislation have transformed the country's urban centres into massive cement blocks, turning at the same time their perimeter, areas very often of fertile agricultural land, into unauthorised residential quarters for the incoming rural immigrants.

The statutory framework for physical planning in Greece may be considered as inadequate to control or guide physical development. Such an inadequancy does not refer only to the establishment of plan preparation, approval and implementation procedures; or, to a formalized planning process and the organizational system of the various agencies with different functions. It mainly refers to, either the absence or the non-enforcement, of land use control mechanisms, a significant instrument for controlling physical development. The Law Statute (Legislative Decree of 17/7/1923) on "Plans of Cities and Towns", which was for many years the major legal instrument in force for the control of physical development in urban areas, was not sufficient to meet the new conditions and changes taking place, either within, or in the perimeter of urban centres. Several other independent and unrelated to each other laws were rather limited in scope; aiming at controlling development in specific areas (e.g., tourist and archaeological sites, special zones for public housing, etc.), or, regulating the size of buildings on land subdivisions outside urban areas.

Postwar physical urban growth in Greece has taken place to a large extent as a result of a free land market mechanism. Two additional factors, or important "planning instruments" that have contributed to the present form of the urban built fabric were the General Building Code and the Building (Densities) Coefficients.

The first phase of the postwar urban planning policy, until the mid-sixties, is characterized by: a) certain changes in the above-mentioned instruments towards allowing large increases of densities and

building heights in central areas and b) a very limited "planned" expansion of the approved town plans, through the traditional practice of town layout plans (rimotomika schedia).

A second phase of urban growth is marked by the first expansion of the Athens "approved" Town Plan (Royal Decree 16/9/1964) and subsequent expansions (e.g., Royal Decree 410/1968), the intensification of land transactions in the peri-urban areas[1], as well as, by specific changes in the Building Coefficients, allowing a rapid increase of building activities in provincial towns. It is worth noticing here, that during this period, from the mid sixties onwards, the growth of vacation houses was very rapid. Such a growth was enccuraged by increasing incomes and motorization, the agricultural land parceling practices, the poor organization of free-time and the residential conditions within the bigger towns, and perhaps, most of all, by the fabourable legal provisions (e.g., Royal Decree of 1967) enabling the erection of "lyomena" (a term applying to demountable vacation houses) on very small plots of land.

A third period of urban planning policy, is marked by major efforts in the early seventies, to improve the legal or statutory frame for urban planning with the enactment of new legislation. The Law Statute 1003/1971 on "Urban Development" by introducing zonal development (e.g., zones for priority development), was making provisions for the realization of large scale housing projects in newly developing areas or for renewal in central areas. However, this law, or the following one (LS 1262/1972 "On Master Plans for urban areas"), which aimed at enabling the application of various master plans, were never put to use. Subsequent legislation was based on revisions and extensions of the above laws, e.g., LS 947/1979, or, pertained to regulatory measures to curtail unauthorised building activities. The 947/1979 law, however, as well as the most recent one (LS 1337/1982) manifest a basic intention: to recover betterment as a result of the inclusion of large tracts of land (areas of unauthorised buildings) within the "approved" town plan.

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1. Relevant problems or the widespread "popular control" of peripheral land and land colonization problems are discussed by Leontidou-Emmanuel, in Working Class and Land Allocation , the Urban History of Athens 1880-1980, Ph.D. Thesis, The London School of Economics, 1981.

Following the above brief review of urban planning legislation, as well as, the description of regional administration in the previous section it is in place here to outline certain aspects of the local administrative structure in Greece.

There are more than 5.000 local administrative units with two kinds of local authorities: municipalities which cover urban centres or settlements with over 10.000 inhabitants and the commmunes covering smaller settlements. The highly centralised administrative system of Greece is defined by two characteristic elements: a) the dispersal of both the political power of local self-government and the productive resources and forces among thousands of small municipal and community units, and b) the concentration in Athens of economic and political power as well as control-exercising power through the funds-allocative mechanism.

The limited role and functions of local authorities, are directly determined by the existing legislation, as well as, the available financial[1] and technical resources. Such a role, however, can be fully understood and explained only through a historical analysis: from the long period of Ottoman occupation - during which the various Greek communities, particularly the geographically isolated ones, kept some kind of administrative autonomy - to the post 1821 Revolution period - when the new Greek State was attempting to consolidate its authority and establish a uniform, administrative organization.

Over the last four years, decision-making and the provision of public services in Greece is becoming more decentralised; either through the transfer of functions and power from central government or agencies to local authorities ("true" decentralization), or, through the transfer of certain functions from central departments to their regional offices (services departments). In the fields of municipal

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1. Local government income in Greece amounted to 34,6 bill. Drs in 1980. This is about 1/75 of the income of local government in the U.K. (£ 26,7 bill in 1980). For comparisons between the two countries' finances see: a) Papayannakis, M., Local government, "own resources" and political disentanglement, in Synchrona Themata, issue 20, January-March, 1984, pp. 35-39, and b) Byrne, T., Local Government in Britain, Penguin books, 1983, pp. 190-220.

decentralization, public participation and urban planning, the two pieces of legislation enacted (LS 1270/1982, LS 1337, 1983) set up "urban district councils" and "urban neighbourhood committees", in order to promote public participation and increase citizen influence on decision at local level. The two bodies established are envisaged to function as a liaise between local administration and citizens, with consultation-information duties and no independent decision-making powers.

4.2. Current local physical planning practices

4.2.1. The Operation Town Planning Reform[1] (OTPR): "A crusade to rediscover our cities"[2]

The so-called OTPR is a physical planning enterprise initiated and undertaken by the MPHE in order to cover with various surveys and plans the whole Greek territory. "I must remind you that the true subject of OTPR, with its extensions, is no less than all the inhabited areas in the country which comprises, according to the established terminology: cities, towns, villages, building cooperatives, summer residences, constructions outside the town plan"[3]. Such an undertaking involves the preparation (by private consulting firms) and implementation of general town plans and town layout plans, for all urban cities of the country, as well as, the preparation of development plans for over 500 "open towns"; the latter being conceived as an integrated settlement system consisting of a core settlement and a number of settlements surrounding it and carrying various functions and services.

The OTPR has been presented, with regard to its underlying theoretical basis, as diametrically opposite to the past planning ventures and policies which were based on the "growth pole" concept and were

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1. Ministry of Planning Housing and the Environment (MPHE), "The new policies for human settlements", Speeches of the MPHE: a) The importance of the OTPR, b) Recapturing the Historic and Town Planning Essence of Greek Cities, c) The Open City of Greek Provinces, Athens, December, 1983.
2. MPHE, op.cit., b), p. 12.
3. MPHE, op.cit., a), p. 7. The so-called constructions outside the town plan are circa 300,000 buildings, while the total area of unauthorised buildings (to be "legalized") 30,000 ha, according estimates of the MHPE.

supporting the concentration of development in a few regional centres.

With regard to the network of urban centres the approach is quite general: "Each centre is considered as the market for its hinterland and as a centre not only of services but of local manufacturing. We reject selecting a few industrial cities for development just as placing emphasis on a few centres. The structure of real development is polycentric"[1].

The guiding planning principle behind the "open town" approach is that of "abolishing" the urban-rural distinction and differentiation regarding the level of technical and sociocultural infrastructure and services; by upgrading and elevating the core settlement's role to a functional level equivalent to a town's centre and that of surrounding villages to that of "urban suburbs". Thus, in other words, one may assume, that what it is envisaged, is a process of an orderly urbanization-suburbanization of the countryside: "In this way the separation between town-village, a system whereby the village was shunted into an inferior category of human settlement, is abolished"[2].

At this point and before describing a specific example of the OTPR (The Corfu General Town) it is pertinent to make certain preliminary critical remarks.

Outlining a general explanatory frame of the undertaken OTPR, one may observe certain of its determining elements. The OTPR has been launched in a period when urban problems (e.g., environmental deterioration, the unauthorised buildings issue, etc.) were becoming politically sensitive. Further, during the same period the government was introducing the new Five-Year Development Plan which promoted participation at the nomos and local level and specific investments allocation programmes among the nomi. Additionally, in a period of high unemployment groups of, architects and engineers, through their professional associations, were exercising various kinds of pressure to secure employment[3]. Thus, within the context of the above facts, the political

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1. MPHE, op.cit., c), p. 5.
2. MPHE, op.cit., a), p. 7.
3. According to estimates of the MPHE more than 3.000 persons were employed in the OTPR. However, in this respect it has been argued

leadership of the MHPE, formed its own perception as to the way of approaching urgent problems and taking action: "By the end of 1984, all the inhabited areas of the country must be regulated in a responsible manner"[1].

What is, however, important to note is the following. Apart from the issue of timing - even if all plans of the OTPR had been prepared in due time - the major question is, how will be all these plans implemented? Here, one would argue, about their relevance, not only in terms of economic and political feasibility (to satisfy a plethora of needs and committments, given the economic uncertainty and constraints) but mainly in view of the pragmatic conditions pertaining to the capability, or preparedness, of the administrative machinery at all levels, to resolve the problems of implementation.

In addition to the above, it may be also observed that the value and effectiveness of such a planning venture is evidently enfeebled by the very same current practices, decisions and action of several public or private agents. For example, major decisions concerning the location of large scale public works, the introduction of new, or substantial amendments in the only recently passed legislation are radically effecting the viability of, and conflict with objectives and policy suggestions of, various plans. More important, the granting of planning permission, through the established practice of "divertions" from standard and generally applied regulations - not to say about the unauthorised building activities -, are distorting the effectiveness, or they are negating the function of an urban plan per se.

However, certain positive aspects of the OTPR should not be ignored. First, the OTPR has mobilized and employed a large number of people in a period of unemployment, contributing parallel to the broadening of their planning experience. Secondly, it has improved

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that the OTPR presented a good opportunity to staff and support municipal technical services, to undertake themselves the preparation of such studies; instead of supporting private consulting offices. See: Economikos Tachydromos, weekly economic magazine, Athens, 17/2/83, p. 27.

1. MPHE, op.cit., a), p. 8. By the end of 1984, however, the OTPR was still halfway; the new leadership of the MPHE ascertaining serious delays. See Vema, daily newspaper, Athens, 3/1/1985.

the information base of physical planning - through the various surveys undertaken and the collection of cartographic material -, as well as, the technical-administrative infrastructure of prefectural offices. Thirdly, such a venture, and relevant organized campaigns, may have increased public awareness of critical environmental problems, and may have encouraged to a certain extent public participation; an issue we discuss in the following section. It may be though an overestimate to claim that "There are no longer any unknown towns or villages in Greece. Thanks to an unprecedented reconnoitering effort, the essential basis now exists for any serious planning"[1].

4.2.2. The Corfu General Town Plan

The Corfu General Town Plan briefly described below is one of the studies undertaken within the OTPR frame, and commissioned by the prefect of Corfu. The general town plan is considered as a planning document which sets out a policy frame for the development, location, or layout of productive activities and sectors, the development of specific housing programmes, the renewal of, environmentally, deteriorated areas (inner town, residential areas), the development of community services and infrastructure networks, as well as, the organization of traffic and communications.

In the following paragraphs we outline the basic parameters of the Plan as well as the relevant approach of tourism as they derive from the analysis of the Study's documents[2].

A. Basic parameters of the Plan

1. Zone of ekistic (building and development) control:

A zone with specified geographical boundaries encompassing:

a. The peri-urban areas of town expansion (areas of unauthorised buildings, parceled land for building purposes, coastal outdoor recreation areas, etc.),
b. Coastal or special protection areas (agricultural land, forests, archaeological sites, etc.),

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1. MPHE, op.cit., a), p. 2.
2. Ministry of Planning Housing and the Environment, OTPR, City of Corfu et.al. Final Proposal, Phase B, General Town Plan, Athens, July, 1984.

c. Areas of specific use: airport, industrial areas, etc.

For each particular area within this zone the Plan proposes different land use restriction and building regulation measures; to be enforced though the enactment of specific Presidential Decrees.

2. Plan for restructuring the urban fabric:

A Plan dividing the town into distinct zones (with different historic social and town planning characteristics), delineating neighbourhood units, suggesting central and district city functions and community services as well as traffic organization measures.

3. Land use plans and plans of town expansion and of building densities and coefficients:

Pertain to the organization of land uses either within the greater urban area, or, within the town proper; define the areas of town expansion, target population and residential densities, as well as, building coefficients of specific areas.

4. Development zones and zones of housing development and renewal:

The proposed zonal division here includes:

a. Zones of productive infrastructure: a zone of retail commerce-storage depots, an industrial zone and a light industry park,
b. Zones of organized housing programmes and residential areas renewal: zones for programmes of residential areas renewal, for co-operative housing programmes, for a building land-sites appropriation programme, for housing subsidies, or mortgage programmes, etc.

5. Zones of financial and fiscal incentives:

These zones which are specified for the implementation of the above zonal divisions include:

a. Zones of "social" building coefficients: concerns new town expansion areas, and the granting of higher, than standard, building coefficient, to cover particular social infrastructure or housing needs,
b. Zones of special financial assistance: assigned in order to provide preferential assistance (loans, taxation, etc.) to certain areas,

c. Special incentives zones: assigned in order to promote the location or relocation of specific activities (e.g., cultural, recreational) in particular areas.

6. Zones of "special urban planning mechanisms" (instruments)

These zones assigned in order to develop particular housing programmes, include:

a. Zones of "active town planning" and urban land consolidation: concern the comprehensive residential development and land replotting or assembly procedures within particular areas,
b. Zones of regulatory building-control measures (which the Plan does not specify) and zones of building coefficients transference (similar to 5a above).

B. The approach of tourism

The scale and the manner of tourism's growth and management is considered, in the General Town Plan of Corfu[1], to be conflicting with or detrimental to the very same function of the city. This sector has according to the Plan a competitive advantage over other sectors and land uses (residential, commerce, etc.), thus displacing them and altering the traditional fabric of the city.

Tourism, it is argued,"consumes and degrades" traditional public goods,and fails to contribute, significantly, to their reproduction, through mechanisms or processes that warrant part of the profit from tourism to be invested into such goods.

Additionally,tourism's impact on the social and economic life of the local community is thought to be generally negative,taking into consideration the observed increases in housing rents,or the scarcity and expensiveness of bussiness-professional premises.

Thus, the above-mentioned arguments are employed in the Plan to support its major proposals: the discouragement of tourism's further development within the city or its peri-urban area. On the contrary, the Plan supports the organization and upgrading of existing infra-

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1. Corfu Town Plan, op.cit. p. 46.

structure, a better utilization of idle resources, to improve the competitiveness of the sector. However, here one may discern a contradiction in the Plan's proposals and further observe the absence of any concrete measures for realizing the stated objectives. The suggested improvement of tourism's competitiveness could probably accelerate (without appropriate measures) the existing process of other land uses' displacement from the historic centre, or the traditional city quarters, an established fact taking place now, due to its competitiveness as against other land uses.

Still further, it is unclear how tourism's growth can be discouraged in the light of an increasing international demand for holidays in Corfu, or, given the interest of ITOs to include the island in their packages. Additionally, and most important, it is not explained how can new investments, in the hotel or "parahotelerie" sector, be discouraged when the government seeks to promote, through its incentives law (1262/1982), private investments at a period of prolonged general investments abstention.

4.3. Characteristics of local planning practices: a general ctitique

4.3.1. The zoning fetishism

The use of zoning or, zonal regulations, is so frequent and uniform - covers almost all categories of plans - that gives the impression of being a panacea for all evils of physical development; or alternatively, one might discern an element of fetishism attached to such practices. The application of zonal regulation, by the planning authorities, through the enactment of specific planning legislation[1], may be also considered as an evasion of the task of a systematic exploration, and consequently application, of spatially and temporally, different planning measures (e.g., land use control measures) that could cope with existing problems. Dutch and British land use control measures, for example, eliminate to a large extent the need for "zoning" by prohibiting any building on land which has not been specifically designated for building purposes[2].

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1. See for example: LS 947/1979, LS 1337/1983.

2. See, e.g.: Edwards, G., Land people and policy, Chandler-Davis Publ. Co., New Jersey, 1969, p. 69

The "zonal practice" in Greek planning shows a certain preference for zoning practices in France and particularly those referring to the zones à urbaniser en priorite (ZUP), i.e., peri-urban zones to be developed or urbanised in priority. But here, one should observe that studying and drawing on foreign experience could be a very useful exercise, provided it is properly understood, and does not lead to a mechanistic copying, or transference, of fragments of foreign legislation.

Another point worthmaking is that the practice followed appears as a predominantly technical matter; without being related to particular land policies, to the entire constitutional and legal frame, to the structure of the fiscal and tax system, to land ownership patterns and perhaps, most important, to the existing administrative-institutional infrastructure and mechanisms[1].

A final point, that should be made in connection to the above, refers to the limited involvement of other social scientists in the design of such measures. Physical planners seem to neglect the economic aspects of land use planning and of the zoning regulatory measures they propose, while economists avoid, or, show reluctance, to enter into this "technical" field.

4.3.2. Issues of content and context

Observing particular practices - the content and theoretical underpinnings of several proposals in specific planning documents - one notices that, apart from an uncritical adoption of concepts, models, and policy measures employed elsewhere, their application here is given a blanket coverage without consideration of their relevance in economic, sociological and physical terms within real, differentiated, spatially, situations. One might question for example how "social integration" could be realized at the neighbourhood level (under existing conditions in Athens or Thessaloniki urban regions), or within the policy objectives frame for "revitilizing-restructuring agricultural settlements as nuclei of regional development". Who has actually studied

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1. For a further analysis of such issues see: Land Use Policy, a committe's report, in Regional Development Programme of Greece 1981-1985, KEPE, 1980.

such phenomena, their premises and implications within the context of existing conditions in rural or urban areas?

Further, one might also question how powerful can be today a movement attending to the need for local participation and community life; or, how effective can be a campaign popularizing the "theory" of the neighbourhood unit, or, e.g., Howard's wards concept in Garden Cities of to-morrow?

Various statements and pronouncements in planning documents and legislation employ frequently vague and obscure notions, terms and concepts[1] in order to support and promote patterns of participation, planning objectives, etc. Obviously, such statements or pronouncements may serve a certain political expediency, or even have a "didactic" function. In the case, however, where these are employed within the context of a specific set of objectives and policy measures one would expect that such statements are both clarified conceptually and operative, i.e., their applicability and operationality has been "tested" with reference to examples of real situations.

It has been indicated earlier, that recent urban planning legislation (LS 1337/1983, LS 1270/1982) established the neighbourhood and district, as territorial units, to promote public participation, through urban planning neighbourhood committees and district councils. Additionally, it has been observed, in several planning documents, that an excessive reliance has been placed upon local authorities[2], with regard to their expected contribution and involvement in the development process; a reliance which is not justified given the existing levels of their financial and technical-administrative capability.

Within the above context, one should remark that before setting up new bodies, or before enacting legislation to promote various forms[3]

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1. It has been also argued elsewhere that the use of "socialist terminology" to characterise measures of economic policy is politically and ideologically misleading. See: Karagiorgas, S., "Forms of collective property and socialist management", in Sychrona Themata, op.cit., pp. 25-33.

2. See for example, MPHE, op.cit. a), The importance of the OTPR, pp. 3, 15.

3. For a review of various forms of decentralization see: Study Se-

of decentralization of central or local government, the relevant authorities must explore all the prerequisites needed for attaining specific objectives, e.g., that of increasing citizen participation and influence in local public life. In this case, the prerequisities would concern such issues as election procedures and composition of local bodies, power and duties to be entrusted, the delineation of geographical boundaries, the available financial and administrative-technical resources, etc. The best approach, perhaps here, would have been to proceed cautiously on an "experimental basis", applying selectively, or, according to certain priorities, different forms of decentralization in order to test first the ability of such local bodies to represent local opinion, to stimulate action by people, or represent their interests. Then, after registering responses and attitudes, and after comparing results and drawing conclusions, one could possibly proceed to a wider application of such institutions.

With regard to the issue of public participation, it becomes apparent that after a period of more or less limited, sporadic and sometimes dynamic[1] citizen involvement, we are entering a new period. This time problems-solving, decision-making or, usually, the endorsement of decisions allready taken, is methodized through standardized, or controlled modes, procedures and channels of participation and "communication". The "dialogue" promoted assumes very often such formal and grandiose forms of mobilization[2] that it reminds us

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ries "Local and Regional Authorities in Europe", Reports Nos. 26, 27, Council of Europe, Strasbourg, 1981

1. Examples of citizen participation and/or popular mobilization in Greece are described in Hadjimichalis, C., Regional Development and Industrialization, Exantas, Athens, 1979, Ch. 6., pp. 174-212.

2. Various comments have appeared in the press regarding the OTPR campaign of the MPHE. For example see: "A dialogue with ... 100,000 persons", Ta Nea, daily newspaper, Athens, 19.11.1984.

of similar situations described by Brecht in one of his poems addressed to the citizens[1].

Because cities are big,
there are for those who do not understand the game played
plans.
Prepared by those who hold and master things.
Plans in which you can easily discern how to attain
the goals.
Since your particular desires have not been known in detail,
one, naturally, expects your proposals for improvements,
here and there.
If something does not match your taste, it will be altered
without any incovenience whatsoever.
In short: You are in the best hands. Everything is prepared
in advance.
you
need only to come.

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1. This is our own translation from: Bertolt Brecht, Zum Lesebuch für Städtebewohner gehörige Gedichte (1926-1933), in Müller, W., Nimmermann, P., Stadtplanung und Gemeinwesenarbeit, Texte and Dokumente, Juventa Verlag, München, 1971, p. 8.

5. Conclusions and further observations on the effectiveness of the planning practice

The analysis of planning practice paradigms in this chapter considered both the nature of the observed practices itself (i.e., the internal consistency of the plans, the applicability of the policies produced), and the relational frame of such practices (i.e., factors which influence them, or the manner with which such planning practices relate to the actual development process). What we observed actually was the existence of inter-regional and inter-nomos resource allocation practices without an explicit inter-regional development policy[1]. There were also regional development programmes, with little coordination among sectors as to the intented intra-regional development objectives. Regional and local planning, has been and is still to a large extent a central government's affair. What we observed is not a regional, or local planning practice but a centralized planning practice to tackle regional development problems. Regional development has been approached, by the relevant central departments, through specific sectoral policies-investments, the system of regional incentives, and various ad hoc regional development plans or studies; e.g., numerous and uniform regional sub-regional and local development plans initiated and organized outside any regional and local participatory framework.

Regarding physical planning, what we observed was a planning process or machinery geared towards producing many plans, various plans (national, regional, subregional, urban or subject plans), but in essence failing to introduce and apply regional or urban physical planning policies[2]; or, failing to relate in a satisfactory way with regional development programmes (in the five-year development plans) and sectoral policies.

Tourism planning was primarily sectoral, quite specific, regarding the supply side, but neglecting important aspects and constraints

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1. Inter-regional planning is mainly concerned with the centrally originated and directed resources among regions in order to meet certain specified objectives.

2. We are referring to land use and land policy measures as the major elements of an urban or regional physical planning policy. See further our report: Land Use Policy, a committee's report, Regional Development Programme (1981-1985) of Greece, KEPE, Athens, 1980.

of the demand side (e.g., domestic tourism, the activities and practices of ITOs, etc.). With regard to the physical development of tourism at the nomos and local levels, we observed that the various plans, having never acquired legislative backing, or been supported by essential land use legislation and land policies, were ineffective in directing spatially, or regulating the growth of tourism either within the urban fabric or in the countryside.

5.1. Physical planning as a plan making activity and the influence of plans

Analysing the way in which the planning process works, we have observed that physical planning emerges actually as a plan-making activity, ineffectively integrated with the overall planning process, where the absence of clear political committment over planning was particularly evidenced. In the analysis of selected planning practice paradigms, we have examined the content of specific plans and the relation of planning objectives-policy measures, included in these plans, to actual physical development or to actual decisions and actions undertaken.

With regard to the content of five-year plans, to the manner with which specific development problems are approached, and to the internal consistency of the plans, we have observed:

a. Unequal weight and scope is given to tourism development issues: Foreign exchange earnings (and macro-economic objectives) usually seem to force into the background domestic tourism and regional development considerations,
b. Lack of concreteness and explicitness in the objectives and policy measures formulation and mainly lack of correspondence between them,
c. Limited or lacking sectoral interrelation, which reveals the lack of coordination between the different agencies involved in the planning process.

The analysis of particular planning documents and plan preparation procedures which apply to all spatial levels indicate, that actually two separate, non-convergent processes are at work:

a. A process with strong economic bias, which involves sectoral objectives and policies formulation culminating (this is recently more pronounced) to specific investment programmes (a series of

sectoral or regional projects),

b. A process focusing predominantly on physical development issues; involving at the national level basic policy directions of spatial development (sectoral and settlements policies) and the preparation of various regional and local plans.

In tourism, the absence of instances, or cases of plan-based comprehensive action and/or plan-related physical development and spatial organization of tourism, shows that many projects for tourism development were "planned" and materialized outside the "formal" planning framework. In this connection, one could presumably claim that certain plans may have influenced to some extent various locational decisions taken by the administrative authorities or private developers. Here, though, it is very difficult to discern and delineate the areas of such a contribution.

There are regional and local planning cases (e.g., The Crete and Corfu plans presented earlier, with a 20 years period separating their preparation) where tourism was "sensitively" approached: Tourism was not considered in isolation (tourist accommodation development), but was also viewed as a matter which needs to be taken into account in discussing a regions' long term development potential prospects, or in approaching issues of employment, conservation and environmental protection, or, a local community's housing needs. However, such plans do not seem to have considered the dynamics of certain factors of external (The ITO's interests), or internal (The LTA's pressures, interests of local land owners) origination. Furthermore, the above-referred plans have not been related to the pursued by the government relevant investment, or incentives policies and their implementation has been associated with a very complex system of zoning regulations which the government was not prepared to commit itself.

5.2. The shortcomings of planning legislation

With reference to the legal-statutory frame, we may observe that any spatial "regulation" of tourism takes place, or is realized through a series of conflicting at times and of short duration policy measures which involve:

a. Financial and fiscal incentives legislation, frequently revised or supplemented,

b. Numerous practices of swerving town planning and building regula-

tions which are in force (e.g., the General Building Code),

c. Practices setting various devices to prohibit or discourage the growth of tourism in particular areas (e.g., "tourism saturated areas"),

d. Legislative practices setting through Presidential Decrees, norms and special regulations, usually, for hotel buildings outside urban areas.

The physical planning process in practice, being confined within a limited legalistic frame of restrictive measures, did not manage to address and relate to fundamental necessities (e.g., policy instruments and regulatory measures) of the land development process. In this respect, early warnings by the planners of the Regional Plan of Crete, namely that "Land speculation has began in some parts of the island. It is the gravest danger for the successful implementation of regional planning ..." (p. 246 of this Chapter) did not conduce to the implementation of appropriate land policy measures; to "affect efficacy or economy of location" of new tourist development.

A major argument regarding the failure of implementing urban, regional, or, tourism-specific plans, focuses on the imperfection, or, on the absence of an appropriate legal-statutory frame (the whole range of legal means and instruments) to regulate or control physical development. The various relevant views here[1] differ as to the shortcomings and weaknesses of the legal frame vis à vis certain plans, propounding different positions such as:

- Planning studies being commissioned at a time when appropriate legislation to implement them was not available,
- Limited scope and arbitrariness of legal statutes enacted at times, or, confusion due to the plethora of different independent statutes applying to particular areas or referring to other statutes,
- Limited knowledge as to the areas of the statutes' applicability, or, inability to interpret and fully exploit the possibilities they provided.

A characteristic weakness of the Greek physical planning legislation, that should be emphasized, lies in the fact that it has failed

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1. Voivonda, A., et al, "Space Regulation in Greece", Architecture in Greece, Annual Review (G), Athens, 1977, pp. 128-213.

for many reasons[1] to relate with, or, to establish "positive" and "redistributive" planning practices[2]. The various legal statutes introduced at times include in a piece-meal way extracts from French, or W. German zonal legislation[3]. It may be the case that Greek physical planning legislation has been influenced, to a considerable degree, by those planners who have copied, or suggested foreign prototypes without really assimilating what these signify to the place they apply, or how they relate to the conditions prevailing in Greece.

5.3. Tourism policy measures, inter-agency coordination and conflicts among the agents of tourism's growth

We have seen that certain tourism policy measures per se lacked in consistency, proper timing, explicitness and interconnection. For example, the complexity and frequent changes in the incentives system may have hindered a wider, spatially, mobilization of private investments. Still further, regional incentives were not accompanied by programmes promoting the infrastructure type of development needed in peripheral areas; as to minimize the risk involved from investing in "new" areas, or to enhance the attractiveness of the tourist product. The incentives system also lacked in temporal consistency, in the sense that it may have favoured some areas longer than necessary; investors would have been attracted there anyway, since they had better prospects for a quick investment return.

The above limitations of tourism policy measures may be attributed to the inadequate coordination among central departments and agencies; inter-departmental, as well as, intra-departmental coordination to promote various regional development objectives, particularly with regard to regional incentives, public investments in physical tourist

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1. The traditionally powerful and leading role of the private sector in the land-property development process seems to have blocked many interventionist tendencies, conducing to an almost unhindered interplay of market forces.

2. By these terms we mean the whole range of legal-statutory and administrative measures in planning to control speculative profit, to recapture betterment in order to fund compensatory payments, or social infrastructure works, to promote widespread programmes in housing, public transport and development land acquisition by local authorities.

3. It is worth noticing that many legal-planning terms introduced in the laws are accompanied by French or German equivalent terms. E.g., see introductory text of LS 947/1979.

infrastructure, and certain regional physical plans and policies. In turn,this situation may be related to an inappropriate administrative machinery and planning organization to conciliate and coordinate, not only various tourism policies, but also sectoral policies (tourism's interdependencies with other sectors) and,still further,to back up positive planning - i.e., setting up developmental priorities, guidelines and appropriate land use legislation - as against negative, consisting of restrictions and contradictory regulations.

In the general debate of physical planning practice,one specific approach[1] develops the following argument: Plans cannot be implemented because they are "ambitious and unrealistic" given: a) the existing constraints, or limitations related to the administrative structure (limited financial-technical capability of public administration and local authorities), and b) the intensive "resistance" and actions of both large and small interest groups, against any planned intervention; in their attempt to secure the "established spatial interests". It is interesting to note that such a "resistance", in the above approach, is attributed to the people's lack of social consciousness, or to the lack of what is called "urban planning training".

However, this point of resistance and the underlying causes, which seem to be rather more complex, raise the whole issue of conflicts and power allocation among the various agents involved in tourist development. Within the Greek context, and drawing on the paradigms analysed, we may discern certain conflict situations and advance relevant arguments in the form of "untested" hypotheses.

First, it may be argued that inter-agency conflicts or divergence in their planning practices and measures pursued, derive from the conditions described earlier: The lack of synergy and coordination among relevant planning agencies, over an agreed set of policies and course of action, or towards concerting their individual policies to attain specific goals. The result is a series of policy measures which, either do not interrelate and produce further conflicts, or, usually, they are withdrawn for revision shortly after they have been introduced.

A second conflicts situation seems to emerge between certain pri-

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1. See Aravantinos, A., Urban Design, Athens Polytechnic, 1984, p. 604.

vate tourism investors, especially those of the centre, and planning agencies which attempt to pursue restrictive, or regulatory policies of tourism's growth. In this case, any divergence from "established" practices may lead, generally, to conflicts. Specifically, it is argued that private tourism investors, or, finance capital enterpreneurs, have been accustomed to well established and consolidated, over the years, practices for arranging and serving their "locational-building" interests; controlling and streamlining such practices through various channels of political influence, or, through their own interests' representatives among certain echelons in the administration. Therefore, it may be expected, that they would strongly oppose the adoption, or application of any measures which depart from such practices. The role and influence of certain tourism enterprises, or, that of a particular class (e.g., the hoteliers), considered as an agent of collective action, can be better understood, when observed within the context of the specific relations it develops with other collective agents (e.g., state administrative officials, politicians, etc.). Here, however, such relations cannot be reduced to, and interpreted by, certain statistical correlations. Instead, they involve the study of concrete functional interdependencies developing among the different agents who, in their attempt to promote, or establish their interests, enter into historically specific arrangements, or agreements with each other.

Third, particular conflict situations seem to arise when measures to control tourism's growth (and related property restrictive measures) fail to liaise with broad regional, or place-specific conditions, or, fail to acquire a broad backing of certain technical-scientific and professional associations. Still further, the arbitrary, or provisional character of certain measures creates a climate of uncertainty, which compels the interested parties to seek their refutement, or recall, especially when such measures do not draw the widest possible political support and commitment; particularly during periods of economic crises, characterized by an investments "abstention", on the part of the private sector, or, during a period of general elections. We have already emphasized the importance of land-real estate ownership and related practices in Greece. In this connection, a typical conflict, or split situation, which seems to develop is between planning agencies (together, in certain cases, with conservationist groups and municipal authorities) and a broad front of local interests, small

land owners, building firms, commercial and real estate interests, etc. Probably, these forces will continue to oppose land use plans, or tourist resources conservation measures, which, in their view, threaten and restrict their private interest, or the development prospects of their property. There is worth noticing evidence that similar situations can be found elsewhere in the Mediterranean. For example, Morris (1985) describes a case in Spain's Catalonia, where the tourism-urban expansion cannot be successfully regulated, through planning intervention, due mainly to the traditionally powerful local rights over private property.

A fourth and particular type of conflict situation seems to result from activities and practices of ITO. In this case, the conflict arises at the regional level, when ITO, in promoting selected markets, favor specific types of accommodation, contrary to the interests of local hoteliers. The response to the problem by the central tourist authority, the NTO, is a "neutral" or non-interference attitude. This may be explained by, the government's desire to maintain and promote "good relations" with the ITO, recognizing their power which lies in the dominant position they hold among private enterprises as the dynamic entrepreneurs and as elements of innovation in the tourism market system.

Evidencing the absence of a substantial rapport, or convergence, between the spatial activities of different agents, or the kind of physical development taking place, and concurrent physical planning practices we have attempted to relate and attribute the latter's overall ineffectiveness to the inadequacies of the planning system: The kind of plans produced, the shortcomings of legislation, the inadequacies of the administrative apparatus and planning organization.

Also, the preceding discussion of planning paradigms in conjunction with the conclusions reached in Chapter V, indicate that the extent of planning's influence upon the main factors which underly tourism's spatial structure may have been confined by an actual planning process of fragmented responsibilities; whereas the process of tourism's growth, involving many and diverse components, requires a comprehensive approach and strategy, the coordination of different policy objectives. The discussions indicate that the lack of <u>political commitment</u>, in the sense of an active and timely governmental support of specific measures suggested in development plans, as well as, a

rather limited political and social acceptability of planning, reflected in its present administrative-institutional organization, may have further limited its range of influence, the ability of planning to minimize conflicts between private and public objectives, or to reconciliate social and economic ideals.

Certain of the issues discussed in this chapter will be further considered in the following chapter, where, drawing on the results reached in each chapter, we shall attempt to synthesize the conclusions, providing an appropriate background to support and justify specific conclusions and proposals for the spatial analysis and organization of tourism in Greece.

CHAPTER VII

Physical and tourism planning and the spatial organization of tourism

Scope and thematic content

Chapter VII sets out to answer specific questions which derive from the research objectives of Direction D. How should problems and policies pertaining to tourism's spatial structure and organization be analysed and approached? Which are the major policy guidelines for the spatial organization of tourism? This chapter purports to advance a certain approach regarding methods and practices in the field of spatial analysis and planning of tourism.

More specifically, such an approach which considers both methodological issues and issues related to planning practice involves the following:

a. A system of tourism territorial profiles:A methodological-conceptual framework for analysing existing developments, formulating and assessing development policies and organizing relevant planning oriented research and surveys.

b. Major directions of tourism policy: The frame of planning guidelines, strategies and policy instruments for the spatial organization of tourism.

The first section of this chapter is to a large extent a synopsis of all the preceding analysis. It synthesizes discussions and arguments and draws, on the basis of several findings and conclusions reached in each chapter, the general background of planning parameters involved in the spatial organization of tourism. It supports and justifies the specific suggestions and proposals we advance in the following section.

The methodological approach in the second section, conceptualizes the organization of tourism and the related planning activities on a territorial basis and proposes a general guidelines frame that could serve the analysis and formulation of regional development problems and policies in tourism. The

advanced approach takes into consideration the multidimensional character of tourism and tourism's impact; it recognizes the interrelationships among dimensions and among the various units of spatial aggregation.

The third section of Chapter VII, sets out the general context of tourism planning policies for the spatial organization of tourism. In the light of the conclusions of the first section, and on the basis of the proposed system of territorial profiles, we outline here major directions of sectoral (tourism) as well as, physical planning policies as guidelines for the spatial organization of tourism. This section focuses particularly on strategic issues of tourism planning and on issues of organization and coordination in planning practice. It indicates, considering both constraints or shortcomings and perspectives or possibilities, several possible changes and/or preconditions for the improvement of planning practice and the implementation of the suggested tourism policies.

1. Main factors and parameters in the spatial organization of tourism: The background to planning intervention

1.1 Main factors and issues in tourism's spatial organization

1.1.1 The tourist flows (markets) and supply (tourist product) factors

In this study we have undertaken to describe, analyse and explain various factors and processes which are involved and give rise to the spatial structure of tourism. We have discussed and argued that the observed marked degree of spatial concentration, or regional uneveness in the growth of tourism is related to, or results from, the interplay of specific demand and supply factors, as well as, factors related to the organization of the international tourist industry.

Within the W. European context, the volume of tourist flows and their spatial distribution seems to reflect a process of leisure division - demand and consumption differentiation - attributed to marked inter-country differences and relationships regarding socioeconomic factors, supply-attraction factors, as well as, distance-accessibility factors. The significance of each of the above factors seems to differ from country to country; a differentiation which may be attributed to the different composition of the tourist clientèle (composition determined by demographic, socioeconomic and motivational variables), to the different modes of travel used by tourists, and to the destination - specific characteristics of the tourist product.

In the analysis of Greece's place within the above context, we have ascertained the significant role of distance-accessibility factors, their constraining effect upon tourist flows to Greece. Also, the organization of the tourist industry in W. Europe, especially through the airlines and tour operators, effects both international tourism demand, i.e., the European markets for Greek holiday destinations and supply, i.e., the Greek tourist product and particularly its transport - accessibility component. Within the European context, the volume of tourist flows to Greece is influenced to a large extent by exo-

genous parameters, i.e., those factors pertaining to the European market conditions and to the organization of the tourist industry. The effect of endogenous, or country-specific parameters on international tourist flows seems to rely mainly on the country's tourist product articulation and attraction (quality and price competitiveness), as well as, on relevant marketing policies geared towards the international tourist markets and the industry's main agents, i.e., the tour operators.

At the national level, the regional pattern of tourist demand in Greece, seems to have been influenced by both general and tourism-specific factors; by factors of an external origination and influence, and factors related to the country's socio-economic and territorial structure, its administrative-institutional organization:the degree of accessibility of each regional unit within the national and international transport landscape, the tourism-related infrastructure and services available in each region, the particular policies of state or public agencies and agents (system of incentives and fiscal measures, direct public investments), as well as, the behaviour of both the international and national tourist market agents.

However, at this level, what seems to be significant are the endogenous conditions and parameters (the role of the state, or government policies and the structure of the tourist industry and tourist product) which give rise to the observed spatial patterns of tourism <u>within</u> Greece. Exogenous parameters (e.g., ITO, international airlines, etc.) although significant (in reinforcing and promoting tourist concentration in establishing places and particular forms of TP articulation), they seem to depend on and 'exploit' the already developed location (accessibility) and attraction (tourist product) advantages and conditions.

In spite of considerable limitations in statistical data and pertinent research background pertaining to the Greek tourist product, certain concluding points and planning implications which emerge from our analysis can be drawn as follows.

First, it seems that the Greek tourist product, sold in the

form of independent components, has not assumed to any significant degree its own regional identity[1]. An identity and differentiation that would result from a mobilization and utilization of all kinds of regonal inputs and resources, economic, sociocultural and physical; or would result from consideration of the country's spatially diverse, natural, cultural and man-made tourist landscape, as fixed assets of the national and regional economy. The Greek regions supply only certain components which constitute separate consumption inputs making up a final holiday package; the latter, which determines the particular mode of the regional product's consumption, is designed and marketed at a supra-regional, national, or international level.

A second point worth noticing is that the activities and policies of the ITO, LTA and the state, as well as, the nature of relations developing among these agents are such that conduce to the above-outlined forms of the Greek TP articulation; through the external influence of the economic terms of its consumption, the promotion of particular, stereotyped, consumption patterns (beach holidays-coastal resorts), or, the unplanned growth of tourist superstructure and its continuous concentration in established places.

A third and final point concerning the structure of the TP pertains to the observed uneven distribution of public and private investments. In this case, we have noticed earlier that very often the tourist superstructure (hotels, apartments, etc.) is growing without the supportive and complementary growth of infrastructural works, or without the parallel development and integration of the TP's attraction components; a course of de-

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1. The concept applies to both the country as a whole, within the wider Mediterranean region and to each of its regional units. The identity of the country's TP is neither independent of its regional entities, nor a simple sum of several regional elements (e.g., the hotels of Rhodes plus the hotels of Crete, etc.). Instead, it is thought to pertain to the structuration of and relations among different - heterogeneous regional units (e.g., the Regional TPs of Crete, the Dodecanese, Thrace, the Ionian islands, etc.) into an entity; where each asserts its own place and folk related unique characteristics, while at the same time it finds certain complementarities and functional preconditions in the other.

velopment affecting negatively the overall quality of the tourist product.

1.1.2 The role of the state in relation to the tourist industry's main agents: International Tour Operators and Local Tourist Agents

The first major point that arises from the discussions (mainly in Chapters V and VI), is that the state has undertaken to underwrite the risks of private investments, or secure the accumulated tourist capital, through various forms of socializing the costs of production.

One form of socialization were social investments, i.e., all expenditures in infrastructure (major characteristics of the period 1951-1964), as well as, all direct or indirect subsidies[1] to the hotel sector (major characteristic of the period 1965-1974 and onwards).

During the boom period of tourism's growth (1963-1973) and especially from 1967 the state supports an expansionist supply policy, favoring large scale developments in the hotel sector (e.g., Chalkidiki, Crete, Rhodes, etc.). The parallel growth of small or medium-sized hotel establishments may be seen as a result of favorable financial and fiscal measures (e.g., incentives), as well as, the overall conditions created by the state conducing to capital flows into the construction industry (dwellings), commercial, financial and rentier activities.

A second form of socializing the costs of private tourist production were social consumption investments, i.e., such public expenditures (e.g., museums, spas, organized beach installations, parks, etc.), enhancing the environment for the private investor. Such investments, however, were relatively small, unevenly distributed in space and decreasing in proportion relative to private investments.

Social expenses, as a third form of socialization, pertain to those expenditures, that may be considered to aim at conducing

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1. Refer to the whole range of financial and fiscal incentives: interest rate subsidies, tax reductions, operating cost reductions, etc.

to capital accumulation increases, but also as mainly geared towards maintaining stability and balance in the capital/labour relation. The subsidization of tourist employees (unemployment allowances during the non-peak tourist season), and subsidizing holidays for lower income groups ("social tourism" programmes), may be considered and argued from different viewpoints: a) as a means of subsidizing and supporting the hotel sector, particularly during periods of crises, b) as a means, within the context of the overall social policy measures, to decrease unemployment and income inequalities, and c) as usual recourse measures undertaken in a sector where more essential, structural changes are required.

Thus, we observe that state intervention assumes temporally various forms of action in socializing private costs and expenses of production. However, the above ensuring conditions and active support of the state to the tourist industry are neither spatially coordinated (within the context of particular regional development plans) nor conduce to substantial changes in the modes of tourism production and consumption; to the development of new products, or to 'enriching' existing ones, which would "pull" both private investors and demand to new locations.

The second point that should be made concerns tourism's spatial pattern and the related spatial orientation of capital investments, capital formation and accumulation processes. In this area, the spatial dimensions of capital investments, production units (components of the TP) and relations in tourism are seen as reflecting to a certain degree and for a certain period, the whole structure of dominance-power-control relations of the centre's economic agents upon those in the periphery over the means of production. This type of relations may be, in turn, considered as a result of:

a) the specific governmental finance policies, as well as, policies of the banking system which have favoured at times large scale development or investments of the centre (monopolization of finance capital),

b) the centralized administrative-organizational structure of the state apparatus and of the tourism relevant agency, the NTO, which seems to serve better the interests of the centre's tourist

enterprises. However, over the last decade we may observe a gradual change towards a more dispersed regionally pattern of capital investments and mainly towards the growth of the informal tourist superstructure, i.e., the illegaly operating tourist accomodation establishments. This last issue will be discussed in the following section.

A third point worth noticing within the ITO, LTA and the state relational context pertains to the state's inadequate functioning in two main activity areas or policy fields:

a) in the field of influencing the international tourist industry (and its main agents) and markets, through appropriate marketing policies, to attract those market segments or new tourist markets which best serve socioeconomic and regional development goals,

b) in the field of mobilizing and guiding the country's private sector, or the highly fragmented tourist industry towards the establishment of a competitive, diversified, and regionally identifiable, tourist product.

1.2 Planning parameters in the spatial organization of tourism

1.2.1 The nature of planning in Greece

In several reviews and studies[1] of the planning process and practices in Greece, different views have been expressed on the nature of planning and its scope; differences reflecting both the disciplinary background, the theoretical assumptions adopted and the ideological position of the authors or planners.

Statements that in Greece there was never planning in general, or physical planning in particular, are advanced on the basis of ideological and political theses prescribing, in a normative way, what planning is, or, what should be in a country like Greece; or

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1. For example, see:
   - Komninos, N., City development and planning, Timeos publ., Thessaloniki, 1982 (particularly Ch. IV:urban planning and ideology).
   - Catephores, G., General principles of planning, KEPE, Athens, 1984.
   - Architecture in Greece, op. cit.

further are advanced on the basis of arguments that planning (as it is defined by those advancing the arguments) within the capitalist system cannot work, it is essentially impossible, or, at best, it has a very limited effectiveness.

On the other hand, there are arguments that planning has not been systematic for several reasons, or, it was limited. Thus, in a very general review of theoretical issues of planning and of experiences in advanced capitalist countries it is supported, that the existing planning in Greece is an activity limited to technical experts and civil servants[1]; while the same review advocates indicative economic planning as the most appropriate planning approach under present circumstances in Greece.

According to a review paper introducing the "new" planning process in Greece (Katseli, 1983), all past efforts and plans do not substantiate the existence of planning; the latter's existence being related and dependent on certain prerequisites, or criteria of a procedural-institutional character. However, the statement that "even though there have been plans in Greece there has been no planning" is self contradictory, since it can be argued that any Plan results from some kind of planning activity and practice, irrespectively of the nature of planning or its effectiveness. Obviously, any planning characterization depends on observations and interpretations given to planning practices (how planning is manifested and practiced), on the wider relational setting (Greek society) such planning practices occur, on the models and hypotheses that are employed to explain certain situations.

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1. Catephores, op. cit. p. 83

Recent accempts to define and propagate the very nature and function of the current planning process in Greece as "democratic" and "active"[1], as opposed to what one assumes must be undemocratic, authoritarian, or indicative, appears to tax the minds of certain, politically committed, planners and advocates of the "new planning style".

The underlining of the "democratic" character of planning and of socialism in general is considered[2] as servicing a practical purpose: that of differentiating the current practice, either from external phenomena (cases of political authoritarianism coinciding with socialist objectives and policies of planning practice), or internal (the authoritarian nature of the dominant capitalist institutions and oligarchic relations). However, several arguments appearing lately - which imply the "democratic" and "active" character of the current planning process by employing "formalistic" definitions to interpret and label recently introduced legislation and mainly five-year plan preparation procedures - carry few confincing arguments and more vague, moralistic expressions, or hackneyed platitudes. As if the planning process can become "democratic" overnight by merely introducing marginal changes in the administrative apparatus and in the participation procedures. This is, perhaps, due to the fact that planning has not been viewed as an activity expressing historically evolving socio-cultural value systems; or, that planning is not a simple regulatory mechanism, operating in a vacuum, independently of the entire social relations which determine the process of development.

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1. "Active" planning is related to a specific investment strategy (programmes and policies) to attain various economic goals (e.g., productivity, international competitiveness) and structural economic changes. See Katseli, L., et.al., "Structural Change and Economic Policy, Suggested evidence from Greece", unpubl. paper, KEPE, Athens, 1983.

2. Catephores, op. cit. p. 17.

Reflecting on the relation of practice to planning theory, on the nature of particular "theoretical modes" in planning, underlying the observed practices, we may, generally, note the lack of concrete and rigorous theoretical underpinning for planning practice. Certain reasons could be advanced for this: for example, the limited development of research in this area and/or the way planning and related research activities are organized within the administrative-institutional apparatus.

The various kinds of relevant assumptions that have been advanced in planning practice paradigms, expressing philosophical, pragmatic and value standpoints probably indicate two underlying theoretical modes. One, which implies, if not explicitly expresses, the "indicative" nature of planning, is heavily influenced by economic growth theories and related assumptions on the scope of, e.g., the social goals promoted (assist to smooth the functioning of market forces), or, of the regional policies suggested (investments concentration on specific centres would generate and diffuse growth over an entire region). Against the above type of planning, current planning practices underline the "democratic" and "active" nature of planning referred earlier. This "new style" of planning resembles the liberal and pluralistic planning ideas which became popular in the 1960's and 1970's in the USA and the UK. Both theoretical modes, however, are barren of empirical foundations or critical theoretical analyses applicable to concrete problems of planning practice in Greece, or analyses dealing with specific issues concerning the relation of planning to development processes.

1.2.2. Major characteristics of the planning process

The major characteristics of the planning process that are outlined here derive from the discussions and conclusions of Chapter VI and pertain to the three phases of the planning process: a) the phase of understanding-interpreting phenomena and identifying problems, b) the objectives formulation and plan generation phase, and c) the action, or decision and plan effectuation phase.

Observing the first phase, one notices (analysing various planning documents) that the way and capacity of interpreting complex facts pertaining to economic, sociocultural and physical growth processes appears disjointed and incrementalist; developmental issues being conceptualized and expressed independently of each other, not in their interelationship; economic problems and macroeconomic analytical models assuming the major focus of the planning effort mainly at the national level, while social environmental and physical development issues acquiring only recently increasing attention.

In the second phase, the way of establishing evaluating different courses of action, or strategies, goals or ends, means and regulating controls, manifests that very little feedback is exercised, or, a vary small degree of interlinkage and correspondence exists between goals and means. It further manifests, a planning apparatus far from flexible and adaptive, in the sense of being able to respond, discuss, incorporate, or reject, diverse societal values and expectations. Thus, over the last twenty years, we evidence the production of a series of development plans and programmes while, either there was not a clear political commitment to implement them or, the presuppositions for their implementation - means and instruments of state intervention - had never been considered and scrutinized in advance, in conjuction with the set of goals being set in the plans. Here, in this connection, one should also notice the lack of a clearly defined and coordinating developmental direction; in the sense of formulating specific batteries of investments incentives, or other policy measures to gear the desired sectoral composition and spatial distribution of productive investments.

Observing the third phase, one may notice that decision taking and the mobilization of several kinds of resources are dependent on, and realized within, a highly centralized form of administrative

structure and machinery. What it is observed here, is not only the formal attitude and behaviour held (and clearly stated) about the "indicative and corrective or accomodating" nature and scope of planning, and hence, that of policy measures being implemented. It is the disparity and discrepancy that exists, between the very images held and expressed in the set of various goals and objectives, and the implemented policy measures, the controlling mechanisms and regulations which lack in coordination coherence and consistency.

The planning implications emerging from the above brief description of the planning process touch upon three major issues, we deal with in the following sections: Methodological approaches in planning, the organization of planning and the policy framework for planning in the case of tourism's spatial organization.

The above characteristics of the planning process may be considered as reflecting the entire administrative-institutional-legal frame and its constituent elements:

- The planning organization and its supporting administrative apparatus and mechanisms, i.e., the administrative set-up at the different spatial levels and the technical-managerial capability of public administration,
- The legal-statutory frame, pertaining to the entire range of legal means and instruments employed to support and promote the development process.

Drawing on the preceding analyses, especially on our discussion in Chapter VI, we shall focus our further discussion on the issues of planning legislation (its present shortcomings, or inadequacies) and planning organization, particularly at the national (central government) level.

1.2.3. Planning legislation[1]

We may observe, generally, that the administrative-institutional-

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1. The analysis and relevant critique of planning practice and legislation has covered a period up to the early 1980s. Within such a context, the 1337/1983 Law for the "Extension of urban plans, ekistic development and relevant regulations" is still the most recent urban planning piece of legislation. Our reference to subsequent developments (practices and legislation) purports to provide a better contextual basis to our discussion and proposals. Evidently, the critical consideration of the effectiveness of relatively recent developments would require a larger time-span to assess the range of their influence, or their shortcomings.

legal frame lacks in strength, or effectiveness to regulate physical development, or land development processes. Land utilization practices and land use changes are either not subjected to efficient controls, or do not follow "prescribed in various plans guidelines and development objectives. In spite of several measures taken to contain illegal, or "informal" land utilization practices, such practices seem to continue and, in certain cases, to have been reinforced by specific unrelated policy measures being promoted to attain particular objectives. For example, in the case of tourism we argue that, recent policies of controling and restricting the development of tourist accommodation in selected areas[1], may have compeled investors and landowners to recourse to illegal building-construction practices, thus contributing to the further increase of the informal tourist accommodation stock.

What is perhaps the most characteristic element of the physical space development is the transition process from the informal to formal practices in the use of urban, peri-urban and rural land. Specifically, the state, through its administrative apparatus and mechanisms, and as a result of various kinds of pressures from interested parties, resorts to what we may call a "legitimization procedure": a gradual recognition and inclusion of the existing illegal-unauthorised housing areas, or of the informal tourist stock, within the existing town map areas, or within the formally recognized tourist accommodation stock.

Earlier, in the conclusions of Chapter VI, we have discussed the shortcomings of planning legislation and of the administrative apparatus and organization; their weakness and inability to enforce and promote effective measures programmes and practices for the resolution of land use conflicts, or, for building wide consensus processes among the different interest groups. Also, we have particularly noticed the lack of an active and positive (as against restrictive) land policy to guide development (the market) to selected, according to planning objectives, locations. In this case, however, the enactment of an appropriate urban and land use planning legislation is not the only important issue. Equally, or more important, is to accompany such legislation with land development and management policies, as well as, a

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1. The enactment of "tourism saturated areas" through the Ministerial Decision 2647 of the Ministry of National Economy (Government Gazette 797B/19.11.1986).

supporting administrative-institutional machinery (e.g., responsible agencies for implementing and enforcing the law): Those planning instruments which could affectively address and resolve complex situations pertaining to land ownership patterns and property rights, to land speculation and fragmentation practices, etc.

The prospects of resolving problems such as the above seem to be hampered by the complexity of existing legislation as well as the ineffectiveness of specific planning practices. Two examples are in order here:

- The urban planning law 1337/1983 constitutes itself a highly complex and multipurpose set of regulations. The Law's application - which is still met with unsurmountable problems, according to the official criticism of professional associations - is related to and dependent on over 40 Articles in 16 different previous planning laws and presidential decrees[1].
- The so-called Operation Town Planning Reform (OTPR), described earlier in Chapter VI, was initially conceived as a two-year (1982-1984) urban planning programme. This, however, was based on an erroneous estimation of existing possibilities regarding its implementation. In June 1987, the new Minister of the Environment, introducing a seminar on the "Upgrading of the Urban Environment", reports, among other things, that "the programme of the OTPR studies has advanced and has acquired now a steady growth rate..."[2].

1.2.4. The organization of planning

From earlier discussions in Chapter VI, it may appear that regional planning has turned to a development from "below"; to particular forms of planning - exemplified in the 1983-1987 Development Plan - where concepts and planning objectives such as mobilization of local resources, self-generating growth, regional devolution of power, etc. assume dominant position. At the level of their ideological function, certain planning practices which took place since the early 1980s may be regarded as a politically expedient response against the central

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1. Technical Chamber of Greece, Weekly Information Bulletin (G) N. 1271-2, August 1983, p. 9.
2. Technical Chamber of Greece, Weekly Information Bulletin (G) N. 1473, June 1987, p. 7.

state authority; against a "discredited", in the public eyes, central administration which was blamed for many development problems and planning failures.

However, this "shift of strategy" was not supported actively by the presence of either a strong and well-organized regionalism movement and consciousness, or, the building-up of an efficient, technically-scientifically, administrative machinery and planning organization[1]. Instead, "decentralized" regional planning practices were and at large continue to be initiated from "above"; carried along by the centre's regional representatives and practiced in a fashion which seems to channelize local action towards directions defined by central authorities. For example, in tourism, with the exemption of the Thessaloniki NTO, which has been given limited power, all the other six regional offices have not acquired any responsibility whatsoever; even though the relevant legislation (Presidential Decree 884/1976) empowers them with certain planning responsibilities.

Although progress towards an effective regional planning organization and in improving the situation and prospects for self-generating development in most regions seem to be a long term achievement, nevertheless, certain measures of breaking the paralysis and inertia, which has brought historically many of the country's provinces and regions in stagnation, may have been taken. These are, however, as yet on a small scale. A much greater effort seems to be required particularly now,when governmental action will probably seek primarily to respond to the "pragmatism" of the more acute and pressing macroeconomic problems (inflation, balance of payments, weak competitiveness of Greek manufacturing, etc.); while regional economic disparities are in danger of being eclipsed, or of loosing weight, as a top priority set by the government.

We have already outlined the administrative set-up in Greece and have indicated the dominant role of central government as a background to discuss recent efforts for decentralization. The various planning problems, particularly those concerning tourism and physical planning

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1. According to a recent (June, 1987) report of the Ministry of the Interior the minimum requirements (for meeting the immediate needs) in technical-scientific and administrative personnel of the 52 Prefectural Planning Services are estimated to be 500-1.000 persons.

have been discussed in the previous chapter. Drawing on these discussions, we are outlining in this section the major shortcomings of tourism and physical planning organization at the national (central government) level. Thus, in Table VII-1 we present both the major functions of central government departments, in the area of tourism and physical planning, and issues reflecting the problems of inter-departmental relations: problems which result from the particular way each central department exercises its official function and/or relates to another department.

The present situation is characterised by a still limited, devolution of functions to the regions and an overloading of functions assumed by central government departments. Additionally, at the central government level, we observe a multiplicity of uncoordinated development initiatives emanating from different central departments many of which maintain a separate responsibility for the same sectoral activity.

The recurrent appearance in our discussion of the coordination issue needs qualifying. Obviously, coordination is not a unique Greek case, a problem appearing only in this country. However, certain of its particular characteristics within the Greek administrative system are worth outlining. First, coordination is hampered by the very same overloading of functions at the central government level. Second, the limited technical-managerial capability of the administrative apparatus is detrimental to the coordinating function. Third, a rather strong jurisdictional fragmentation and compartmentalization within each government department works to the detriment of coordination. The same negative impact seem to have the absence of clear-cut statutory arrangements which could promote inter-departmental cooperation.

Table VII-1

The Organization of Tourism at the National Level

matrix of inter-departmental relations

CENTRAL GOVERNMENT DEPARTMENTS major tourism-related functions	①	②	③	④
		MAJOR AREAS REQUIRING POLICY COORDINATION-INTEGRATION		
MINISTRY OF NATIONAL ECONOMY • Five-year plans, regional develop. plans + policies; inter-sectoral investments allocation + policies. ① • Tourism-related fiscal + financial incentives system-zones; tourism "saturated areas". • Tourism relevant economic policies: balance of payments-foreign exchange.		— Long and medium-term (5 year) tourism development strategy. — Investments allocation and monitoring system. — Regional development + Tourism + Physical development (infrastructural works, settlements) policies.		
NATIONAL TOURIST ORGANIZATION • Tourism public investments programmes; annual budgets, 5 year plans. • Tourist accommodation site suitability regulation within existing town map areas; tourist buildings regulation; special control policies: e.g., tourism "saturated areas". ② • Marketing-advertising, cultural activities (festivals); NTO offices abroad. • Special programmes: social tourism traditional settlements--buildings conservation	— Considerable friction-conflict regarding tourism policy formulation and implementation. — Tourism's weak integration to other economic sectors at different spatial levels. — Unclear overall tourism development strategy: non-integration of the different components of the TP into a comprehensive planning frame.		— Tourist infrastructure + superstructural (accommodation) location policies (within town map areas and in rural areas). — Tourism related conservation (both structures and areal), environmental and cultural development policies. — Traditional settlements, rural development, agro-tourism + tourist product diversification policies.	— Tourist transport (air, road, sea-travel) and nautical tourism policies (NTO + Ministries of Transport and Commercial Shipping).
MINISTRY OF PHYS.PLAN.+ENVIRONMENT • Physical-regional development plans (advisory); Town plans and building regulations. • Tourist accommodation site suitability regulation outside existing town map areas; "saturated areas". ③ • Traditional settlements-historic buildings conservation; second housing areas. • Major infrastructure work: airports, roads, ports. • Environmental control policies and legislation.	— Economic considerations override physical and regional planning objectives. — Spatial distribution of tourist investments and relevant legislation (incentives zones) do not sufficiently relate to particular physical planning policies. — Tourism is considered prima facie as the significant factor in support of major infrastructure (airports, roads) decisions; little inter-departmental, inter-sectoral coordination.	— Ad hoc and/or sporadic cooperation (as against statuory-permanent) in tourism spatial location and control policies. — Failure to control large scale illegal tourist accommodation. — Tourism+environmental policy weakly related; recent improvement with Environment Law 1650/86.		
OTHER MINISTRIES • Ministry of Agriculture: Agro-tourism; National Parks+outdoor recreational areas; legislation for their establishment. ④ • Ministry of Culture: Archaeological sites + museums; conservation of monuments + historic buildings. • Other ministries		— Agro-tourism programmes exhibit limited integration with other programmes. — National parks system (Min. of Agriculture) weakly related to physical-environmental planning + outdoor recreation. — Often purely tourism-oriented criteria in cultural decisions-choices. — Responsibility divided between 3 departments + no clear direction in traditional settlements-buildings policy.		

MAJOR ISSUES - PROBLEMS OF INTER-DEPARTMENTAL RELATIONS

2. The system of tourism's territorial profiles: The methodological frame for the spatial analysis and organization of tourism

The survey of literature and previous analyses have shown that the various aspects of the tourism phenomenon, and the problems of tourism development, have been approached by employing different analytical methods, and through different planning methods and practices. With regard to the general underlying characteristics of such approaches, one may observe that they are, more or less, subject and location specific, and assume either a mono-disciplinal direction or, a direction specified and effected by the particular scientific technique employed (e.g., management science techniques, econometric models, etc.). Moreover, what predominantly is resulting and suggested from the analysis of tourism's spatial aspects and of relevant planning practices, is the need for a) much broader in scope analytical-methodological approach of tourism issues and b) an improved planning process and practice; an explicitly defined planning practice with regard to its content - object, and the relational - conditional frame within which it operates.

Drawing on the results of the preceding research work, our major purpose here is to synthesize a guidelines frame for surveying-analysing issues and problems of tourism, on a comprehensive basis at various spatial levels; thus, contributing in the establishment of a solid basis for strategy generation and policy formulation in the tourism planning and decision making process.

2.1. Aims and conceptual clarification

The system of tourist profiles that is being conceptualized and presented in this section aims at providing a general framework for: a) analyzing existing developments in the area of tourism, resulting from planned or unplanned intervention and actions; within a context of cause-effect relationships, b) formulating and evaluating development strategies and policy objectives-measures in tourism, c) suggesting the number and range of issues that should be investigated in research and surveys of tourism phenomena.

Elaborating the above-mentioned points, certain further remarks, as to the nature and scope of the system, are thought to be in due order here. The tourist profiles system is intended not as another eval-

uatory method (e.g., similar to EIA[1] methods), but as an overall comprehensive spatial frame for a consistent incorporation and integration of such methods and studies; i.e., impact studies (estimates of the impacts of different types of tourism development as a basis for evaluating alternative tourism policies) and intersectoral analysis (tourism in relation to other sectors). Further, such a system could serve as an orientation frame for tourism planning research and studies; i.e., market analysis, tourism consumption and preference patterns, tourism potential and assessment of existing resources, as well as, capacity studies.

The tourist profile concept differs from the tourist region one, which in certain studies[2] has been defined as "a concentration of significant tourist resources which would allow the widest possible range of physical development in areas small enough to provide economically all essential services". The tourist profiles conceptualized here are of diverse nature, regarding their character and areal size, or the size and range of tourist resources and physical development; they are not exclusively related to criteria of economic viability. Additionally, they are not envisaged as standard tourist regions with functions along the lines of those proposed elsewhere[3].

The territorial profile is assumed to have a three-dimensional character. Economic, sociocultural and ecological - physical dimensions are analysed as follows:

a. Tourism's socio-cultural dimension manifests itself through certain

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1. The whole set of Environmental Impact Analysis (EIA) methods and techniques (outlined earlier in Chapter II) covers three purpose considerations:
   a. identification of existing or probable impacts
   b. assessment or quantification of existing or probable impact
   c. assessment, quantification and comparison among existing and probable impact.
2. For example, see "The Model Amenity - Tourism Study of Country Donegal", An Foras Forbartha, Ireland, 1966, p. 68.
3. "Tourist regions rather that local authority areas would then form the basic units for decision making within the overall framework of the policies laid down by the central controlling authority", See: Archer, B. A Strategy for Tourism, Ph. D Thesis, University of Wales, Bangor, 1971, p. 200.

activities (e.g., visiting museums, galleries, participating in festivals, local fiestas, etc.), which may or may not involve differing degrees of interaction among social groups, and/or through the elements or components of what constitutes the socio-cultural milieu of a locality.

b. Tourism's physical dimension manifests itself through certain recreational activities (e.g., skiing, sailing, etc.) and/or through various natural or man-made components which constitute the landscapes, the physical settings or attraction poles for those activities to occur.

c. Tourism's economic dimension manifests itself through a series of transactions between consumers (buyers) and producers (sellers) of products and services: resources and services of diverse nature, originating from other sectors, form the TP sold at different price levels and consumed in different ways.

Each dimension is then defined and expressed through certain Activities (or consumption processes), and Components (or elements that constitute the TP). In analytical terms, we have three categories of variables corresponding to Activities and Components and further, a set of mutual influences or cause and effect relationships among Activities and Components. Within a specific tourism profile, change results from the interaction of various sets of Activities (ΣA) and Components (ΣC). In a simple form of interaction, we may have an Activity (A= tourist souvenirs shopping) and a Component (C= handicrafts production in the area). Both have certain characteristics, exist under certain conditions, and manifest themselves through various types and/or forms of behaviour and/or organization. The introduction of new activities, or, a change of the nature of activity A (say through an increase in the number of tourists, or change of their shopping habits) brings about new forms of interaction and create new conditions. This new set of conditions is contrasted and compared with the initial one in order to assess the change and the direct or indirect impacts resulting from the introduced new activities.

More complex, or different forms of interaction within particular tourist profiles pertain to, or result from, activities that may not relate to tourism per se, or that are dependent on external factors,

i.e., pertain to the characteristics of the tourism origin place or to the international organization of travel systems.

2.2. The three dimensions of tourism's territorial profiles

2.2.1. The economic dimension of a tourist profile

Macroeconomic considerations

From the macroeconomic point of view, tourism is being considered within the context of broad economic aggregates pertaining to foreign exchange earnings, income and employment (generation), production and consumption structure (tourism's linkages with other sectors), investments structure and regional distribution, etc. (see Diagram VII-1, section A). Major questions here center on assessing (quantitatively and qualitatively) the above parameters of tourism's economic structure and, primarily, on analyzing their relationships within a broader variables context of internal (conditions of the country's socioeconomic and territorial structure) and external conditions and influences.

Microeconomic considerations

The analysis here is concerned, generally, with the study of individual "behavioural units" (e.g., consumption patterns of various segments of the tourist population, ITO's decisions and practices, etc.); with identifying the existing among them interrelationships, or the way they determine the particular structure of tourism's production factors and consumption modes. Within the context of territorial profiles, the focus centers (see Diagram VII-2) on assessing basic interdependence relations between tourism's economic variables and a set of tourist, or non-tourist, variables pertaining to either a particular regional unit or of an extra-regional origination.

2.2.2. The ecological - physical dimension of a tourist profile

Macrospatial considerations

From a macrospatial point of view, tourism is being considered within the country's overall territorial structure (see Diagram VII-1, section B). This is exactly the type of analysis undertaken predominantly in Chapter IV (with regard to the level of aggregation that the various spatial patterns of tourist activities and components

Diagram VII-1

Tourism's Territorial Profiles

(macroanalytical aspects)

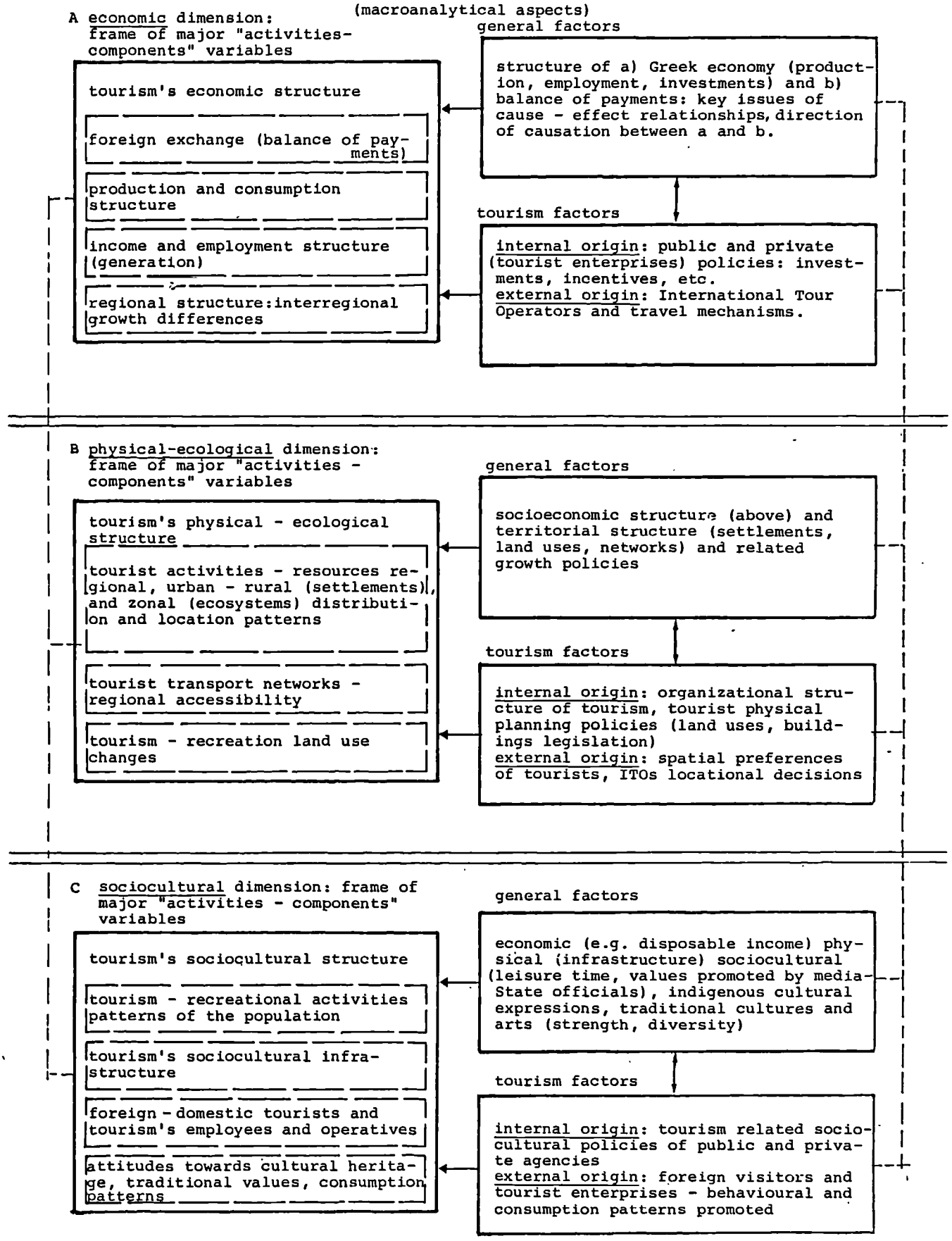

Diagram VII-2

Tourism's Territorial Profiles

(micro-analytical aspects)

PROFILE'S ECONOMIC DIMENSION — STRUCTURE MATRIX

Assumption on interactions and cause-effect relationships among variables: The formation of (new) economic conditions-relations and impact situations observed within the context of: basic interdependence relations between tourism's economic variables and the local-regional economic structure; interdependence relations between new conditions introduced by tourism and the pre-existing ones in the local-regional economy.	Tourist and non tourist variables of local-regional or extra-regional origin		
	tourist population related variables . categories of tourist population (domestic, foreign, etc.) . categories of tourist expenditures (by tourist category and type of tourism)	Local - Regional economic - sociocultural - physical structure changes economic: . production . consumption . income . employment . investments sociocultural: (see diagr. VI-4) physical: (see diagr. VI-3)	organizational structure internal origin: . macroeconomic policies - regional policies (investments) external origin: . Foreign Tour.Operations' financial involvment-factor pricescontrol
Local - Regional elements of tourism's economic structure			
. tourism's production (production - supply of services and packages - programmes of services and goods) and consumption (accomodation, food recreation - entertainment, transport services) structures		. extent of local "support and servicing" of tourism's production and consumption pattern - economic duality or integration	
. tourism's income (income generated by tourism) and employment (permanent - seasonal, local or non-local origination, male-female) structure		. extent of the spread range of economic effects to local-regional economy, spread of financial gains, contribution to growth - diversity of local employment	
. investments in tourism proper (tourist accomodation equipment) and related goods and services (land, apartments - houses, shops, restaurants, etc.)		. extent of local participation in tourism investments, tourist capital formation (land, buildings etc.)	
. tourism supporting technical and sociocultural infrastructure and services		. extent of positive (external economies gains) and negative cost effects to the local community (diseconomies due to congestion, importation of highly priced goods etc.); benefits (improvement in infrastructure) and costs (negative externalities)	

assume) and partly also in Chapter III and V.

Microspatial considerations

The analysis of microspatial aspects, outlined in terms of its content in Diagram VII-3, pertains to specific cases, or types of spatial units and to particular changes taking place therein; land use changes, infrastructure changes (transport networks, public supply and discharge networks, etc.), natural environment changes (ecosystems and microclimate), changes of the man-made built fabric, etc.

The ecological - physical structure changes, or, the new physical conditions and impact situations, are viewed within the context of the particular way, the touristic physical space is utilised and consumed by the various tourist, or non tourist consumers and operatives; or, within the context of the particular way, the touristic physical infrastructure is located, or articulated within the physical structure of the territorial unit.

2.2.3. The sociocultural dimension of a tourism profile

Macro-sociological considerations

From the macro-sociological point of view, tourism is being considered within the context of quantitative and qualitative changes, in the collective social and cultural activities pattern of the population (see Diagram VII-1, Section C); such changes refer, e.g., to (a) the touristic and, in broader terms, recreational patterns of the country's population and to the factors which are instrumental in the development and evolution of such patterns, and (b) the effect of foreign behaviour patterns and life styles (as manifested by foreign tourists) on the country's population.

Micro-sociological considerations

The analysis of microsociological aspects within particular tourism profiles, outlined in Diagram VII-4, covers two major areas: (a) Social effects, as a result of interaction among different groups of tourists and local population, (b) Changes in the social structure of a community, as a result of the effects from (a) plus the effects of both economic and physical structural changes.

Economic structural changes, referred above, pertain to changes

Diagramme VII-3

Tourism's Territorial Profiles

(Micro-analytical aspects)

PROFILE'S PHYSICAL DIMENSION

STRUCTURE MATRIX

. Assumption on interactions and cause-effect relationships among variables: The formation of (new) physical - ecological conditions and impact situations are observed within the context of the particular manner the territory (space) is used - consumed by the various "tourism activities" participants; or, from the stand point of form, structure and location the touristic resources and physical development (infrastructure) assumes within different spatial settings (landscapes)	tourist and non tourist variables of local-regional or extra-regional origin		
	tourist population and tourism activities related variables types of activities and size of corresponding users population touring (cruising) sightseeing congress-educational, cultural medicinal, health cure-treatment spas eat-dring entertainment shopping outdoor recreation sports, etc.	local - regional physical, sociocultural - economic structure changes physical-ecological . settlements pattern . land use changes . networks and accesibility change . built up areas . ecosystems sociocultural (see diagr. VI-4) economic (see diagr. VI-2)	organizational structure internal origination: investments (public and private) land use policies, planning legislation external origin: . Foreign Tour.operations' location decisions
Local - regional elements of tourism's physical - ecological structure . tourism infrastructure proper: various types of accommodation equipment and tourism related establishments: restaurants shops etc. . tourism and outdoor recreational land uses, resources (aquatic - coastal, traditional architectural built fabric, artefacts; ecosystems and natural environmental areas. . tourism transport networks and infrastructure; degree of accessibility by air, sea, road as well as links of local - regional units to international transport system.	. extent (quantitative, qualitative assessments) of tourism's physical development integration within the local - regional physical environment and built fabric; extent of natural and built heritage resources deterioration - disruption or preservation - enhancement extent of diversity or uniformity of the new tourist spatial layouts and infrastructure . extent of improvements in or strains on networks and public facilities servicing the local communities and the tourist sector: disfunctioning overcrowding excess capacity, improved accessibility, increased amenity value, etc.		

Diagram VII-4

Tourism's Territorial Profiles

(Micro-analytical considerations)

PROFILE'S SOCIOCULTURAL DIMENSION — STRUCTURE MATRIX

Assumption on Interactions and cause-effect relationships among variables: The formation of (new) social conditions-relations and impact situations is observed within the context of interactions among the local community's different social groups, the various categories of the tourist population and the incoming (immigrant) foreign or domestic tourism employees and operatives; social impact situations observed further, as resulting from changes in the regional economic and physical structure brought about by tourism.	tourist and non-tourist variables of local-regional or extra-regional origin		
	tourist population related variables	Local - Regional Sociocultural - economic - physical structure changes	Organizational structure
	• categories of tourist visitors (according to nationality, length of stay, etc. • categories of tourist employees and operatives	sociocultural: . demographic structure . social organization . cultural patterns and traditions economic (see diagr.VI-2) physical (see diagr.VI-3)	internal origin: . investments (public and private) . socio-cultural policy measures external origin: . foreign tourist operations' transm. of sociocultural values
Local - regional elements of tourism's sociocultural structure . tourism and recreation related sociocultural activities - practices of the host and guest - tourist population (festivals feasts rituals etc); sociocultural resources: traditional built fabric and artefacts.	. extent of participation in and continuation of traditional activities and of production of traditional arts and crafts; extent of environmental awareness and appreciation (perception) of cultural heritage and tradition views here may differ between locals and outside experts since tourism financial benefits accruing to the first may "bias" their perception of cultural deterioration standards		
. social conditions, relations and collective/ group activities pertaining to the organization of a) tourist employees and enterprises (associations, trade unions, cooperatives etc.) and b) local and "foreign" (permanently settled or seasonal foreigners, second residence domestic holiday makers, etc.) tourism and recreation interest groups.	. extent of changes introduced in the employment structure/local labour force) and of integration within the local community of different tourism related social groups; extent of social needs (leisure time, tourism) satisfaction of the local population.		
. behavioural and consumption patterns of various groups of local and visitors population (domestic or foreign tourists) as well as tourist employees and operatives.	. extent of differentiation in attitudes and modes of behaviour or particular population groups (e.g. tourist employees, youth etc.); depending on their ability to diallectically communicate with, interpret and confront subjects and meaning of foreign behaviour . extent of transfer and different degrees of accepting foreign consumption patterns; depending on the influence exerted by particular local groups who adopt and follow such patterns.		

in the employment and production structure in a locality. Such changes are associated with the replacement of local human inputs, in the tourist service sector, with more "efficient" ones, from abroad, or outside the area, or, with technological changes and innovations, altering traditional techniques and practices, in small manufacturing and handicrafts producing local businesses.

Physical structural changes pertain to changes in the land use pattern, and the touristic built-environment (building activities, e.g., hotels, second homes, infrastructural works). Here social changes, and particular impacts situations, are viewed as the effect of: a) conflicts between local and foreign interests (non-local) with regard to land transactions, control of land and building development, land prices and speculation, b) inplanting within the rural environment a particular touristic physical structure, reflecting values, tastes and life styles of an urbanised, domestic or foreign, metropolitan-based industrialised society.

2.3. Procedural and operational considerations

The macro-, and micro-analytical frameworks, which have been outlined previously, are viewed as interdependent within the context of the proposed system of territorial profiles (see Diagram VII-5); the difference lying in the level of aggregation at which tourism phenomena or variables are studied. For example the study of tourism development at the regional scale (e.g., the Regional Plan of Crete) would require different variables selection - aggregation, different types of analysis than the study of, say, tourism's sociocultural impact on a local community (e.g., the town of Ierapetra in Crete). In the first case one would focus on certain significant aspects of tourism[1] which effect, delineate, or relate to the skeleton elements of tourism development of the region (see also analysis in the following section). In the second case, one would focus on investigating certain

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1. E.g., how three distinctive types of tourism accommodation infrastructure - i.e. large scale tourist complexes, small scale or family type hotels and rented rooms - relate to, or integrate within the regional economy, or within the different settlement patterns of the island, etc.

Diagram VII-5

Tourism's Territorial Profiles

Framework of Analysis

	Macroanalytical frame	Microanalytical frame
Aims	• assess the overall structural characteristics of tourism within the context of relations between internal and external factors	• assess interelationships among individual tourism factors and their economic sociocultural and physical impact; within an interaction and cause-effect relations context
Types of analysis and methods and techniques	• cross-unit or cross-level analysis (sectorial in nature) • cross-time (time series) and cross-sectional analysis (economic sociocultural and physical structure cross sections at one point in time) • correlation and cluster analytical techniques, regression analysis (simple multi-linear) canonical analysis	• inter-sectoral and cross-sectional analysis • matrix techniques and factorial analysis; a profile at one point in time is compared with itself at another; in order to assess variation in dimensions (Factors, between profile situations - the sets of variables used in both situations do not differ in size and composition •
Spatial Units (types of territorial profiles) considered	• national territory • regional units (administrative or planning regions) • subregional units (nomi, zones) • settlements (municipalities, communities) aggregate clusters or types	• national territory • regional units • subregional units • settlements Locational impact of individual "decision units", e.g. ITOs or particular types of spatial units, e.g. the resort coastal

"interaction or encounters"[1] hypotheses concerning various groups: foreign visitors, domestic tourists, local residents, hotel employees, etc.

Thus, the scope and procedure for employing the above outlined system of territorial profiles in the planning process, would depend on: a) the particular objectives of the analysis set, e.g., an analysis of the sociocultural impact of tourism on rural communities, or an analysis of specific sectoral (touristic) policies on the local economy, etc., b) the type of territorial profile chosen, e.g., the national territory or particular groups of rural settlements, etc., c) the dimension, or dimensions, to be analysed, and d) the temporal frame in which the particular phenomena are analysed. Thus, depending on the above, such a procedure may involve the following:

- Phase A: Identification of the set of variables (activities and components) that are involved in the particular situation (type of territorial profile and dimension) analysed. Examples of such variables are presented in the rows and columns of the structure matrices in Diagrams VII-2, 3, 4. The process of identifying and selecting "typical" profile situations and variables relates to that part of our research work undertaken in Chapter IV. It involves: a) identifying-bringing out spatial patterns of sociocultural, economic and physical tourist variables, b) identifying similarities, disimilarities and correlations between variables, c) identifying spatial (areal) units or, groupings of units with similar characteristics in terms of the variables.
- Phase B: Selection of the most important variables according to preliminary analysis of interrelationships among them (employing e.g., factor analytical techniques); or, additionally, according to value judgements that confine the set of variables by selecting those thought most important to characterize the particular pro-

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1. "From the social-psychological standpoint, touring may be seen to consist of a series of "encounters" in which one or more visitors or outsiders, interact with one or more hosts, or insiders, in a network of supplementary goals and sets of expectations", see: Sutton, W., "Travel and Understanding: Notes on the Social Structure of Touring", International Journal of Comparative Sociology, Vol. VIII, No. 2, 1967, p. 220. See also the analysis of sociocultural dimensions of tourism in Chapters I and II.

file analysed. In situations of value judgement, statements of assumptions, or values adopted, are necessary for setting selection criteria. At a particular phase of the planning process, such statements may be discussed at different levels (political or technical) to resolve possible conflicts. It is of interest to state in this respect what has been remarked elsewhere: "As the conflicts are the result of clashing values, the impact analyses must somehow address and incorporate (by ranking and weighting) such values; otherwise they will prove to be largely irrelevant - even though they may be replete with facts, figures and imaginative theories of cause-effect relationships"[1].

- Phase C: Evaluation of the specific situation (impact situation), or the set conditions and relations among variables that result from the interactions observed. This is a major phase which involves: (a) analyzing the degree and extent (in terms of spatial level, coverage or spread) of change and impact situations that take place within the particular set of conditions and the type of territorial profile examined, (b) assessing their significance, on the basis of a simple general designation, as positive-beneficial, negative-adverse, or neutral (see Diagram VII-6); or on the basis of more elaborate and detailed assessment methods using ranking and scaling techniques, (c) searching for possible, or identifying existing, links and correspondencies among the different dimensions within a particular type of territorial profile, or among different profile types pertaining to one dimension. A simplified hypothetical example to illustrate the above major phase could be: The physical dimension of Crete's tourism territorial profile.

In this case, it is assumed that, following the identification and selection of variables procedures (Phase A and B), the two categories of variables to be considered are a) different types of tourism infrastructure and b) different landscape types (e.g., coastal landscape, urban region, natural area, etc.), or settlement types. The basic under-

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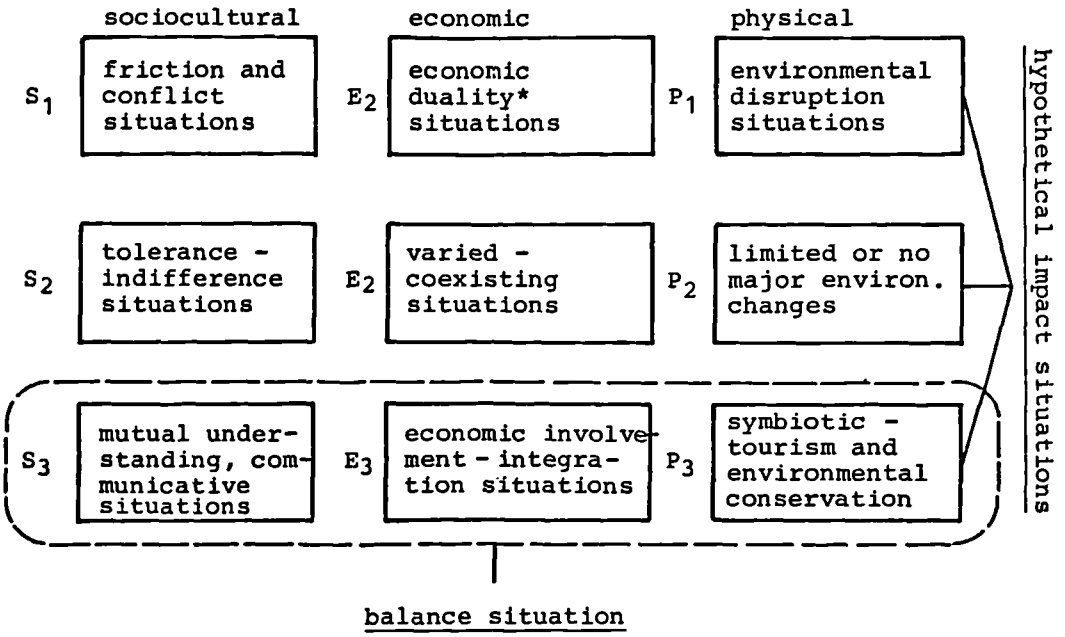
1. See: Mathews, W.H., "Objective and subjective judgements in Environmental Impact Analysis", Environmental Conservation, Vol. 2, No. 2, 1975, p. 122.

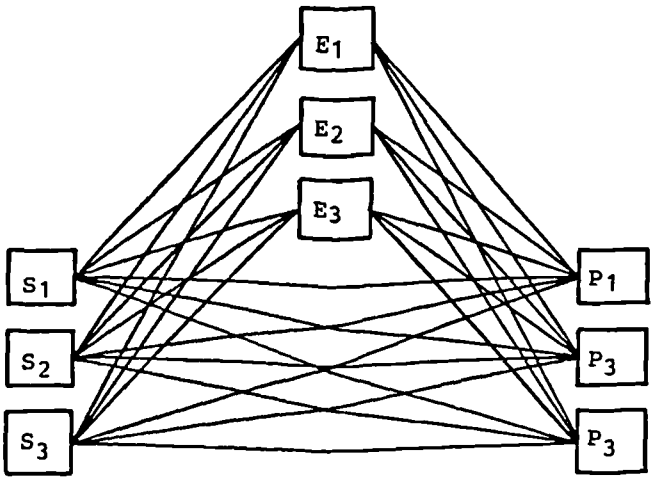
Diagram VII-6

Tourism's Territorial Profiles

(economic, sociocultural, physical dimensions)



* Absence of local-regional involvement in tourist development, or two different unrelated compartments with regional or extraregional inputs.



interrelationships among different types of impact situations.

lying assumption of the analysis (see Diagram VII-3) is that the formation of new physical development conditions, or, impact situations, is observed from the standpoint of form, structure and location that the different types of infrastructure assume within the different landscape or settlement types.

The analysis of effects or impact situations can take place through measurements of observations (see review of relevant techniques and methods in Chapter II) of:

(a) visible built-form changes: e.g., changes introduced by new and/or extension of existing tourism infrastructure (hotels, shops) within the traditional built-fabric.

(b) functional changes: e.g., changes (improvement or deterioration) of transport networks, public water-supply and waste-discharge networks; changes in agricultural land use and ownership patterns.

(c) natural environmental changes: e.g., changes in the state of coastal water resources, or in the microclimate and ecosystems.

The evaluation, or assessment of the significance of the results from the above analysis might suggest, e.g., the following alternative impact situations.

	alternative 1	alternative 2
(a)	Uniqueness of tourism infrastructure and integration within the locality's urban fabric; scale and extent of tourism's infrastructure causes minimal landscape modifications	Internationalization-standardization of tourism infrastructure in contrast to existing built-fabric; strong effect on natural landscape modifications
(b)	The infrastructure and services supply of the tourist sector is integrated to that of the local community; correspondence in standards and levels of supply; equal accessibility opportunity to amenities	Overcrowding and pressure on public facilities, networks and services; discrepancies, contradictions and conflicts in the supply of services between the tourist sector and the local community

(c)	The "amenity" value of natural recreational resources remains unchanged; no disruption effects on ecosystems.	High degree of water pollution, littering of the littoral and public open spaces; considerable disruptions in ecosystems.

The final step in this phase involves a search for assessing possible correspondencies with, or relations to, other impact situations (economic or sociocultural). Thus, the analysis here might bring forward cases where certain of the above-mentioned impact situations (e.g., integration of the family type tourism infrastructure within the traditional built-fabric) correspond with say an "economic duality impact situation or a "tolerance-indifference" situation (see Diagram VII-6).

- Phase D: Assessment of the temporal context (probability of occurence of an impact, or the time scale certain conditions or relations among variables occur, or might occur) of the particular situations studied. This is an hypothetical phase in simulation situations, when investigating the potential cause-effect relationships, that would result from implementing, e.g., various development plans, programmes, projects, etc. The assessment of an activity's potential effect, i.e., various degrees of certainty of occurence would depend on the level of scientific knowledge and the prediction techniques used.

An important, finally, issue, relating to the operational aspects of the profiles system in the planning process, concerns the information domain. The inclusion of economic, social and ecologic-physical variables in the tourist profiles system requires not only a strong theoretical backing of economic, social and ecological research in each area but also knowledge of the exact links and relations among the variables of this three dimensional set. This issue will be discussed in the following section of the chapter.

3. Major directions of tourism policy; The frame of planning guidelines, strategies and policy instruments for the spatial organization of tourism

This section draws on the results of the entire analytical work undertaken and particularly on the preceding in this chapter synthesis of findings and conclusions which serves as a justification and orientation frame for the specific proposals and suggestions advanced here. Thus, we shall discuss in this section three main issues which emerge as instrumental parameters in tourism planning and in the physical planning process for tourism development.

- The frame of tourism planning guidelines, involving the sets of principles, goals and objectives which suggest the general context and content of tourism development planning
- The frame of tourism development strategies, which involves the two main axes (tourist product and tourist market restructuring) according to which the various policy measures develop
- The frame of policy instruments, concerning the main parameters involved in the formulation and implementation of tourist policy.

It should be clarified that this section introduces certain ideas, normative statements, or, value judgements pertaining to and/or deriving from the relation between what "are" the cases of tourism spatial structure, development and planning practice (the descriptive and interpretative factual analysis undertaken) and what "ought" to be, or how "should" be (interpretations of and reflections on the empirical results of the analysis perhaps fused with a "practitioner's" experiences in, and perception of, Greek planning).

3.1 The frame of tourism planning guidelines: principles, goals, objectives in tourism development planning

With regard to the problems of identifying and setting principles, goals and objectives in the planning process, it is in

order here to make certain remarks, as they emerge from the analysis of practice paradigms. Thus, it may be observed that politicians, administrators, or planning studies commissioners do not formulate, suggest, or hand down to planning agencies and professional planners sets of specific goals and objectives; avoiding to commit themselves from the beginning towards certain directions. On the other hand, government departments and public agencies seem to pay relatively less attention to formulating and elaborating goals, or objectives, as against other tasks they assume. Additionally, planners seem reluctant to assume responsibility in deciding on specific goals or objectives; usually confronting first decision-makers on possible alternative action and then determining goals and objectives. One may, generally, observe that in such a planning "game", where technical and political considerations intersect and assume, at certain periods, a concrete relation or equivalence, technical considerations (e.g., how to secure and distribute resources) are argued and reconciled first, before social objectives are set and finalised.

Following the above general observations, it may be assumed that, at a certain initial phase in the planning process, goals and objectives should be formulated in such a way as to avoid "unworkable" generalizations or "binding" directions. Within the context of our work, the formulated below principles, goals and objectives do not constitute proposals of a "formal" planning agency, or of a certain planning process. They are conceived as derivatives and consequents of our analytical work and delinate concisely the content and orientation context of tourism development planning.

3.1.1 The one-system, comprehensive development issue:

Principles: International tourism should not be considered independently from domestic tourism, or the pattern of the country's outdoor recreational activities; both constitute integral parts of one system which aims at resolving a variety of conflicting interests and satisfying diverse needs and preferences.

Goals: Confine, or mitigate the negative influence and limitations exercised, or imposed on the growth of tourism by external

factors. Improve the country's international accessibility, its image in the international tourism market, with regard to the TP offered, and increase its competitiveness.

Objectives: Diversify the country's TP by developing and enhancing its regional identity; the country as a whole should emphasize its unique characteristics, develop new or alternative types of tourism, while each region should develop its individual or distinctive characteristics. Strengthen the domestic tourism market and attract new tourist markets developing in international tourism.

3.1.2. The inter-sectoral coordination and the balanced, inter-regionally, development issue

Principles: Tourism development, at all levels of spatial consideration, should be viewed in its complementarities, consistencies and inconsistencies to other activities or sector of development in order to secure sustained growth and economic stability in an area. Tourism should be developed in all regions of the country, however, with differences in terms of type, concentration and priority. The "comparative advantage" principle, which would favour the concentration of tourism development in a few only regions, should be examined carefully, before applied, within the context of an inter-regional tourism development strategy.

Goals: On the national and inter-regional level, the long term goal of tourism development aims at correcting the imbalances and problems caused by excessive concentration of tourist facilities in a few areas. Tourism development takes both an economic and a social and ecological-environmental orientation; aiming at preserving and enhancing the unique resource characteristics of each region.

Objectives: Policy objectives are spatially differentiated according to different kinds of problems, or conflicts encountered in each area, and according to the stage of development of the particular area, or region. In urban regions, the strongest accent lies on securing the development of different types of tourism and land use (coastal areas for outdoor recreation, second housing,

holiday-resort areas). In rural areas, policy objectives vary according to the problems encountered and the resource potential. In areas further out, or in "problematic" zones (in the sense that they evidence continuous depopulation or have limited resources capabilities), concerted administrative intervention is necessary to establish new sources of employment, so as to raise prosperity and improve the social and cultural climate. In areas well endowed, regarding tourist attraction resources, and in areas well placed, regarding the transport network and tourist circuits, an effective inter-sectoral coordination, necessarily linked with vertical and horizontal administrative coordination is urgently needed. Conservation and protection is a major policy objective for important natural areas and resources. Here, the economic goals of tourism development must be completely adjusted to the ecological dictates for managing such areas.

3.1.3. The potential and capacity issue

Principles: The tourism development potential of an area should be based on the capacity of the available natural and man-made resources, as well as, on the human resources of the area. Natural and man-made resources have certain capacity levels: physical-ecological carrying capacity of different sites and landscapes to withstand various intensities of use; capacity of tourist facilities to accommodate and serve a certain number of people. The socioeconomic capacity of an area relates to the ability of its resident population to tolerate and "absorb" a certain number of tourists, as they relate to local economies (squeezing out of the area desirable local activities) and/or social and cultural life styles.

Goals: The size, range, or limits of tourism development must be assessed and planned in accordance with the particular conditions and needs of each locality or region; while at the same time, and in the case of scarce or of national importance resource categories (e.g., certain coastal resources), full consideration must be given to the national interests.

Objectives: Under the responsibility of central, regional and local authorities, several studies must be initiated, to identify and assess the development potential of each region and the significance of each resource category at each level. As to the latter, the generation of sufficient information into the planning and implementation process, on all administrative levels, must be accompanied by appropriate organizational and statutory - legal measures to secure optimal use of resources.

3.1.4. The multi-sectoral and multi purpose development issue

Principles: In the light of uncertainty, or incomplete knowledge, regarding the feasibility issue of a region's exclusive "specialization" (the largest percentage of regional income derived from tourism) in tourism, it is tentiatively suggested that tourism, at least in the short run, should be one among other sectors (perhaps not the dominant one) for the improvement of the regional economic structure. Such an approach does not preclude that tourism cannot assume in certain areas, or sub-regions, a weighting role, or, become the most significant source of income.

Goals: Avoid mono-cultural development, i.e., total reliance on a single sector (tourism), or development of one type of tourism (e.g., resort tourism).

Objectives: On the intraregional and subregional level, the long term objectives focus on a) exploring and assessing the tourism potential of each resource category and each region, b) exploiting opportunities for developing other sectors in addition to tourism, or types of tourism which contribute to the growth of traditional or new sectors and activities, c) promoting types of tourism and scale of development such as to minimize the "leakage" of earnings out of the region, to avert unplanned spreading of uniform hotel-resort facilities and cater for the various needs of the region's population, d) coordinating the various land use requirements of different sectors to satisfy as many of the conflicting demands as possible; while fully recognizing the value of each land use resource in its contribution to the regional welfare.

3.1.5. The in-depth and multi-dimensional development issue

Principles: Tourism embraces many activities requiring various types of facilities and services. These are attracted, as we have evidenced, predominantly to beach-coastal locations. Coastal resources and facilities should not be planned and/or allocated without considering the immediate adjacent physical and functional hinterland of the coastal area. The principle of "planning the use of land in depth" is instrumental to an optimal utilization of resource and allocation of investments within an area; to providing a wide range of employment opportunities, and to satisfying diverse needs of an area's population. Additionally, one should consider all dimensions of effect and impact of tourism; economic, socio-cultural, physical-ecological.

Goals: Select and promote, location-wise, those types of tourism, and those categories of complementary technical and socio-cultural infrastructure and services, that maximize the positive effects and serve, in the best possible way, the diverse needs of foreign and domestic tourists, as well as, those of the local people.

Objectives: Initiate several studies to assess the effects of tourism development, or the effects of different types of tourism on the economic, sociocultural and physical-ecological environment of an area or region. The system of tourism territorial profiles proposed earlier could provide the orientation frame for such studies. Additionally, tourism development objectives and specific policy measures (e.g. public investment, incentives zones, etc.) must be related to, and coordinated with the broader development objectives and policy measures of a regional, or local plan.

3.2. The frame of tourist strategies :Restructuring the tourist product and tourist markets

Earlier discussions and arguments have indicated that the structure of Greece's TP, or, the country's mode of tourism development in general, related directly, among other things, to the conditions and conjunctures that determine the placing of the

country within a system we could call the international division of leisure. Any attempt, therefore, to restructure the country's TP would depend on the possibility of influencing such evolving conditions and conjunctures; or,on the ability of the state to adopt and apply appropriate policy measures that could affect the conditional-relational frame of Greek tourism's development analysed in the preceding chapters.

In connection to the above, and regarding state intervention in this area we envisage and support two parallel and closely interrelated strategies of state intervention, involving specific policy measures that should be undertaken for their realization.

3.2.1. Restructuring the tourist product

The first strategy, which has a long term orientation (perspective), would aim at the restructuring of the Greek TP and of modes of tourism production and consumption. This kind of strategy involves, predominantly, a process of diversifying the country's TP, or that of its regions. Diversification in this respect pertains to increasing the presence of contrasting types of tourism (types of equipment-infrastructure, types of activities, types of consumption) in a way that could improve both nation-wide diversity and regional specialization in tourism. In other words, it is believed that the development of an appropriate range of tourism types, regionally differentiated, would both encourage the growth of domestic tourism and of particular segments of the international tourism market (individual tourism, special interest holiday groups), as well as, increase the country's competitiveness in the international tourism market.

A tentative list of new or less-developed types of tourism, or products which could be actively promoted is presented below[1]. Each tourist product type, or complex of product types should be considered within the context of specific feasibility criteria and

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1. For further information on the subject see: Komilis, P., Tourism activities, an analysis of development possibilities (G), Series: Themes of Planning, D10, Center of Planning and Economic Research, Athens, 1986.

market research studies (e.g., see Diagram VII-7) and on the basis of several selection procedures (e.g., see Table VII-2).

a. Spas and related health-resort development:

It involves a series of projects and/or programmes to develop the spa facilities and resources, as well as, related activities like thalassotherapy. These product types relate to:

- governmental policies in the health-social services sector; since the economics of spas depend considerably on the arrangements made with the National Health Services Organization or Health Insurances which pay a high proportion of prospective visitors' expenditures
- the range of complementary services offered (hotels, casinos, shopping,conventions, etc.); since the major benefits of spa resorts could come not from expenditures on hydrotherapy per se but rather from expenditures on complementary services.

According to a certain study of the WHO[1], spa treatment "constitutes a sizeable market, with a varied clientèle by socio-professional categories", while thalassotherapy "provides an opportunity of renewing the infrastructure of some seaside resorts and of slowing down the deterioration of their public image".

b. Aquatic sports - water recreation, sea-travel (cruises) yachting and marinas network:

It involves programmes and/or projects for the development of facilities, resources and services (e.g., marinas network, organized beach-facilities, etc.) to serve wide range of tourist, or leisure activities at the seaside or inland waters: wind surfing, dinghy sailing, yachting, fishing (deep-sea, snorkel, etc.), swimming (indoor and outdoor), etc. Although of a predominantly coastal orientation, such activities and facilities could be also partly directed to inland-rural areas. For example, fishing in inland waters could potentially attract substantial

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2. World Tourism Organization, Prospects for restructuring tourist flows, destinations and markets, Madrid, 1983. See particularly Chapter II, pp. 15-24.

Diagram VII-7

Product type: Spa - health resort

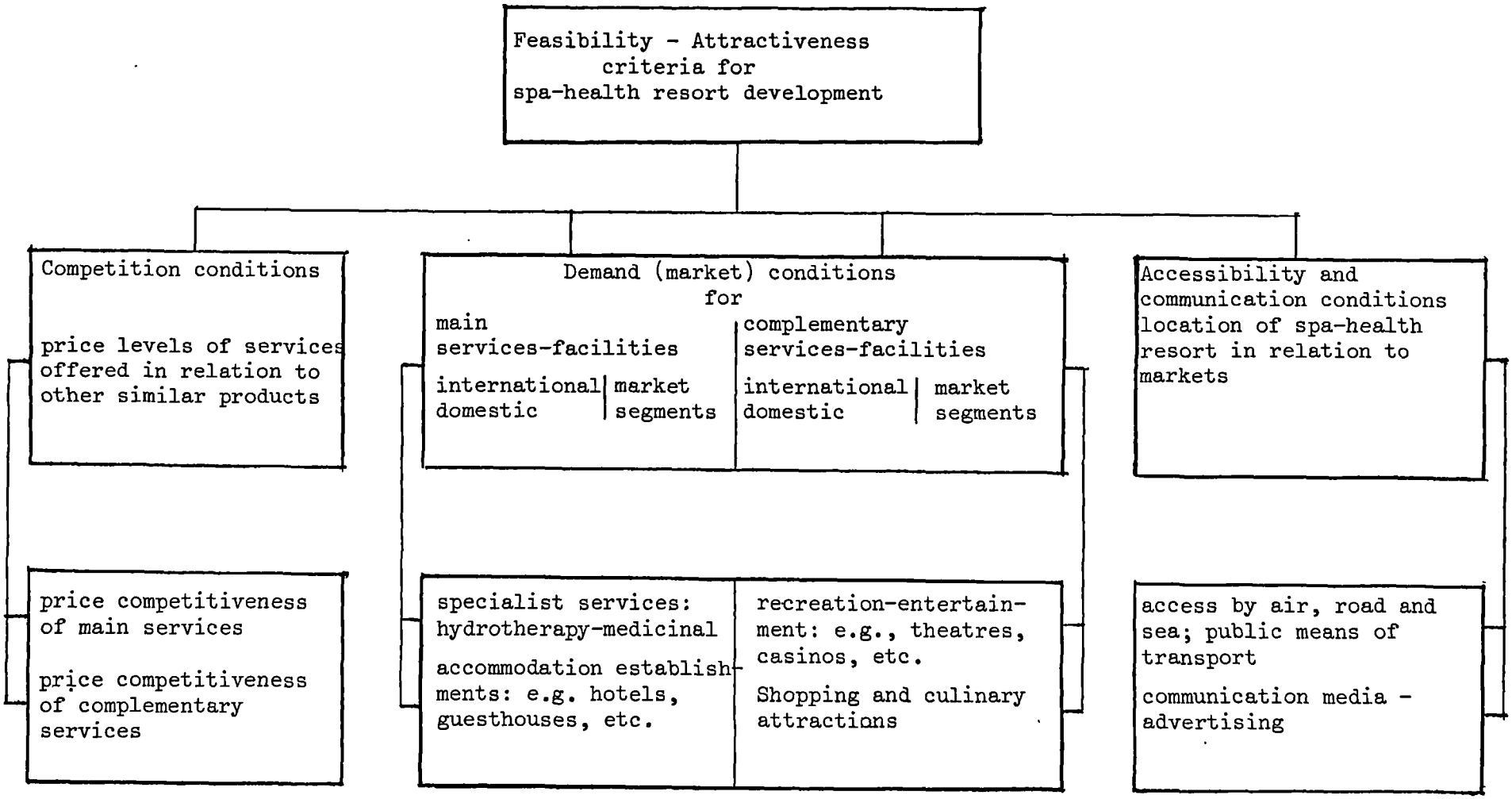

Table VII-2

Tourist products selection procedure*

I. First run criteria: Strategic planning considerations

1. National development objectives: Benefits to the balance of payments - foreign exchange earnings
2. Regional development objectives: Best contribution to regional income, employment (creation of new jobs), upgrading of social services; overall socioeconomic and environmental benefits to the local population
3. Best utilization of idle or underused tourist infrastructure and resources
4. Social benefits for particular disadvantaged groups of the population.

II. Second run criteria: Broad feasibility considerations (see also diagram VII-7)

1. Existing and potential demand for each product type by market segment (demand for main and complementary services)
2. Suitability of existing resources-services: size-quality, spatial distribution, accessibility
3. Technological-scientific know-how, managerial efficiency qualified-trained personnel
4. Price levels of services supplied in the domestic or international market

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III. Third run criteria: Project level considerations

1. Location, size and types of facilities-services
2. Cost of project-investment needs by type of facility
3. Volume of demand by category of users
4. Personnel requirements (jobs created), managing agents, ownership patterns

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* See also in section 2 of this chapter Diagrams VII-1, 2, 3, 4.

numbers of home tourists if appropriate action is undertaken, e.g., to create and increase the fish stock and related facilities in selected areas. Also, certain developments or activities of a predominantly scientific-environmental nature (e.g., marine parks, underwater archaeology) would contribute to the overall attraction of the Greek TP.

Generally, however, the development of this product type, which is of particular importance to the (Aegean and Ionian) island communities, could contribute to the further growth of small boat manufacturing enterprises (as well as, to the regeneration of traditional boat building practices) and could strengthen the historic identity of Greece in the area of maritime tradition.

c. Agro-tourism development, traditional villages renewal, handicrafts - popular art and rural traditions - folk culture enchancement:

It involves a series of projects and programmes which are interrelated and coordinated at the central and/or regional level towards a comprehensive multi-purpose and area-wide development in selected, mainly remote, rural areas. This type of development, which could promote particular types of accommodation, recreational and cultural activities in these areas, is related to the government objectives to promote social tourism, cooperative development and to enchance the overall sociocultural environment of these areas.

Within the above context, the revitilization of traditional settlements should be seen as a means to gain some prosperity by promoting their architectural-historic-cultural heritage, to attract cultural tourism, touring and other types of tourist activities, as well as, small business investments (small handicraft industries). To this end, it would be necessary to forge appropriate channels of cooperation and coordination among various agencies in order to control quantity and quality of development. The most important, however, problem in order to emulate success in such communities would be the achievement of broader consensus; among community groups and developers (local or outsiders) on issues

such as securing or promoting existing resident needs (housing, social services etc.) and controlling environmental impacts resulting from such development.

3.2.2. Restructuring the tourist markets

The tourist markets restructuring is viewed as a process of diversifying and redistributing the international tourist flows (markets) to Greece. Diversification involves the attraction of new tourist clientèle which develops out of the expansion of new tourist activities, or leisure modes and habits; or develops as a result of introducing and supplying the market with new products which "pull" new customers or tourist-consumers. The redistribution of flows is viewed within the context of the various categories of factors discussed in this study (demographic, socio-economic, etc.); factors which are closely interrelated and effect in different ways the volume and spatial distribution of flows.

Apart from the discussed previously, tourist product restructuring, which constitutes itself a main policy of market diversification, the envisaged market restructuring strategy involves also the following two main sets of policies:

a. Policies to influence international transport links and tour operation-business

Following the ascertained significant influence of accessibility-transport factors and ITO practices upon the tourist flows, we suggest that, as a matter of priority, planning intervention in these two areas should assume a specific scope: the various policy measures undertaken by different central agencies are coordinated in a way that serves both the goal of increasing the country's competitiveness and share in the market, as well as, the goal of decreasing its dependence on exogenous factors, i.e., ITO, CIT-travel and international charter airlines. Tentatively we may suggest and outline the following categories of measures.

- Measures to increase the market share of the country's national air carrier (Olympic Airways) in the total volume of air journeys to Greece. These measures could involve creating a charter airline and/or the undertaking of other tourism related businesses.

- Measures to improve, generally, the quality of the transport component making-up the Greek TP and particularly the country's land and sea accessibility. This should aim at promoting independent holidays (individual travel), to gain a larger share of, e.g., the less distant W. German, Austrian and Italian markets. Within the country, the extension and improvement of sea and road-transport infrastructure (to promote sea-travel and touring) would conduce to mitigating overreliance on resort-mass tourism and to a better regional distribution of demand.
- Various categories of measures relating to package pricing policies, to the cost of tourist services in Greece and to supporting the national tourist industry, i.e., the LTA in their business transactions with ITO.

b. Marketing policies

The function of marketing is, generally, viewed in three areas: to identify the main market segments (tourist groups) which correspond to different activities and products; to provide and bring to the consumer (potential tourist) relevant to the tourist product information; to influence the development and consumption of particular products (Medlik, op. cit., p. 49).

From the point of view of a destination country like Greece, marketing is quite important in order to consolidate and advance the country's share in the traditional European markets, or attract new tourist clientèle (e.g., Middle East, Japan, etc.). However, a marketing programme for Greece and its regions should be broader in scope encompassing more than a few standard traditional attraction elements (e.g., the antique landscape or "established" coastal resort, and sandy beaches) and involving the participation of both private and public enterprises in promotional and advertising campaigns.

Viewed within the context of the NTO policies, marketing should aim at influencing both the main institutional agents, e.g., the ITO, who are involved in CIT-travel, and directly the markets, particularly the independent-travel market.

In the first case, the combined NTO-private sector effort should be geared towards influencing in the most effective way the marketing instruments employed by the ITO:

- product related instruments: range of packages or holiday programmes offered, price policies or price fixing practices
- distribution related instruments: travel agencies, department stores, banks, travel-related clubs and associations, etc.
- communication related instruments: brochures or other "classical" means of advertising (press, films, TV), public relations, etc.

In the second case, the NTO's offices abroad should undertake to analyse in great detail the market changes or conditions that take place or prevail; in order to promote through appropriate policy measures types of new or "enriched" products which best correspond to the socioeconomic realities (constraints and possibilities) and the motivational background of the markets.

3.3. The frame of policy instruments in tourism planning

3.3.1. The organization of tourism and physical planning

a) General considerations

From the preceding discussions and arguments of planning practice at various levels, it appears that the reorganization of the entire "planning system" is a crucial issue; a reorganization covering all spatial levels, and related directly to current or expected in the future changes and reforms in the administrative-institutional (e.g., local government) and statutory-legal (towards decentralization and public participation). However, it would be far from the scope of the present work to advance detailed proposals for the organizational restructuring of the entire planning system. Instead, drawing on the conclusions reached earlier, regarding the shortcomings of the current planning process, we put forward certain suggestions indicating tentatively those changes which are most relevant to improving current practices in tourism planning.

At the national (central) level, the improvement of the overall planning practice should be a major aim in order to avoid present confusion, or conflicts-producing problems of communication among various agencies. Here the effort should be directed towards a "critical planning practice"[1] and a better coordinating function and administrative organization of planning agencies. An improvement of the overall planning practice at this level involves, among other things, a better integration of physical planning practice within the national planning process, a better interlinkage of physical planning with sector planning; in order to avoid problems and constraints identified earlier in the analysis of paradigms. However, such improvements, which have to be agreed first by the relevant central agencies, presuppose that the various areas of competence and responsibility between different tiers of government or planning agencies, as well as, coordinating mechanisms, are clearly defined under statutory regulations; or still further that, alternatively, the entire planning process is determined through a statutory-legal frame.

With regard to the organization of tourism planning, it seems that a major shake-up in the state administration of Greek tourism is urgently needed. The present organizational structure and function of the Greek NTO is insufficient to generate action towards research and planning activities in tourism; either in the direction of strategic planning (i.e., producing National Strategies of tourism development) of the type advanced earlier, or in the direction of dealing effectively with the various kinds of problems we have discussed in this research work.

b. Planning organization at the national and regional levels

Elaborating certain general observations pertaining to the

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1. What is meant here is to introduce into the planning system (in its organizational structure and mechanism) certain changes which would make it more skilled (technically-professionally), sensitive (politically) and communicative (organizationally). For a discussion of relevant issues, see: Forester, J., "Critical Theory and Planning Practice", in Journal of American Institute of Planners, Vol. 46, No 3, July 1980, pp. 275-286.

organization of tourism planning at various levels, made in several sections earlier, one should make a few additional points as to the content, object and the organization of tourism planning at the national, regional and local levels.

- At the national level, tourism planning should be concerned with strategic issues, i.e., development planning strategies, reflecting alternative scenarios of the sector's future development, or of its spatial structure. Planning at this level should identify and determine major types of tourism development of national importance and should set out national guidelines, on the basic aspects of tourism development, which should be taken into account by regional and local planning authorities in their regional structure and local plans. At this level, one should also formulate appropriate tourism development policies, to be considered and incorporated in the five-year development plans, tourism investment programmes (e.g., see following suggestion regarding a system of allocating and monitoring funds) and special tourism development programmes of national importance, for example, the programme of NTO concerning the development of tourist accommodation and facilities in traditional settlements.
- At the regional (or nomos) and local levels, tourism planning should not be a separate plan-making activity. It is our view that regional tourism development plans (e.g., like the Basil report discussed in Chapter VI), or other subject plans (tourism zones, area-wide, or subregional tourism development programmes) should not be advanced separately. Instead, as a genre, tourism should be integrated within the comprehensive regional development plans (e.g., the nomos physical structure plan, or development programme) and comprehensive local plans (e.g., the general town development plan) both of which should be regarded as the mainstream of planning. Tourism policies, at the local level, should be formulated in such a way as to encompass and satisfy wider social objectives. Our suggestions discussed earlier with reference to principles, objectives and measures of tourism development

could serve as a guidelines frame. Regional development plans should include those aspects of tourism which define the skeleton characteristics of tourism development in a region: major sectoral goals and objectives, desirable sectoral composition of tourism investments and types of tourism to be promoted, the intra-regional distribution of tourism (according to national planning guidelines, concepts and priorities), major types of tourism (regarding accommocation infrastructure) in relation to the settlements pattern, major axes of tourist circulation, etc. The 1965-1975 Development Plan of Crete, discussed, at length, in Chapter VI, seems to be a good example in this case.

In connection to the above discussion, and at this point, it is pertinent to remark the following. Under the assumption that a regional development plan has or maintains an advisory, non-statutory character, it can be argued that its "effectiveness" would depend on the plan itself, i.e., how it steers between vague generalizations and detailed, binding directions, regarding objectives and policy measures, and involving all relevant planning and development agents. Additionally, and most important, it would depend on a series of political commitments taken on matters of investments (volume, composition, location) and coordination, or control of major development factors. Here, however, it is worth arguing still further, that the possibilities of realizing stated regional objectives, or of implementing regional plans, should be viewed and investigated within a wider context of certain factors or preconditions. A possible set of such preconditions may be outlined as follows:

- Inter-sectoral coordination is materialized and effective at the regional or at the nomos level, i.e., various central and regional departments and authorities coordinate their decision and activities both at the central and the regional level.
- Legislatively backed local plans (general urban or physical development plans) are supported by the appropriate land use legislation and land policy measures and, additionally, agree with sectoral and regional objectives.

- Commitments of strategic importance for the region made by central authorities agree with stated, in the regional plan, objectives.
- Objectives and policies of the regional plan and relevant actions taken reflect a broad consensus of diverse regional-local and national interests; built into the plan through processes which make decisions participatory, institutionalize discussions and politicize planning.

With regard to the administrative organization of tourism planning at the regional level, it seems that the existing regional development services in each of the nine planning regions[1] of the Ministry of National Economy and the recently established prefectural committees of tourism, could become, for an interim period, the nuclei for organizing tourism planning at this level. The prefectural committees could assist prefectural councils and local authorities to formulate tourism policies and could further influence and interpret national policies at the nomos level; serving at the same time as forums for cooperation and contact of various local tourism agents and organizations.

3.2.2. Issues of coordination in the planning process

a. General considerations

The nature of tourism demand and the diversity and geographical distribution of tourism resources actually suggest, if not compell, the responsible planning authorities to approach the problems of tourism and take action in a coordinate manner along a broad front of policy measures; sectorally - coordination among various policy instruments - and spatially - coordination between national, regional and local levels.

The various kinds of tourism policy measures that should be interrelated and coordinated spatially and temporally, refer to the tourist public investments, the fiscal and financial incentives system and private investments, special tourism programmes of

1. According to recent legislation (Law 1622/1986) Greece has been divided into 13 planning regions. However, the planning organs and mechanisms envisaged in the new law are still in the process of development.

various agencies (e.g., agro-tourism) EEC financed programmes, tourism-related programmes (technical and sociocultural infrastructure and services), tourism legislation proper, as well as, physical planning legislation regarding the location of tourist infrastructure and superstructure in urban and rural areas.

The resolution of existing problems of intra-sectoral, inter-regional and tempotal coordination of the various policy measures requires both a systematic and a concerted action. Systematic in the sense that for each kind of policy measure (e.g., public investments in tourism), one should investigate its diverse impact and its interrelation to other policy measures. Concerted, in the sence that the responsible agency or agencies for a particular policy measure exchange information with other relevant public, or private agencies, on their specific programmes; in order to assess or reassess the full range of objectives, define complementarities in infrastructural works needed, avoid areas of overlap and time consuming procedures.

As we have suggested above, in assessing the various tourist investment plans, or different types of tourist investment, one should realize the need to consider fully, in the light of all existing knowledge, the impact of each type of investment. The proposed profiles system could provide the guidelines frame for specifying selection criteria, or for defining selection procedures according to the type of development envisaged.

However, in cases of incomplete knowledge, one should suggest as a general rule, the selection of those types of investment which offer the maximum flexibility with the minimum risks. Flexibility in the sense that certain structures[1] resulting from investments, due to location, composition, or versatility attributes exhibit the following properties: a) can better adjust to changing economic, social and technological conditions, b) can be more accommodative, or responsive to unforseen changes, and c) lend themselves to a lengthier, temporally, use (e.g., a hotel

1. The term structure applies here to various situations; it may denote a hotel or a car-ferry service or, the entire hotel accommodation capacity of a spa resort.

in a coastal spa resort can serve both foreign clientèle, during summer, and home tourists during autumn or winter).

b. The case of tourism investments

Focusing on the category of tourism investments, as a matter of priority among all other policy measures, it is in place here to make further certain tentative suggestions. Under present circumstances, the Greek NTO (or another central agency, possibly the Ministry of National Economy) should apply and operate a long and medium term system of allocating and monitoring funds, on the basis of which, among other things, the annual public tourism investments should be formulated. Such a system should include:

- A public investments allocation scheme,
- A private investments encouragement-promotion scheme, setting up the various types of tourism infrastructure (e.g., accommodation forms, service categories, transport equipment, etc.), the various categories of financial and fiscal incentives and the corresponding geographical zones or areas of applicability,
- A special investments allocation scheme, which would refer to, or encompasses the various types of comprehensive development projects (e.g., those outlined earlier emphasizing new or alternative types of tourism development), or particular programmes proposed by different agencies.

The above system should develop in concert with the five-year development plan, according to the sectoral (tourism) and physical planning objectives set in this plan. Further, this system should set criteria and procedures for securing, in addition to the selection of investment types mentioned earlier, the updating and monitoring of investment schemes (to identify arising constraints and/or discard infeasible elements) and the distribution of funds among the various agents, i.e., private firms or public agencies, local authorities, or municipal enterprises, etc.

A major challenging planning problem here pertains to the ways of designing and allocating tourism infrastructure, or various categories of investments; ways according to which full consideration is given to a region's resources for the kinds of demands,

needs, or user requirements which will confront it. Such a problem, necessitates the generation of sufficient energy into the planning process, on all administrative levels, and the undertaking of specific tasks. A difficult task in this area involves two interdependent "management" practices in the planning process:

- Making arrangements for transcending often jurisdictional barriers (either between agencies or departments at the central level, or between different spatial level) and for promoting multi-agency cooperation,
- Fully considering all equities involved when deciding about investments allocation among various fund recipients, or when imposing restrictive and control measures (e.g., the designation of "tourism saturated areas", building controls, etc.) in certain areas.

3.3.3. The information domain: Surveys and research background to tourism planning

Tourism planning, like other types of planning, requires certain steps to be taken: collecting and analysing data, establishing goals and objectives, formulating and evaluating alternative plans or courses of action, implementing various measures. What we could call the information domain in tourism planning, is a basic element of the planning process which is not independent from, and limited to, its first step, but supports or relates to all other steps of the planning process[1]. In other words, the various fields constituting the information domain (e.g., from basic statistics of tourist arrivals, to detailed surveys and research of specific aspects of the tourism phenomenon), integrate within the major phases of the planning process, e.g., as problems identification and policy formulation tools, or, as strategy evaluation criteria and parameters, etc. Obviously, in the planning process one cannot expect the creation of a "complete" information base first, and then undertake specific planning tasks. Instead, new information inputs are introduced continuously in the planning process, contributing to both its improvement and to a more effective planning practice.

1. This is in accordance with the Geddesian methodological approach of "survey-analysis-plan", where surveys are viewed as integral parts of the plan-making process; as methods of gaining valuable knowledge, through empirical observations, or, still further as "educational processes". E.G., see Geddes, P., Cities in Evolution, Harper and Row, publ., 1971, pp. 329-358.

In the course of our work, we have analysed the nature and gaps in the existing information domain concerning tourism. Further, in several sections of the preceding analysis, we have suggested certain weaknesses and limitations pertaining to the situation in Greece. Apart from improving basic tourism statistics (e.g., enriching nationality segmentation statistics with socioeconomic variables, improving domestic tourism statistics, improvements in the way tourism is reported in the balance of payments accounts, etc.), one should assign priority to developing the following fields.

a. Tourism market surveys and research

Market surveys employ interviews and questionnaires to assess tourism demand, the various market segments and preference patterns for specific products within a country, or a region. At the present time, two types of market surveys seem to be needed in Greece: a national (domestic tourism) survey and detailed regional surveys of tourism demand and activity patterns.

At the national level, the existing information concerning the holidays patterns of the population is quite insufficient for planning purposes. A survey of this kind, which could be set up by the NTO or, jointly by the NTO and the National Statistical Service of Greece, should a) include and relate socioeconomic variables to travel propensity, or travel participation rates and b) cover and measure all categories of overnight travel (weekend traffic, summer vacations, Christmas holidays, etc.).

At the regional-local level, a significant piece of information needed concerns the demand for and supply of the different regional products of new products to be introduced. Specifically, this type of information pertains to the analysis and assessment of major differences among the tourist market segments (domestic-foreign, nationality segments) in terms of demand and supply variables: location and accommodation preferences, activities pursued, seasonal distribution of demand, socioeconomic characteristics and expenditure patterns of tourists, etc.

The specific market research programmes to be undertaken in this area should be formulated in such a way as to provide tourist

organizations and management agencies with useful information in order to a) assess and monitor the performance of existing tourist products, and b) determine the future place of new products in the market.

b. Tourism resource surveys

The information of such surveys is important to all levels of tourism planning (strategic or local), as well as, to considering the environmental implications of alternative tourism development programmes or projects. In this area, one could suggest two major approaches for developing an appropriate information base for tourism planning:

- Bring together, in a systematic way, all relevant resource survey information collected by different agencies or governmental departments (e.g., the Ministry of Agriculture, the Institute of Oceanographic and Fisheries Research, etc.). Useful information is also contained in various planning documents and reports, and in the various tourism development studies that have been undertaken in the past. Here, of course, due to the variability of such information, it is difficult to organize it into computerised reference system. However, it could be systematically organized along the lines of the methodological approach we have applied in Chapter IV.
- Develop, on a selective basis (e.g., coastal resources, islands, etc.) specific tourism resource surveys. Such surveys could be coordinated with monitoring types of surveys in order to observe, diachronically, particular developments or phenomena taking place in certain regions. Additionally, and for more immediate purposes, one could suggest the development of a model approach (a set of salient facts pertaining to tourism resources and tourist-user activities combined into a digest) to the collection and interpretation of tourist information, that would assist prefectural and local authorities in the preparation of tourism plans and policies.

c. Surveys for tourism impact studies

Research on the diverse impact of tourism, as a basis for evaluating alternative tourism policies, is a major field of the

tourism information domain. The proposed earlier profile concept may serve as an orientation frame of policy oriented research that should be developed in this area. Survey types of tourism impact studies can be differentiated, as has been suggsted elsewhere (Williams, Goodier, 1981), according to their use, rather than in relation to the survey method per se. Depending on the type of survey (e.g., surveys for strategic tourism impact issues[1], or surveys for project impact studies), and according to the type of impact, the information required may be generally available (e.g., from resource surveys, land use surveys, etc.), or there may be cases that new specific subject surveys must be undertaken in order to obtain additional information.

The impact of different types of tourism is a very important issue since policy makers are often facing the problem of formulating tourism policies and implementing measures pertaining to the type of tourism development which takes place or should take place. Impact studies and research in this case necessitate surveys which involve accurate knowledge and extensive information in such areas as those outlined in Chapter II; e.g., measurement of interaction and encounters among different groups of visitors and local population in an area, assessing levels of crowding within particular interacton environments, or levels of carrying capacity of different ecosystems.

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1. As examples of such issues, one could refer to "The socio-cultural impact of tourism on small settlements in Greece", or "The impact of tourism on agricultural land in coastal areas", etc.

4. Concluding remarks

In this chapter we have attempted to delineate and synthesize the major conclusions emerging from the preceding chapters. We have employed this synthesis as a justification and supporting framework to put forward certain ideas concerning methods and policies for the spatial analysis and the planning of tourism. Specifically, the advanced system of territorial profiles and the guidelines of tourist policy respond to the derived from the analysis conclusions with regard to the effectiveness of selected physical and tourism planning practices; effectiveness pertaining to the influence they exert on the major determinants of tourism's spatial structure, or in terms of their substantive role in satisfying tourism and physical planning objectives.

We have placed high priority on integration and synthesis of tourism's economic, social and physical-environmental dimensions; presenting a method in the form of broadly formulated correlation matrices, to facilitate a systematic analysis, an identification and/or fusion of these dimensions, as well as, their major interrelationship to be explored. Our methodological approach conceptualizes the organization of tourism on a territorial basis: it provides the development context for the coordination of tourist policies among dimensions and among the various units of spatial aggregation.

In the light of the identified shortcomings of the Greek planning system, and following the advanced "territorial profiles" approach, we have put forward a frame of tourist policy guidelines: specific proposals pertaining to the content of tourist development planning (the system of principles-goals-objectives), the main strategic issues of tourist policy, as well as, to the general character of changes that should be introduced into the planning system: the legal-statutory frame and planning organization. However, both policies and methods advanced in this chapter will be further considered in the following chapter where we present and discuss the conclusions of our entire research work.

CHAPTER VIII

Conclusions and reflections on the spatial analysis and planning of tourism

Scope and thematic content

Chapter VIII provides a discussion of the major issues analysed and of the hypotheses advanced, outlining and reflecting on the principal findings and conclusions of the entire work. In each of the previous chapters we have undertaken to approach and explore specific areas of tourism within the context of the selected field of inquiry.

In Chapter I, we have set out the objectives and hypotheses of this study, the specific research directions of our work and outlined the relevant general methodological approach.

With the literature review in Chapter II, we seeked to explore and bring out advances and limitations or critical gaps in the research and information domain concerning tourism. Also in Chapter II, we have introduced certain basic concepts our research work has been concerned with, and have critically discussed the most relevant to our theme methods and techniques employed in tourism studies.

In the pursuance of the study's first objective, we have undertaken, in Chapters III, IV and V, to describe and analyse particular aspects of tourism's spatial structure at both the West European and the national geographical levels. In the first case, we have explored the role and effect of selected factors in the distribution of tourist flows in W. Europe and identified the particular place of Greece within such a context. In the second case, the regional structure of tourism in Greece has been analysed in relation to the country's overall socio-economic and territorial-regional structure, as well as, to specific endogenous and exogenous factors pertaining to tourism-related governmental policies and to the organizatonal structure of the international and national tourist industries.

Following the study's second objective, in Chapter VI we have introduced the planning situation in Greece; discussing the

role and effect of particular planning practices as they relate to tourism's spatial structure.

In response to specific questions set out in the study's third objective we have seeked, in Chapter VII, to advance an integrated planning approach which incorporates and interrelates economic sociocultural and physical aspects, into the analysis and planning of tourist phenomena. Also, we have seeked to put forward a frame of policy guidelines, strategies and policy instruments which could improve current tourism and physical planning practices in Greece.

The synopsis of our research work undertaken in this chapter is presented in three main sections which follow the study's objectives. Thus, this chapter includes concluding observations and discussions of the following:

- The explored factors and advanced hypotheses pertaining to tourism's spatial structure
- The major parameters of planning and their influence upon tourism's spatial structure
- The methods of approach and policy guidelines for the spatial analysis and organization of tourism.

1. The spatial structure of tourism: Concluding observations on the explored factors underlying tourism's spatial structure and on the validity of the advanced hypotheses

In the analysis of tourism's spatial structure in W. Europe and Greece, we have examined and discussed the role and effect of several factors: a selected set of factors has been explored within the context of specific models and hypotheses, while certain other factors have been broadly discussed with reference to their use in tourism studies or with regard to their relevance in the present study. The emerging conclusions from our analysis which respond to the study's first objective and the advanced hypothesis are presented and discussed together with a brief summary of the main findings specific to the W. European and Greek contexts.

1.1. The W. European context of tourist flows

The growth of tourism and its spatial structure, observed within the wider geographical setting, reflects a process of leisure division - tourism demand and consumption differentiation - attributed to marked inter-country differences and relationships regarding major economic indicators and supply attraction, as well as, accessibility factors. It may be also attributed to the organizational structure of international tourism and to the influential role of International Tour Operators in controlling market size, price of the tourist product and the means of transport.

In the analysis of the magnitude and directions of tourist flows, we have defined and assessed the skeleton of the spatial structure of tourism, the position and ordering of each country and the various degrees of its tourist connections with all other countries of the examined system. An important observation to be made concerns the relative stability in the direction of spatial concentration of tourist flows. It seems that after certain flows from and/or into particular countries have been established, there is a considerable degree of inertia to the change of such flows. This conclusion seems to relate to relevant

findings and arguments elsewhere. For example, Noval (1975) attributes the stability in the pattern of arrivals to the fact that variations in the demand factors have a greater effect on tourist expenditures and on the length of stay than on the choice of the destination country itself. According to Thurot (1980), the "repartition" of major flows has taken place and was established in the 1960s and since then there is a heavy inertia to change in the "historical" positions of the markets.

The analysis of tourist flows diachronically, does not show substantial changes in the hierarchical ordering and position of certain origin or destination countries. In this connection, one could tentatively conclude and argue about a process, whereby an increase in the "tourism consumption" power and extension of the travel access radius of certain countries, grows in parallel to, or is accompanied by a slow and gradual transposition of the centre, or, centres of gravity of tourism consumption towards more peripheral regions. Nevertheless, within the spatial context examined there is insufficient evidence to support a thesis similar to that developed by Christaller (1964), which considers tourism as a peripheral activity; since the major aggregate tourist flows (all types of tourism) are not evidenced in, or directed towards, peripheral countries and regions. It seems that factors such as transportation costs and agglomeration economies, as well as, specific "culture-business-health-recreation" related factors are important to the development of tourism in nodal or central places; in the old traditional urban centres and adjacent regions.

The weighting role of the travel cost-distance factor has been particularly ascertained in the hypotheses which were tested. The existence of inter-country differentiations, as to the frictional impact of distance, or, the importance of the various modes of transport, were evidenced in countries like Greece (where tourist flows related satisfactorily to the air-travel cost factor), and in the centrally located countries (e.g., Netherlands, W. Germany, France, Switzerland), where tourist flows seemed to

be significantly influenced by the land or road distance factor. Although the importance of the distance factor has been ascertained in several studies, one could also raise certain arguments with regard to a) the difficulty of isolating and assessing the role of distance in the case of special tourist market segments such as CIT travel (see for example the relevant study of Guitart, 1984) and b) the role of the distance factor within a long term perspective; where an assumed continuous technological improvement in the means of transport may diminish the significance of distance.

The testing of linear tourist demand models, tourism generation and attraction hypotheses, as well as, interaction models has provided, generally, satisfactory results in terms of the statistical significance of the independent variables examined, or with regard to the degree they explain the variation in the observed tourist flows. Distance and income appear the most significant variables in most of the hypotheses tested. Nevertheless, it is worth noticing distinct differences between countries, as to the influence of either the generation or the attraction variables on the development of tourist outflows or inflows. In relation to earlier discussions (in Chapter III) of the suitability and significance of the employed factors, the above observation suggests that the extent to which we can consider tourist demand as a function of per capita income and final private consumption variables (generation hypothesis), or, as function of tourist infrastructure variables (attraction hypothesis), varies from country to country. Further, one may assume that such a variation is probably due to the different impact that certain other variables (e.g., socio-economic, modes of leisure time organization, tourist industry structure, urbanization, etc.), may have upon each country; variables which are not easily quantifiable and not usually included and explored in quantitative analyses of tourist flows.

In connection to the above, we should add that econometric methods, gravity and interaction models, or, quantitative analyses of tourist flows in general, still confront problems of market segmentation (i.e., separating different categories of tourist flows) in relation to data availability and suitability;

problems of expressing in measured values several variables; problems related to the paucity of research in the field which prevent the development of explanatory, or cause-effect models of general applicability.

1.2. Major parameters of tourism's spatial structure in Greece

The spatial analysis of tourism in Greece has focused, predominantly, on certain aspects of tourist demand and supply distribution. The lack of pertinent information on many other aspects of tourism, particularly data and surveys on behavioural and consumption patterns of the various segments of the tourist population (domestic, or international), has directed our search towards cross-sectional analyses of demand (nights spent) by major visitor groups (nine nationalities) for tourism in each of the 51 regional units (*nomi*) of the country.

What follows in this section is an outline of main points and arguments from the findings and conclusions (reached in Chapters IV kai V) indicating the emerging planning implications and/or issues for further research.

a) The overall relative stability in the spatial orientation of demand (i.e., well established places continue to evidence for a long time steady volumes of tourist inflows), is one major conclusion of the investigation undertaken. Also, in this area, we have ascertained the existence of distinctive differences and/or similarities among nationality groupings concerning their spatial orientation and preferences. Such differences, however, should be further analysed and explained by undertaking specially-designed surveys, which would aim at exploring motives perceptions and activity-consumption patterns of the various, according to socio-economic variables, segments of the tourist market.

b) Through the homogeneity analysis of tourist resources we have analysed the regional distribution of tourist resources potential. The identification and delineation of a quantitative-qualitative picture of the unique or particular resource-character of each regional unit, provides useful insights and a preliminary basis for i) comparing and juxtaposing actual to potential levels of tourism development (to ascertain spatial inequalities in the

development of resources) and ii)the formulation of appropriate marketing policies and the design of the most desirable articulation of the regional tourist product.

c) The regional distribution of tourism demand in Greece - number of tourist nights spent in each regional unit - was statistically correlated to selected regional attributes. In the hypotheses tested we verified that tourism demand in each regional unit is strongly influenced by the accessibility of each regional unit and factors pertaining to services or tertiary employment, to tourism-related infrastructure and fixed capital investments in tourism proper. In relation to the above, we have argued that the growth of tourism, starting by the early sixties, was directed towards locations and regions favoured by infrastructural investments in transport and, mainly, by an overall economic environment which promoted buildings-construction, real estate and rentier capital, as well as, commercial activities and services expansion. In connection to the latter point, we should further refer (Chapter V) to relevant studies and arguments which relate tourism's growth to the type of Greece's economic development, i.e., to the growth of non-traded goods sectors favoring tourism, and also vice versa, to tourism's favorable impact on the growth of these sectors; although, as we should notice in this respect, tourism's interlinkages with other production sectors has not been studied sufficiently at either the national or the regional scale.

d) From the analysis of tourist investments, as well as, from observing certain operational-spatial characteristics of tourist development agents (local tourism agents, international tour operators and state agencies), we may outline certain points as follows. The regional dimension of tourist capital investments, of production units and relations in tourism, reflects, to a certain extent, the structure and type of relations between central and regional agents over the means of production. This type of relations is considered in turn as a result of specific state finance policies and practices, including those of the banking system and the tourism-specific central agency, the NTO. From the mid-seventies onwards we observe, however, a less

centralized pattern of investments distribution, or, higher growth rates in a number of regional units relative to the centre, and we argue that i) the patterns of dominance-power-control relations of the centre's economic agents upon those in the periphery over the means of production, became less accentuated and ii) the relevant state policies did not continue to favor predominantly large scale developments and investors in the centre. Nevertheless, we argue further that this evolution results from a centrally initiated and originating distribution of a relatively larger and regionally more dispersed volume of financial resources; as against being the outcome of an autonomous regional development process, or a process whereupon the regions assume some kind of independence (in decision making and mobilization of regional resources) from a still highly centralized, economically and administratively, system.

e) Through cross-sectional analyses of the available international and domestic tourism data, we have identified certain differences in the spatial orientation and degree of concentration of home, vis à vis foreign tourists, within Greece. International tourism is directed apart from Athens, to major resort regions, directly linked to the international air travel system; while domestic tourism is related to the peri-urban zones of the large urban centres, certain spa resorts and islands, as well as, inland mountainous resorts. Observing such differentiations, one may at this point only speculate about the causal factors involved (socioeconomic, accessibility, resources perception and preferences of different visitor groups, etc.) in the present, or future spatio-temporal variations of either domestic, or international tourism. The limited data available does not permit, apart from a general descriptive analysis of domestic tourism, any further investigation or model application to interpret the distribution of home tourists within Greece. In this connection, we have suggested the need to undertake in Greece, on a permanent basis, a National Travel Survey, i.e., the type of survey which is common practice in most European countries.

1.3. Concluding remarks

Recapitulating the various points raised and discussed until now, we should notice, generally, that the evidence emerging so far from the analysis provides indications supporting the validity of the general hypothesis advanced: Both exogenous and endogenous factors are instrumental in affecting the spatial structure of tourism; although, viewed within a different context (international or national), each category of factors seems to assume a greater or lesser significance. More specifically, we should add the following points:

- Within the W. European context, international tourist flows (demand for Greek destinations) are predominantly influenced by exogenous factors pertaining to the European market conditions and to the organization of the international tourist industry (ITO, travel mechanisms). The influence of endogenous (relating to the destination country) factors seems to depend on the country's tourist product articulation or attraction, as well as, on relevant government marketing policies geared towards the international tourist markets.

- At the national level, the distribution of tourist flows within Greece is influenced predominantly by endogenous general conditions (socioeconomic, administrative-institutional-legal frame, territorial structure), or tourism-specific factors (the structure of the tourist industry, the role of the state or government policies). The influence of exogenous factors (international air-travel system, ITO) although significant, particularly in the case of certain Greek regional destinations, cannot be considered as developing autonomously and independent of the country's specific conditions.

On the basis of the above, the emerging policy implication is that Greek tourist destination regions should always consider, when developing international tourism, that they are entering a highly competitive international market which leaves them susceptible to outside economic forces. A successful national or regional tourist development strategy, would require in our opinion a careful consideration of exogenous forces, in addition

and relation to more direct and endogenous concerns: scale of development, range of regional or community benefits, resources availability and investments allocation, etc. However, what seems to emerge as a major planning task and challenge relates to the regional structure of the tourist product: the way of developing and articulating its main components - accessibility, accommodation facilities, attractions - according to the capacity and potentiality of regional resources and the developing new tourist markets in W. Europe. We believe that through a restructuring of the Greek tourist product and through appropriate marketing policies the main exogenous determinants of tourist flows could be influenced. Specific policy suggestions in this area are discussed in the following section 3 of this chapter.

2. The physical planning process in Greece: Its major parameters and influence upon tourism's spatial structure

The second major objective of this study was to analyse the role and effect of planning practices, tourism and physical planning in particular, as they relate to tourism's spatial structure; to identify major conflicts and convergencies that may exist between planning objectives and current actions, or decisions, of different development agents. Here, our guiding hypothesis was that explanations, or the effectiveness of the particular practices considered are dependent on, and should be viewed within, the country's superstructural framework (legal-statutory system, administrative-institutional organization, the role of the state), as well as, in relation to the kinds of planning practiced in general.

This section provides a synoptic presentation of the main issues raised and discussed. A fundamental methodological issue in planning process evaluation pertains to the identification of the connections, or causal links, between specific planning processes, or practice manifestations, and the impact of such practices. The problem of identifying causal links, or connections, between these two "variables" arises from the difficulty of specifying the dimensions of practice and impact. In Chapter VI, we have approached this issue in a way which places the two variables within a matrix of relations, or transactions:a broad organizing tool to examine and present data, to interrelate observations, to identify qualitative connections between the two variables. The paradigms selected and examined, within such a matrix, provide a descriptive picture of planning practice parameters, related to specific spatial units and their structural-developmental profile.

2.1. Major issues related to the role and function of plans, to planning legislation and organization

2.1.1. The role and function of plans

Analysing the contents of specific plans, we have discerned both the way problems are approached and the internal consistency

of a plan. Thus, we have noticed that the capacity and manner of interpreting complex facts pertaining to economic, sociocultural and physical growth processes was limited, disjointed, and incrementalist; developmental issues being conceptualized and expressed independently of each other, not in their interrelationship; economic problems and macroeconomic analytical models assuming the major focus of the planning effort, mainly at the national level, while social, environmental and physical development issues acquiring a supportive and supplementary role.

The lack of interconnections between economic-sectoral planning and physical planning, as well as, the lack of correspondence between, vaguely stated, objectives and policy measures was particularly evidenced in the five-year plans analysed. The investigation of specific planning documents and plan preparation procedures provided us with sufficient information to support and argue about the existence of two separate non-convergent processes: a) a process with strong economic bias which involves sectoral objectives and policies, culminating (this is a recent development) to specific investment programmes and b) a process focusing predominantly on physical development issues; involving, at the national level, basic policy directions of spatial development (e.g., sectoral and settlements policies) and the preparation of various regional and local plans.

From a juxtaposition of planning objectives with actual development processes we have, generally, observed the absence of a rapport between certain aspects, or, the kind of physical development taking place, and concurrent planning practices. In tourism, the absence of instances, or cases, of plan-based comprehensive action and/or plan-related physical development and spatial organization of tourism indicates that many projects of tourism development were "planned" and materialized outside the "formal" planning framework.

Concluding the above observations, one may notice that physical planning was functioning as a plan-making activity; as a process geared towards producing a plethora of plans, plans of various scales, but in essence failing to introduce and apply regional, or urban planning policies. It has been ineffectively

integrated with the overall planning process, where the absence of clear political commitment to physical planning was particularly evidenced, and has been confined within a limited legalistic frame of restrictive measures.

2.1.2. The legal frame

The Greek legal-administrative system has produced, in general, legal instruments and administrative decisions which enacted, quite often, ambiguous, or contradictory policies and statutes; similarly, the Greek governments have not created financial, legal and organizational structures capable of implementing the various policy objectives and plans. Both the observed weakness of the legal frame - consisting at large of a series of legal statutes imposing negative-control measures, as against encouraging positive redistributive planning practices - and its inability to coordinate the various plans and policy measures, have undermined the regulatory efficiency of physical planning development control.

Specifically, with regard to the physical development of tourism at the regional (nomos) and local levels, we observed that the various plans, having never acquired legislative backing, or, without the support of essential land use legislation and land policies[1], they were ineffective in directing or regulating spatially the growth of tourism; either within the urban fabric, or in the countryside. The spatial "regulation" of tourism took place and has been realized through a series of occasionally conflicting, and usually short duration administrative-legislative measures and through financial and fiscal incentives which were frequently revised and lacked in explicitness relative to the regional development objectives promoted. Also, in relation to the above practices, worth noticing are numerous cases of evading town planning and building regulations, or changing administrative acts devised to prohibit or discourage the growth of tourism in particular areas.

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1. Within this context we should observe the failure of three attempts by successive governments (1964, 1975, 1983) to introduce tax reforms to land property. Relevant discussion can be found in: Papamichos, N., Skouras, A., The taxation of landed property in Greece, Technika Chronika, 21: 11-31 (G), 1984.

2.1.3. The organization of planning

In the description of the state planning apparatus, of its structure and effectiveness at different spatial-administrative levels, we have emphasized the inadequacy of its technical-scientific organization, especially at lower levels, and the administrative-conceptual separation of national and regional economic planning from urban and physical planning. Further, we have noticed the operation of the local and regional state as functional arms of the central state; as a "branch-agencies" administering its affairs. Regional and local planning has been evidenced as a central government undertaking. What we observed was not a regional or local planning practice but in essence a centrally initiated and managed undertaking to tackle regional development problems. Regional development has been approached by the relevant central departments through specific sectoral policies and investments, guided by a system of regional incentives and various ad hoc regional-physical development plans, or studies; e.g., numerous and uniform regional sub-regional and local development plans, mostly organized outside any local participatory framework.

Following the identification of various functional connections between spatial levels, central agencies and kinds of planning, we have examined certain dynamic aspects developing and structuring such connections; their bearing on the planning process and, in turn, their influence upon tourism's spatial growth process. This was based, in terms of analytical method, on observing the role and effect of planning agencies, or development agents, cases of inter-agency antitheses, and conflictual decision processes. This analysis indicated the incapacity of the state planning apparatus to promote consensus-establishing processes, or, to develop determinate links with social institutions and "community" interests involved in planning, as well as, with those market forces, in general, acting within, or upon, the planning system. Thus, at the upper level of government, the lack of synergy and coordination among the relevant agencies, on an agreed set of policies and courses of action, seems to accentuate the problems and conflicts of tourism's spatial regulation - conflicts

between the locational interests of various development enterprises (large and small landowners, contractors, or hoteliers alike) and those of planning agencies - and results in a series of policy measures which either do not interrelate, or usually are withdrawn for revision shortly after they have been introduced.

2.2. Wider considerations for understanding planning practices and concluding remarks

Apart from the above-outlined major points, pertaining to the characteristics of plans, legislation and planning machinery, and their relation to certain aspects of physical, or spatial development, we concluded that the effectiveness of such planning elements is dependent on, and reflects the capacity of, the entire superstructural frame: the capacity to understand, regulate and mobilize the forces that influence socioeconomic growth process, and hence physical, or spatial development. Certain arguments and further reflections on these issues are in place here.

Within the frame of state planning functions, physical and tourism planning practices may be considered as following from the state's role to a) provide conditions for capital accumulation and valorization in tourism and b) allocate public sector budgets for the sphere of reproduction in a way that conduces to objective a) and to the mitigation of social conflicts. However, the capacity of the state's administrative-planning apparatus to appreciate the possibilities for comprehensive planning, or the capabilities of implementing effectively specific policy measures, seems to be inadequate, or limited. This has been indicated in the analysis of certain planning practice characteristics (e.g., those described in Chapter VI with reference to recent planning legislation and the Operation Town Planning Reform), where policy measures and statements of ambitious intentions (employing often a populist rhetoric and "radical" terminology) usually contrast to, or are inconsistent with realizations.

The above planning characteristics may be also understood as reflections of the political and cultural system at large, in respect to the observed elsewhere (Mouzelis, 1978) tendencies of this system to transform and divert real and substantial problems into formalistic, often personalized, issues and conflicts; or, with regard to the

kind of formalism[1]-legalism, characterizing political and cultural practices, which influences and transmutes planning practice as well. This is certainly an area related to the ideological-doctrinal background of tourism development in Greece, which deserves further investigation.

The identified limitations or shortcomings pertaining to plans, legislation and planning machinery, were related to the structure of the administrative apparatus, to the way central and local government is organized and political power is spatially distributed: spatial distribution of power, decision taking, as well as, mobilization of different resources dependent on, and realized within, a highly centralized form of administrative structure. This was particularly evidenced, when observing tourist investments distribution, or, when dealing, generally, with the ways central, regional and local governments fit into the wider context of the state. In relation to the above, one could possibly advance specific hypotheses for further investigation, as to the planning issues which have contributed, and how, to a "community of interest", to wider, territorially, consensus or participation building processes. In this respect, we may notice here only that the ways planning issues appear, or are presented, on various forums and spatial levels, tend to galvanize public opinion and particularly defuse reaction temporally and spatially instead of forging and stimulating a continuous and expanding interest in participation processes.

Summarizing the various points and arguments developed in this section we may add the following concluding remarks.

Planning in Greece is generally realized and exercised within a socio-political (superstructural) environment characterized by a) a limited degree of political commitment to and social awareness and acceptability of planning action, b) an inefficient scientific-technical base and information background to support planning intervention and c) a centralized administrative-institutional system gather-

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1. The concept formalism is employed here by the author to denote morphological-technical attributes as against social-historic processes. See Mouzelis, N., Modern Greece: facets of underdevelopment, Athens, Exantas, 1978, pp. 303-314.

ing a plethora of functions and failing to perform its coordinating role.

The above characteristic elements constitute the relational-conditional frame of tourism and physical planning which may be further and specifically distinguished by a) a limited, or largely asymptotic relation among tourism, regional-economic and physical planning parameters, and b) an ineffective planning system (planning legislation and organization), and a planning process producing predominantly plans, unable to incorporate and integrate the diverse elements of the tourism sector within a comprehensive development strategy, or unable to provide a correct balance between restrictive policies and control and positive-constructive strategies.

Thus, although the ascertained limited "range of influence" of planning may be attributed or related to the kind of planning practiced (the qualitative level of planning) and to the shortcomings of the planning system - both giving support to the validity of the study's second main hypothesis outlined in Chapter I - we should not ignore to emphasize the main underlying socio-political factors: the weighting role of political decisions in regulating different socio-economic forces, or development agents at different spatial levels.

3. Methods of approach and policy guidelines for the spatial analysis and organization of tourism: Conclusions and suggestions for improving tourism planning practices in Greece

The study's third objective was to put forward and analyse certain methods of approach and policy guidelines for the spatial analysis and organization of tourism; to advance a methodological approach and a frame of policy guidelines which could contribute to the improvement of tourism planning practices. In this section we delineate the major points of our proposals analysed in Chapter VII, reflecting further on problems and prospects of their implementation, against the background of actual or expected conditions, as well as, of specific relevant arguments developed in other studies.

3.1. The methodological background to tourism spatial analysis and planning

Tourism and tourism research cannot be considered, as yet, a separate branch of social sciences, or, in social science research, which has developed its own theoretical foundations and research methodologies. Instead, there is a considerable and growing volume of various studies on tourism which draw extensively on concepts and analytical methods from different branches of social sciences: anthropology, sociology, economics, etc. In such studies, tourism is viewed from different perspectives and there are attempts to integrate the study of tourism (or of particular aspects of the tourist phenomenon) with bodies of theories pertaining to those branches.

Scientific methods in tourism research seem to have veveloped only in few areas (e.g., macroeconomic demand analysis, geographical quantitative models, economic impact analysis) sound, technically, approaches (although these are characterized sometimes by a high degree of quantified formalism), or, to have reached a level of development which would allow their employment in planning practice. From the planning point of view, tourism research at present is characterized by an inbalance and as fragmentary. In spite of their significance,

many studies are piecemeal or ad hoc investigations of discrete empirical problems: It seems that they cannot be easily integrated into specific case studies which aim at elucidating explanatory and instrumental factors of tourism's development and impact; or studies which aim at supporting imortant policy issues of tourism's growth.

The analysis and identification in this study of the various problems and issues, pertaining to both analytical methods and policy fields in tourism, has shown the need for a multi-dimensional approach in dealing with tourism planning. Specifically, the advanced method and the tourism policy guidelines correspond to the concrete findings we arrived at by analysing selected planning practices, policies and decisions of relevant planning agencies or agents, mechanisms and means of implementing particular tourism policies; their nature and scope, the range of influence they exert on tourism's spatial structure, their substantive role and effectiveness in satisfying assumed or expected tourism and physical planning goals.

The methodological approach proposed (in section 2 of Chapter VII), recognizes both the complexity and specificity of problems involved in tourism's spatial development: complexity pertaining to the need of transcending barriers erected between planning disciplines, or the social sciences in general - in order to gain a deeper understanding of the processes involved and promote interdisciplinary studies and practices; specificity related to the need to consider particular spatial and historical contexts - in order to actualize the relational frame of tourism and physical planning, its relevance and correspondence to concrete spatial development processes and planning situations.

The system of tourism territorial profiles provides a general frame on the basis of which to develop an integrated planning and management system of tourism. The economic, social and physical development issues of tourism are perceived so closely related that it is considered essential to study them in a comprehensive way; in order to ensure compatibility between tourism development and the overall environmental objectives in an area. Thus, tourist territorial profiles provide the context for

- placing and examining tourism programmes, plans or projects at the national-regional planning level where, tourist activity is considered in respect of both sectoral economic (profit maximization) criteria and sociocultural and ecological development factors
- considering and reconciling existing or potential areas of conflict between various activities or agents concerned in tourism development.

We have already indicated that the advanced method would require from an operational point of view prior knowledge and precise information on many items or fields of tourism, particularly those pertaining to impact studies. However, we believe that this method if properly conceived introduced and put into operation, could be of considerable use to the national tourism planning authority. It could support the authority's function and role of formulating tourism development policies and coordinating the work of all government departments involved directly or indirectly in tourism.

Of course, in the last resort the usefulness of such an integrated planning approach would depend on the existing (inherent) capabilities of the administrative-institutional system; capabilities which at present do not seem to warrant the incorporation of such methods in the current planning process. Nevertheless, the ideas expressed here may possibly conduce to some extent in sensitizing certain interested parties or relevant agencies involved in tourism development planning as to the way of approaching and dealing with the multidimensional problems of tourism.

3.2. The frame of policy guidelines

With regard to the policy framework, our proposals cover three major areas which we discuss below:

- The system of principles-goals-objectives in tourism development planning
- The strategic issues of tourism policy
- The planning organization for tourism development.

3.2.1. The system of principles-goals-objectives

Summarizing the analysis of the tourism planning situation, it is in place here to specify certain emerging factors. In the analysis of specific planning documents and procedures (e.g., five year plans) we have ascertained a rather incomplete, if not contradictory at times, system of goals-objectives and policy measures. The lack of conceptual coherence and the confusion surrounding basic terms employed in the analysed documents has been also noticed elsewhere, with regard to the 1968-1973 Development Plan of Greece (e.g., Ritsatakis, 1986). We believe, however, that this failure is not simply an issue of semantic confusion, but reveals the weakness or incapacity of the relevant planning administration to develop and express in a coherent and consistent way planning objectives; way which affects directly the policy measures being proposed, as well as, their realization prospects. In connection to the above, it is worth noticing that, among different planning echelons of the administration, touristic issues are viewed and approached in a way which is fragmentary and limited, or exhibit clear absence of interdepartmental coordination, as has been illustrated in Table VII-1 of Chapter VII.

Against such a background we are proposing a broadly defined, as to its content, system of principles-goals-objectives for tourism development planning. In this respect, we should argue further that the relevant government departments and public agencies should pay more attention to such a task. This of course implies a greater commitment on the part of policy-makers and administrators towards specific policy directions. We believe such a task to be attainable even within the "limits of proper" role of indicative planning; the type of planning practiced in Greece and assuming that the proper use of indicative planning is to set certain rules (for guiding the market forces to desired, intersectorally and spatially, directions), as well as, to lay down the channels of information exchange among the various planning actors, or agents at different spatial levels. What we particularly propose in the system of principles-goals-objectives is that the various tourism relevant policy measures (e.g.,

public investments, incentives) should be better articulated and coordinated with regional development objectives, better related to specific sector policies (agriculture - agrotourism - socio-cultural activities), as well as, to the spatially differentiated and diverse tourism resources potential and capacity. Additionally, we propose the development of domestic tourism together with diversifying the TP, or developing new or alternative types of tourism. This is in contrast to the existing situation observed, whereupon, apart from the limitations in the available data on domestic tourism, we have noticed the almost exclusive emphasis on international tourism in the various government policies and the relative small interest of the private sector in organizing and promoting the domestic tourist market.

3.2.2. Strategic issues of tourism policy

Among the strategic issues of tourism planning, the restructuring of the TP and the improvement of the country's international and regional accessibility assume dominant position in our policy suggestions. The essence and scope of restructuring the Greek TP lies in the diversification and qualitative upgrading of the tourist supply, in interweaving and interlinking tourism and other tourism-related sectoral activities into regionally identifiable and differentiated tourist products, or integrated tourism activity complexes. In support of the restructuring process, the promotion of certain new or less developed types of tourism (which we suggested in section 3.2. of Chapter VII), is expected to utilize and mobilize existing idle and the regionally diverse, tourist resources and thus conduce to increasing the country's competitiveness and share in the international tourism market. The development of a more diversified TP seems to be favored by present conditions of a highly competitive tourist market, its development in the past having been inhibited by particularly favorable demand conditions and by the rapid expansion with strong state support of one type of accommodation (hotels) and by private/state orientation to mass and resort tourism.

Despite this, the restructuring of the Greek TP may be not an easy planning task; particularly under the present economic

conjuncture[1] and within the context of established practices and patterns of bargaining among ITO, LTA and the state. The prospects for a successful restructuring seem to rely on the state's planning capability to:

- mobilize the private sector, i.e., guide private investment towards the development of new tourist products, and the "enrichment" of existing ones,
- advance a comprehensive marketing strategy to attract specific client groups, or market segments, which develop out of an expansion of particular tourist activities and leisure habits,
- direct the bulk of public investments to a few carefully selected locations and programmes built around new tourist product categories.

Our analysis of international tourist flows revealed the significance of distance as a factor affecting, particularly in the case of Greece, the volume of flows. We also observed, at the national planning level, that little attention was given to the significance of distance, or accessibility factors, or to the role played by the organization and operation of the international tourism market, its travel mechanisms and operators, in the distribution of tourist flows into the country or within its different regions. Consequently, from a national planning point of view the relevant policies should be directed towards affecting those factors, within the international and national transport landscape, which are relative more open to influence by planning intervention. These include: a) more efficient organization of the national air-carrier, b) improving land and sea transport links related to the promotion of individual tourism (to stabilize the increasing share of CIT travel) and c) promotion and development of the country's regional transport links or those regional air-connections (to the national centre and the metropolitan centres-sources of international tourism) which support regional development objectives: efforts in this

1. A combination and concurrence of events and circumstances pertaining to economic problems (inflation, balance of payments deficits, rising unemployment particularly in large cities, etc.) may possibly limit the financial resources needed for the restructuring of the TP.

direction will face increasingly competitive conditions in view of the EEC induced liberalization of transport policies.

3.2.3. The organization of planning and coordination in the planning process

Following the above-stated proposals for tourism planning and strategic issues of tourism policy, we summarize below certain points which concern the general character of changes that should be introduced into the planning system; changes with regard to the planning organization and legal-statutory frame for tourism development. These points should be considered as extensions of the discussion on planning organization in Chapter VII.

The identified and described limitations, or specific shortcomings pertaining to the role and function of plans, the legal frame and the planning machinery were viewed within and related to the country's overall administrative structure, to the organization of central, regional and local governments, to the way particular decisions are taken and different resources are mobilized. It is pertinent, therefore, to consider the organization of tourism planning as dependent on, or as a constituent part of, the organization of the entire planning system, the country's administrative-institutional-statutory-legal frame. In this sense, our tourism-specific suggestions are of a tentative character.

With regard to the state of tourism planning and policy making, there are two main points which seem to emerge from the analysis:

a) The ad hoc nature and occassional or incidental character of planning intervention which reflects among other things the inadequacy of central and regional planning and coordination.

b) The ambiguity or confusion of direction which imbues tourism planning policies, confusion due perhaps to the multiplicity of involved parties and affected interests.

We have noticed earlier the limited attention attributed, at the national planning level, to accessibility and international tourism market factors and have drawn certain implications suggest-

ing the orientation that relevant planning policies should assume. What may be implied, generally, for the study of international tourism or for tourism development planning is that factors of "external origination" should be given the same weight in the studies for smaller regions as they are for whole countries; such factors are particularly important in regions which are linked to or dependent on the international metropolitan-based travel system within which regions have to compete with each other. For example, a physical development plan of tourism for the island of Corfu, or specific physical planning guidelines and zoning to direct tourism's physical growth to desired locations within Corfu, may be less effective if either fails to consider the dynamics of international travel mechanisms and tour operating businesses which involve concrete choices as to the spatial distribution of their tourist clietèle.

The failure to integrate tourism (sectoral) planning to physical and socio-economic planning is one side of the problem. The other side pertains to the discussed inefficiency of tourism policy and measures; inefficiency attributed to the inability to appreciate the numerous and diverse factors of the tourist factor and subsequently integrate all these factors into the planning process. Thus, it seems to us that tourism policy should both broaden its scope and range of influence - by including and considering a wide variety of interrelated factors - and more effectively relate to and integrate with other types of planning. In both cases what is required is to consisent strategy for tourism development with a long term perspective but also medium term dimensions. Organization-wide, this implies that the relevant administrative-planning agencies (the NTO, the Ministry of National Economy, the Ministry of Physical Planning and the Environment) build-up approapriate, technico-scientific planning services and develop statutorily regulated and effective channels of communication, cooperation and coordination. One possible division of functions which could assist in developing integrated strategies whilst retaining existing agencies is as follows:

a) The NTO assumes full competence in tourism research and planning, which is far from being the case today.

b) The Ministry of National Economy formulates and proposes sector-specific development guidelines and especially the main economic policy measures (tourism investment and incentives programmes and schemes) within the overall national development strategy, macro-economic goals and inter-sectoral coordination.

c) The Ministry of Physical Planning and the Environment proposes tourism location guidelines and regulations within the context of its National Physical Planning guidelines, Regional Physical Plans, urban centre and settlements policies, zonal regulations for rural areas and nationwide environmental protection policies.

However, we believe that the formulation of tourism policy and tourism investment policies would benefit most if developed on a regional base. There are three main arguments underlying this belief. First, the regional level is best suited for the integration of tourism planning with regional development planning. It is the spatial level to realize the investments' sectoral coordination and synthesis (e.g., tourism, agriculture, infrastructure etc.); to asses the relationship and complementarity between the different sectors and threshod zones of impact of each upon the other. The Crete Development Plan we have discussed in the analysis of planning paradigms (Chapter VI) is a good example to illustrate and support this argument. Second, the control of tourism, particularly tourist infrastructure, in the countryside is a planning issue of regional significance; since as we have observed (Chapter IV) the diverse tourism activities assume location-wise both a central places (different categories of settlements) and a peripheral orientation. Also, land use conflicts (tourism and outdoor recreation, tourism and agriculture, etc.), due to their spatial distribution, should be resolved at this level. Third, the interrelationship between different types of tourism can be better understood studied and promoted on a regional basis, according to each region's tourism resource differentiation, potentiality and capacity, as well as, on the basis of the regional economic and socio-cultural conditions.

Regional planning authorities in this case could select and encourage those types of tourism which are compatible (i.e., the growth of two or more types has no constraining effect upon each other's development), effectively interlinked with other growth sectors and enhance the region's tourism and environmental resources.

APPENDICES

Table 1

International Tourist Flows

(1963)

From Country i		To Country J												Total Outflows
		01	02	03	04	05	06	07	08	09	10	11	12	
AUSTRIA	01		125000	250744	18907	19365	46914	508776	34581	175074	20300	4355	352976	1556992
FRANCE	02	248007		572600	65695	150909	3880590	1589925	67410	1254694	287500	40663	138748	8297011
GERMANY W.	03	3673714	1640000		86756	718098	820995	2204696	700000	1889337	209700	58620	439850	12441766
GREECE	04	20930	44102	61255		9523	14015	95395	8609	36474	11600	4769	27830	334502
NETHERLANDS	05	273687	860000	804229	10288		206468	317985	87000	342852	123100	19930	64124	3109663
IBERIAN C.	06	16064	600000	89695	2862	28375		158992	12679	109421	30900	9060	33347	1091395
ITALY	07	143884	990000	288236	32872	47738	183181		43968	729474	70400	24820	186524	2741097
SCANDINAVIAN C.	08	187634	220000	907059	40548	132985	244296	392181		189663	125488	27340	56829	2524023
SWITZERLAND	09	167968	670000	343308	17654	58006	174020	614771	44354		48000	14621	48543	2201245
UN.KINGDOM	10	360907	1630000	604124	74468	260503	967629	1271940	210340	948316		138539	124136	6590902
USA	11	303867	970000	921860	147561	247705	415681	1929109	303644	787731	509160		59643	6595961
YUGOSLAVIA	12	26066	28856	18138	12991	6231	630	116594	5633	14590	5300	1974		237003
Total Inflows		5422728	7777959	4861248	510872	1679437	6954419	9200364	1518217	6477626	1441448	344691	1532550	47721559

Table 2

International Tourist Flows

(1965)

From Country i		To Country J												Total Outflows
		01	02	03	04	05	06	07	08	09	10	11	12	
AUSTRIA	01		133000	277917	23216	21185	47858	521700	39795	174430	24500	6443	360000	1630044
FRANCE	02	267223		651610	80176	178138	5736890	1776000	80917	1319605	363500	57879	213000	10724938
GERMANY W.	03	3929762	1643000		100281	726973	1070309	2109000	900000	1827728	259000	88642	561000	13215695
GREECE	04	26474	47293	74460		10473	23021	105450	10465	37919	16000	5683	50900	408139
NETHERLANDS	05	330786	966000	859284	17970		293378	310800	111412	371613	168700	26000	94800	33550743
IBERIAN C.	06	20882	744000	97663	4067	30172		166500	17683	113759	36900	17539	42416	1291781
ITALY	07	158940	1254000	297906	43996	57032	266498		48882	743225	84000	38582	302000	3295061
SCANDINAVIAN C.	08	220867	292000	1013525	73326	148195	408888	466200		212350	161500	35437	95000	3127288
SWITZERLAND	09	186398	677000	366075	21762	69436	184261	621600	48572		58000	21039	58700	2312843
UN.KINGDOM	10	409523	1598000	656719	86382	301988	1144180	1436000	254527	955576		193771	209000	7141666
USA	11	380825	977000	1044171	172475	301427	5771410	8031000	331375	887320	674300		86800	12658103
YUGOSLAVIA	12	46387	40871	26343	45726	9051	2239	166500	9044	22752	7100	3048		379062
Total Inflows		5978067	8372164	5365673	669377	1854071	14948932	9606750	1852673	6666277	1853500	494063	2073816	59735363

Table 3

International Tourist Flows

(1968)

From Country i		To Country J												Total Outflows
		01	02	03	04	05	06	07	08	09	10	11	12	
AUSTRIA	01		120000	260027	17673	20804	66683	567000	41747	184014	32600	10482	522000	1843030
FRANCE	02	246474		607883	81172	190901	7791257	1663200	91103	1312098	507000	82801	243000	12816889
GERMANY W.	03	4475921	1500000		90292	765210	1410051	2595600	1000000	1864140	356000	135280	798000	14990494
GREECE	04	29336	51013	59800		13649	30188	138600	14416	56004	27100	10301	67400	497807
NETHERLANDS	05	403676	900000	952812	15021		556908	352800	177709	424032	253400	41793	171000	4249151
IBERIAN C.	06	25724	700000	85990	3715	36546		239400	21404	128010	63300	22351	62935	1389375
ITALY	07	163724	1300000	292336	47500	64494	383691		99186	816061	129600	60390	624000	3940982
SCANDINAVIAN C.	08	235150	286000	968969	27383	164139	810629	904000		216016	243400	59739	120000	3635425
SWITZERLAND	09	200995	680000	359667	18131	69872	297186	743400	60011		82900	30151	88000	2630313
UN.KINGDOM	10	442105	1300000	617700	100404	340787	2122183	1058400	309614	720054		269916	207000	7488163
USA	11	461015	800000	1081537	201875	376928	740804	2293200	383036	1024077	877800		114000	8354272
YUGOSLAVIA	12	104424	69922	48729	17306	18708	17517	378000	19760	40003	12300	4385		731053
Total Inflows		6788544	7706935	5335450	620472	2062038	14227097	10533600	2177986	6784509	2585400	727589	3017335	62566955

Table 4

International Tourist Flows

(1971)

From Country i		To Country J												Total Outflows
		01	02	03	04	05	06	07	08	09	10	11	12	
AUSTRIA	01		170000	290696	39214	21844	104118	591142	52201	193762	57000	14197	570000	2104174
FRANCE	02	265473		606790	140306	220781	8617329	[illegible]	111532	1208705	710000	130095	390000	14044670
GERMANY W.	03	6050306	2180000		205083	846391	2887111	[illegible]	1100000	2159061	698000	204901	1363000	20577473
GREECE	04	30119	67285	71728		14949	34715	158999	16038	64587	51600	15295	84800	609715
NETHERLANDS	05	528491	1190000	1102006	46950		1000250	331616	203193	415204	452000	56808	274000	5600518
IBERIAN C.	06	33063	870000	399636	10203	48011		288362	33501	166082	126325	35241	109033	2119487
ITALY	07	230515	1800000	356889	110257	80704	377084		80704	876541	201000	86187	867000	5066881
SCANDINAVIAN C.	08	275551	310000	959676	108749	172931	1124187	533470		249122	315000	75218	157600	4281504
SWITZERLAND	09	236168	810000	372482	44586	68868	528520	677651	75099		189000	39689	146000	3188063
UN.KINGDOM	10	550183	1900000	732674	254378	377744	3199782	1239956	381984	765821		343340	299000	10044862
USA	11	657049	1430000	1403963	438981	531051	1270844	3143146	502743	1577775	1637000		243000	12835552
YUGOSLAVIA	12	131734	100316	59254	95444	22288	20286	432000	23912	73814	41754	9241		1010043
Total Inflows		8988652	10827602	6355794	1494151	2405591	19164222	11923225	2580907	7750474	4478679	1010212	4503433	81482942

Table 5

International Tourist Flows

(1973)

From Country i		To Country j												Total Outflows
		01	02	03	04	05	06	07	08	09	10	11	12	
AUSTRIA	01		188360	290330	70028	22936	134650	660150	67016	199991	52000	20402	618000	2323863
FRANCE	02	281367		595483	177267	268062	12242232	1628370	138524	1145402	866000	188074	400000	17930781
GERMANY W.	03	6619863	2526620		321306	1078723	3592593	3080700	1350000	2299895	835000	337426	1736000	23778126
GREECE	04	30452	54041	65573		12818	40663	146700	14421	54543	22904	22305	72000	536421
NETHERLANDS	05	563538	1310190	1150243	66972		1321206	308070	238659	399982	438000	71802	323000	6191662
IBERIAN C.	06	40760	973530	383981	20053	62078		352080	45520	209081	196623	56732	128507	2468945
ITALY	07	232655	1891800	335955	125239	84804	444937		84191	709058	302000	111263	872000	5193902
SCANDINAVIAN C.	08	295048	331700	927393	239920	174396	1364421	513450		254531	325000	119738	155700	4701297
SWITZERLAND	09	277599	882000	383732	67890	86800	677696	718830	94909		203000	60946	167000	3620402
UN.KINGDOM	10	500623	1989000	701925	364885	461181	3929796	1246950	446719	681787		499530	361000	11183396
USA	11	592165	1264120	1247018	615606	454929	1513031	2934000	565170	1409027	1577000		283000	12455066
YUGOSLAVIA	12	111369	85994	46048	177326	20397	17628	293400	22948	54618	19000	14464		863192
Total Inflows		9545439	11497355	6127681	2246492	2727125	25278853	11882700	3068077	7417915	4836527	1502682	5116207	91247053

Table 6

Spatial Distribution of Tourist Flows
(A general hypothesis-Indices of relationship)

Country	AUSTRIA				(01)
In relation to:	1963	1965	1968	1971	1973
02	-0,7368	-0,7510	-0,8227	-0,8286	-0,8499
03	1,5992	1,9705	1,7519	1,6656	1,6615
04	-0,4492	-0,3519	-0,4568	-0,5521	-0,4572
05	-0,2252	-0,693.	-0,1244	-0,1444	-0,1298
06	-0,8704	-0,8385	-0,8293	-0,8585	-0,8421
07	-0,5379	-0,5181	-0,6171	-0,5875	-0,5717
08	-0,3456	-0,2944	-0,4038	-0,4165	-0,4000
09	-0,3282	-0,1948	-0,2957	-0,3285	-0,2669
10	-0,5179	-0,4271	-0,4558	-0,5034	-0,5720
11	-0,5944	-0,6994	-0,4913	-0,5359	-0,5454
12	-0,0318	0,2225	0,3165	0,1824	0,2334

Country	FRANCE				(02)
In relation to:	1963	1965	1968	1971	1973
01	-0,5074	-0,4176	-0,4715	-0,3920	-0,3567
03	-0,1913	-0,1126	-0,1877	-0,2028	-0,1566
04	-0,1911	-0,1729	-0,1682	-0,1696	-0,2004
05	0,6966	0,9418	0,7192	0,5987	0,6794
06	2,3727	3,1109	3,0894	2,0886	2,1294
07	1,2157	1,7164	1,6774	1,6730	1,8907
08	-0,4652	-0,3335	-0,3614	-0,4551	-0,4400
09	0,8673	1,0893	1,0984	0,9117	0,9334
10	0,5172	0,5971	0,4091	0,4232	0,4115
11	-0,0977	-0,4490	-0,2227	-0,1617	-0,1944
12	-0,2530	-0,2303	-0,2236	-0,2526	-0,2093

Country	W.GERMANY				(03)
In Relation to:	1963	1965	1968	1971	1973
01	0,5804	0,8986	0,6540	0,7711	0,8591
02	-0,3227	-0,3234	-0,4439	-0,4460	-0,5058
04	0,7970	1,0316	0,4082	0,5082	0,8190
05	1,5380	1,6948	1,6287	1,5226	1,7644
06	-0,1934	-0,1580	-0,2744	1,4173	1,3143
07	0,0319	0,0067	-0,1303	-0,0969	-0,0374
08	2,5266	2,6090	2,1246	1,8736	1,9354
09	0,5305	0,7625	0,6030	0,4979	0,5772
10	-0,1004	0,0240	-0,0329	-0,0648	-0,0659
11	0,3715	-0,0813	0,5176	0,4023	0,4899
12	-0,2489	-0,2261	-0,2185	-0,2478	-0,2061

Country	GREECE				(04)
In relation to:	1963	1965	1968	1971	1973
01	0,1348	0,2716	-0,0314	0,0183	0,2249
02	-0,2600	-0,3325	-0,3602	-0,4540	-0,5981
03	-0,3483	-0,3224	-0,3915	-0,4553	-0,4507
05	-0,6908	-0,5481	-0,6429	-0,5419	-0,5603
06	-0,7549	-0,7188	-0,7299	-0,7369	-0,6698
07	0,1207	0,1921	0,2174	0,1890	-0,0198
08	0,5013	1,0934	-0,2391	0,3879	1,0745
09	-0,2504	-0,1598	-0,3037	-0,2357	-0,2377
10	0,0559	0,0799	0,3543	0,3838	0,3263
11	1,0907	0,2165	1,4408	0,8688	1,0091
12	4,1227	0,7704	1,3911	4,1636	7,3508

Table 7

Spatial Distribution of Tourist Flows

(A general hypothesis - indices of relationships)

Country : NETHERLANDS (05)					
In relation to:	1963	1965	1968	1971	1973
01	-0,6466	-0,5821	-0,6569	-0,6480	-0,6699
02	-0,4832	-0,4659	-0,5472	-0,4671	-0,5000
03	0,6396	0,7687	0,5515	0,3943	0,5172
04	-0,1912	-0,1749	-0,1666	-0,1688	-0,2008
06	-0,2613	-0,2489	-0,2004	-0,2316	-0,1590
07	-0,5052	-0,4434	-0,5025	-0,4600	-0,4539
08	0,4968	0,5237	0,3723	0,3691	0,2406
09	-0,2513	-0,0346	-0,1925	-0,2677	-0,1981
10	0,1228	0,3596	0,3832	0,2747	0,3791
11	0,0668	-0,2343	0,3713	0,4024	0,2215
12	-0,2531	-0,2322	-0,2221	-0,2519	-0,2097

Country : IBERIA (06)					
In relation to:	1963	1965	1968	1971	1973
01	-0,7933	-0,8827	-0,8408	-0,7896	-0,7908
02	2,2078	1,1370	1,6732	1,6086	1,4647
03	-0,5474	-0,6764	-0,5863	-0,4034	-0,4545
04	-0,7126	-0,7746	-0,7333	-0,7579	-0,7263
05	-0,5446	-0,6698	-0,4236	-0,2406	-0,2296
07	-0,5416	-0,6768	-0,5718	-0,6835	-0,6907
08	-0,3361	-0,4776	-0,0194	0,1163	0,0477
09	-0,4577	-0,6817	-0,5031	-0,2951	-0,3242
10	0,0069	-0,3599	0,2462	0,3543	0,2685
11	-0,5677	0,8215	-0,6100	-0,5790	-0,5614
12	-0,9817	-0,9764	-0,8946	-0,9146	-0,9262

Country ITALY (07)					
In relation to:	1963	1965	1968	1971	1973
01	0,6948	0,9903	0,8268	0,9202	1,1818
02	-0,0060	0,0298	-0,2294	-0,2000	-0,3025
03	-0,0809	-0,0075	0,0282	-0,0421	-0,0049
04	0,4791	0,6067	0,6533	0,7779	1,1004
05	-0,4696	-0,4556	-0,5069	-0,5952	-0,6178
06	-0,2444	-0,1984	0,0232	-0,0700	0,0952
08	-0,1940	-0,0729	-0,1767	-0,1483	-0,1611
09	0,4485	0,6713	0,6783	0,4528	0,5249
10	0,0009	0,1598	-0,1606	-0,1562	-0,1436
11	0,5169	-0,0021	0,6300	0,6738	0,8093
12	1,5516	1,7316	2,0704	1,9234	1,6106

Country SCANDINAVIA (08)					
In relation to:	1963	1965	1968	1971	1973
01	-0,3015	-0,2124	-0,3491	-0,2174	-0,1417
02	-0,7445	-0,7566	-0,7957	-0,7494	-0,7700
03	0,7692	1,1968	0,9169	0,6863	0,6897
04	-0,1906	-0,1728	-0,1678	-0,1702	-0,1998
05	-0,1202	0,0121	0,2017	0,1445	0,1471
06	-0,6346	-0,5584	-0,5573	-0,5013	-0,4512
07	-0,4955	-0,5214	-0,5684	-0,4975	-0,5175
09	-0,3663	-0,3225	-0,3443	-0,2568	-0,2197
10	0,0035	0,1496	0,1881	0,1996	0,1888
11	0,4476	-0,1555	0,3175	0,2355	0,3505
12	-0,2525	-0,2303	-0,2232	-0,2531	-0,2087

Table 8

Spatial Distribution of Tourist Flows

(A general hypothesis - indices of relationships)

Country : SWITZERLAND (09)					
In relation to:	1963	1965	1968	1971	1973
01	-0,1713	-0,0411	-0,0797	-0,0317	0,0585
02	0,1143	0,1025	-0,0564	-0,0950	-0,2142
03	0,1190	0,2392	0,1461	0,1032	0,1897
04	-0,1964	-0,1674	0,0368	0,1138	0,2506
05	-0,1875	-0,0622	-0,0802	-0,2204	-0,2054
06	-0,2611	-0,2108	-0,1508	-0,1760	0,0416
07	0,9611	1,0211	0,9084	0,8190	0,6791
08	-0,4462	-0,3915	-0,4523	-0,3881	-0,3340
10	0,0602	0,1989	-0,1137	-0,1983	-0,2501
11	-0,1199	-0,3718	0,1297	0,2925	0,3914
12	-0,5463	-0,4621	-0,4956	-0,2315	-0,2217

Country : U.S.A. (11)					
In relation to:	1963	1965	1968	1971	1973
01	-0,6115	-0,5237	-0,5097	-0,4558	-0,4679
02	-0,3193	-0,3497	-0,4430	-0,2529	-0,3643
03	-0,3456	-0,1918	-0,2220	-0,1969	-0,1399
04	0,9801	0,6776	0,7838	1,0230	1,5200
05	-0,1098	-0,1177	-0,1521	-0,1819	-0,2971
06	0,1529	0,6358	0,3868	0,3408	0,3926
07	0,2576	0,4107	0,3209	0,3717	0,2982
08	0,5044	0,3652	0,4165	0,4167	0,5435
09	-0,0774	0,0959	-0,0118	0,0039	0,0202
10	1,9194	2,2689	2,1073	1,7565	1,7070
12	0,1568	-0,0312	-0,4829	0,2621	0,0155

Country UNITED KINGDOM (10)					
In relation to:	1963	1965	1968	1971	1973
01	-0,5682	-0,5151	-0,5717	-0,5074	-0,5778
02	0,1473	0,0933	-0,0421	-0,0808	-0,0887
03	-0,4419	-0,3678	-0,4249	-0,3832	-0,3374
04	0,1482	0,2645	0,3181	0,5387	-0,1943
05	0,3108	0,5326	0,4439	0,4673	0,3347
06	-0,0625	-0,0785	0,1031	0,0836	0,5026
07	-0,1495	-0,1776	-0,2037	-0,2787	0,0970
08	0,6462	0,6658	0,6211	0,3376	0,3043
09	-0,2779	-0,1910	-0,2368	0,0778	0,0579
11	1,5560	0,7183	1,5441	1,3188	1,3908
12	-0,2595	-0,3957	-0,5926	-0,2483	-0,5846

Country : YUGOSLAVIA (12)					
In relation to:	1963	1965	1968	1971	1973
01	6,0624	5,3846	4,8761	3,8985	3,7404
02	-0,4790	-0,4276	-0,6066	-0,4978	-0,6023
03	0,1013	0,2233	0,1044	0,1977	0,3013
04	1,5918	2,5940	1,8090	1,5150	1,3925
05	-0,3576	-0,2305	-0,1650	-0,1152	-0,0701
06	-0,0481	-0,0492	-0,0602	-0,0697	-0,0722
07	1,1198	1,6412	2,2849	2,0942	1,9926
08	-0,2985	-0,1245	-0,3151	-0,3343	-0,4096
09	-0,3130	-0,2685	-0,3058	-0,1718	-0,1777
10	-0,4132	-0,1566	-0,4264	-0,4617	-0,4245
11	-0,7183	-0,8023	-0,7168	-0,6576	-0,5949

Table 9

Cost of Tourist Services - Daily Tourist expenses[1/]

(An average traveler's typical day-budget, in $)

COUNTRIES	TYPES OF SERVICES 2/						TOTAL FOR THE YEARS		
	S1 Lodging	S2 Board	S3 Transport	S4 Other items	S1-S4 Total	SL3/	1963	1973	1981
1. Austria-Vienna	24,24	14,72	4,74	6,59	50,29	53,90	8,89	37,34	68,11
2. France-Paris	20,42	15,21	5,21	6,86	47,70	95,91	16,56	41,32	68,45
3. Germany W. Bonn Frankfurt Munich	24,24	14,20	7,14	7,48	53,06	67,57	13,45	43,12	72,53
4. Greece-Athens	9,45	8,78	1,47	2,39	22,09	53,31	8,92	19,44	33,44
5. Iberia-Spain-Portugal	7,49	9,48	2,00	3,22	22,18	42,34	13,54	36,47	63,76
6. Italy-Rome	12,37	14,62	2,02	5,51	34,52	60,80	8,11	22,22	44,67
7. Netherlands-Amsterdam	22,39	14,66	4,50	4,95	46,50	82,72	13,49	27,60	45,67
8. Scandinavia-Stockholm	16,62	16,01	6,07	6,76	45,46	70,97	14,70	38,85	108,91
9. Switzerland-Berne Genova Zurich	23,37	157,77	5,77	6,57	51,48	63,21	12,94	32,06	68,57
10. United Kingdom-London	19,90	11,88	3,27	5,44	40,49	60,62	14,80	36,99	83,42
11. U.S.A.-New York San Francisco Washington	23,13	11,20	4,95	6,46	45,74	86,15	13,40	42,55	83,40
12. Yugoslavia-Beograd	6,11	5,32	3,11	1,72	16,26	-	7,12	16,01	56,40

1) Expenses refer to capital or major cities. Average values were estimated where more than one city is indicated

2) Middle class category of services

3) Special services. Upper class category of services for the traveler businessman. See Financial Times, Feb.23, 1976 A guide to travel cost.

Source: Centro per la statistica Aziendale, Pronctuario Economico del Turista, Firenze, 1963,1973,1975,1981

Appendix A - Chapter III

4. Tourist Flows Analysis: The generation and attraction profiles

4.1. Methodological procedure for assessing the Generation (G_i) and Attraction (A_j) indices:

a. With regard to both indices G_i and A_j we used two matrices (12X12) in which each element has been subdivided into 4 or 6 subelements each of which pertain to a factor instrumental to the generation or attraction of tourist flows.

b. Pairwise comparisons among all countries on each factor separately were made using the binary coding; one for country X_1 and zero for country X_2, when the first excells or surpasses the second on a particular factor examined. The two indices result from the summation of rows and columns in matrices M_1 and M_2 respectively; i.e.,

$$G_i = \sum_{j=1}^{12} X \qquad A_j = \sum_{i=1}^{12} Y ,$$ where X and Y are the values in each row and column of matrices M_1 and M_2 respectively (see Table 10).

c. The factors considered in the first case (G_i) were the population of each country, employment in all but the primary sectors (percentagewise), per capita GDP and the cost of tourist services (see Table 10).

d. In the second case (A_j), we considered certain factors together with their corresponding hypotheses as follows:

- Migration: The existence of a migration movement (flow) from country X_1 towards country X_2 favours the creation of tourist flows in the opposite direction.
- Cultural affinity - language: The existence of a common language between two countries X_1 and X_2 favours tourist exchanges between these two countries (e.g., W.Germany - Austria, U.K. - U.S.A., etc.).
- Geographical proximity: Common boundaries between two or more countries are conducive to the growth of tourism.
- Heliotropic movement: It country X_1 is endowed with better climatic conditions (sunshine) than country X_2, then country X_1 is in a more favourable position as a tourism reception country.

e. Two more factors examined additionally to the above, in an alter-

native hypothesis pertain to tourist equipment (hotel capacity) and cost of tourist services; both favouring, in pairwise comparisons, the country with greater capacity and lower cost of tourist services.

4.2. Methodological procedure for factors assessing in the attraction hypotheses

a. The internal attraction indices (see matrices M_3 and M_4 of Table 11 were assessed by ranking the values of rows and columns of matrix M_2 respectively.

b. The average attraction values of the intervening between i and j countries, i.e., A_{mij}, has been estimated (see Table 12) using the formula:

$$A_{mij} = \frac{\sum_{K=1}^{K} A_j \cdot dK}{\sum_{K=1}^{K} dK}$$

Where K = the number of intervening between i and j countries

dK = the distance between each intervening country from the destination country,

and $A_j = \sum_{i=1}^{12} Y$ = total internal attraction of each country j.

Table 10

Matrices of the Tourist Generation and Attraction Profile

M_1

	01	02	03	04	05	06	07	08	09	10	11	12	G_i
01	.	0	0	4	1	3	3	0	2	2	0	3	18
02	4		0	4	3	4	3	1	2	2	0	4	27
03	4	4	.	4	3	4	4	4	2	3	1	4	37
04	0	0	0		0	1	0	0	1	0	0	3	5
05	3	1	1	4		3	3	1	3	1	0	3	23
06	1	0	0	3	1		0	1	1	0	0	4	11
07	1	1	0	4	1	4		1	1	0	0	4	17
08	4	3	0	4	3	3	3		2	2	0	4	28
09	2	2	2	3	1	3	3	2		1	1	3	23
10	2	2	1	4	3	4	4	2	3		1	4	30
11	4	4	3	4	4	4	4	4	3	3		4	41
12	1	0	0	1	1	0	0	0	1	0	0		4

M_2

	01	02	03	04	05	06	07	08	09	10	11	12
01		2	2	2	1	2	4	0	3	0	0	4
02	1		1	2	1	6	5	1	3	2	0	3
03	4	4		3	2	4	4	2	4	2	2	2
04	1	1	1		0	1	1	0	1	1	1	2
05	1	2	2	3		3	3	1	2	2	1	3
06	1	3	0	1	0		2	0	0	0	0	1
07	1	3	0	1	0	2		0	2	0	0	2
08	2	2	2	2	1	3	3		2	2	1	2
09	3	4	2	2	0	3	6	0		0	0	2
10	2	3	0	2	2	3	3	0	1		1	2
11	2	2	0	1	1	2	2	1	1	2		1
12	2	1	1	2	0	1	2	1	1	1	1	
A_j	20	27	11	21	8	30	35	6	20	12	7	24

Table 11

Matrices with Indices of the Relative Internal Attraction

$M_3 (A^l_j / l)$

	01	02	03	04	05	06	07	08	09	10	11	12
01	-	6,5	6,5	6,5	4	6,5	10,5	2	9	2	2	10,5
02	3,5	-	3,5	6,5	3,5	11	10	3,5	8,5	6,5	1	8,5
03	9	9	-	6	3	9	9	3	9	3	3	3
04	6,5	6,5	6,5	-	1,5	6,5	6,5	1,5	6,5	6,5	6,5	11
05	2	5,5	5,5	9,5	-	9,5	9,5	2	5,5	5,5	2	9,5
06	8	11	3,5	8	3,5	-	10	3,5	3,5	3,5	3,5	8
07	6,5	11	3	6,5	3	9	-	3	9	3	3	9
08	6	6	6	6	1,5	10,5	10,5	-	6	6	1,5	6
09	8,5	10	6	6	2,5	8,5	11	2,5	-	2,5	2,5	6
10	6,5	10	1,5	6,5	6,5	10	10	1,5	3,5	-	3,5	6,5
11	9	9	1	4	4	9	9	4	4	9	-	4
12	10	5	5	10	1	5	10	5	5	5	5	-

$M_4 (A^i_i / _j)$

	01	02	03	04	05	06	07	08	09	10	11	12
01	-	4,5	9,5	6,5	7,5	4	8,5	3,5	9,5	2,5	3	11
02	3	-	6	6,5	7,5	11	10	8,5	9,5	9	3	9,5
03	11	10,5	-	10,5	10,5	10	8,5	11	11	9	11	5,5
04	3	1,5	6	-	3	1,5	1	3,5	3,5	5,5	8	5,5
05	3	4,5	9,5	10,5	-	7,5	6	8,5	7	9	8	9,5
06	3	8	2,5	2	3	-	3	3,5	1	2,5	3	1,5
07	3	8	2,5	2	3	4	-	3,5	7	2,5	3	5,5
08	7,5	4,5	9,5	6,5	7,5	7,5	6	-	7	9	8	5,5
09	10	10,5	9,5	6,5	3	7,5	11	3,5	-	2,5	3	5,5
10	7,5	8	2,5	6,5	10,5	7,5	6	3,5	3,5	-	8	5,5
11	7,5	4,5	2,5	2	7,5	4	3	8,5	3,5	9	-	1,5
12	7,5	1,5	6	6,5	3	1,5	3	8,5	3,5	5,5	8	-

Table 12

Matrix with Indices of the Average Attraction of the Countries Intervening between i and j (A_{mij})

M_5

	01	02	03	04	05	06	07	08	09	10	11	12
01	-	22,11	16,44	30,22	18,03	18,16	22,03	13,14	21,89	16,41	18,64	-
02	18,99	-	13,27	20,46	11,50	-	18,88	14,59	11,00	-	16,68	17,16
03	21,75	9,89	-	24,03	-	19,74	21,30	8,00	-	17,39	19,45	23,89
04	18,90	19,81	21,35	-	22,52	17,46	20,45	22,44	19,01	21,52	19,42	25,00
05	23,24	12,00	20,00	22,04	-	20,47	22,45	-	25,41	27,00	23,15	22,22
06	17,05	13,02	19,16	19,23	20,87	-	18,10	18,23	20,32	18,98	15,72	15,63
07	17,82	19,54	17,36	24,00	14,92	23,17	-	20,22	15,37	17,76	18,30	20,63
08	19,28	23,24	22,78	21,15	18,72	19,46	18,84	-	22,43	24,44	20,63	17,76
09	24,00	13,02	-	26,11	16,98	27,00	-	13,06	-	14,37	17,54	25,75
10	20,89	-	19,37	21,15	11,00	19,50	20,09	15,31	21,46	-	-	16,40
11	19,44	20,06	21,28	17,51	22,20	17,98	16,43	22,19	19,38	21,42	-	18,01
12	-	23,02	22,39	-	22,19	16,34	20,00	16,93	19,30	20,98	18,81	-

5. Tour Operators Survey: The Questionnaire

University of Strathclyde

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Dear Sir,

With the present letter we are asking you to help us with a survey concerning the activities of U.K. tour operators in Europe.

We would like in particular to investigate certain aspects involved in the selection process of holiday destinations pertaining to a group of six Mediterranean countries. Therefore, we would appreciate very much if the enclosed herewith questionnaire could be filled in and returned to us at your earliest convenience.

An effort has been made to limit the number of questions and make them as short and clear as possible. However, should you have any queries or should you suggest an interview with certain experts of your company's staff, please let me know.

Your support will be valuable since it is certain that the success of this survey will depend very heavily on your willingness to provide us with information.

With many sincere thanks in advance.

Yours faithfully,

Panajotis Konilis

P.S.
We will be grateful if you could send to us, when you return the questionnaire, a copy of your new Summer 1979 holiday brochure.

TOUR OPERATORS SURVEY :1

THE QUESTIONNAIRE

1. Special note and instructions

- The purpose of this survey is to analyse the tour operator's spatial behaviour; to gather comparative information regarding their characteristics as they relate to their decision making process in the selection of a tourist destination place. The present survey is an attempt to define the criteria on the basis of which a tour operator formulates various holidays programmes as well as the factors instrumental in differentiating the size of holidays flows among several countries.

- Questions are formulated in such a way as to facilitate rapid completion. If for some items in the questionnaire there are not "exact" answers please give rough estimates. In any case please be careful in your response to describe practices as they exist not as you wish they should exist.
Of course, all information provided will be held in confidence and full anonymity will be preserved.

2. General characteristics of your holiday company.

2.1. Please answer and/or check the following questions and/or statements:

A. Size of the company:
Number of people who travelled with you in
1973 _____
1978 _____

B. Seasonality:
Period of the year covered in your programmes
1. Summer _____ ☐
2. Winter _____ ☐
3. All year _____ ☐

C. Destination:
Countries/regions included in your programmes:
1. Europe-Med. countries ☐
2. Africa (except Med.) ☐
3. Caribbean - N. and S. America ☐
4. Asia - Far East ☐

D. Price-range:
Differently priced holiday packages (in £).
1. _____ 100 _____ ☐
2. 100 _____ 300 _____ ☐
3. 300 _____ 500 _____ ☐
4. > 500 _____ ☐

(Please rank appropriate box in B., C., and D. with 1st, 2nd, 3rd and 4th according to their order of importance for your company).

3. Holiday destination selection process

3.1. Listed below are six countries which you have been including in your holiday programmes. Please indicate opposite each country the number of holiday resort centres patronized, the number of hotels selected and the number of tourists who took holidays with your company during 1978. Also please indicate according to your own experience and on ranking order the three most popular holiday resorts in each of the six countries.

Countries	Resort* Centres	Hotels	Tourists	Major Resort-regions *		
				1st	2nd	3rd
1. Greece				1.	2.	3.
2. Italy				1.	2.	3.
3. Portugal				1.	2.	3.
4. Spain				1.	2.	3.
5. Tunisia				1.	2.	3.
6. Yugoslavia				1.	2.	3.

3.2 Which of the factors appearing in column A. contributed in the making of your decision? Please rank the factors a-e in order of importance (their order of importance is from 1st to 4th or 5th). Also, please, mark on the scales indicated in column B the different weight you attribute to criteria a-e in each of the six countries below. (weight should range from 1 - completely unsatisfactory - to 4 extremely satisfactory).

A. Factors considered

a. Quality of the tourist product and services offered (range and variety) ☐

b. Price competitiveness (best correspondence to the incomes of the holidaying population) ☐

c. Overall environmental characteristics of the country (climate, landscape, monuments, way of life) ☐

d. Experience of tried-tested resort already proved by your Co. and well established in the public mind (best correspondence to demands and tastes of holidaymakers) ☐

e. Any other you consider pertinent ☐

_____

_____

* For example Costa Blanca in Spain is considered a holiday resort region while Benidorm a holiday resort centre.

B. Destination countries

		1st	2nd	3rd	4th
1. Greece	a.				
	b.				
	c.				
	d.				
	e.				
2. Italy	a.				
	b.				
	c.				
	d.				
	e.				
3. Portugal	a.				
	b.				
	c.				
	d.				
	e.				
4. Spain	a.				
	b.				
	c.				
	d.				
	e.				
5. Tunisia	a.				
	b.				
	c.				
	d.				
	e.				
6. Yugoslavia	a.				
	b.				
	c.				
	d.				
	e.				

3.3. Which of the following categories (a-d in column A.) do you consider as the more important information channels in helping a customer decide on his holiday destination place? (Please mark the appropriate Box a-d with 1st, 2nd, 3rd, 4th according to their importance).
Do you receive sufficient information from the National Tourist Organizations (N.T.O.), other pertinent tourist agencies of a destination country or your own representatives there regarding the prevailing tourist conditions in each country? To what extent do your information levels pertaining to each country differ? Please indicate (in column B.) the different variations in information levels generated by and pertaining to each of the six countries below;

A. Information categories

a. Holiday experience itself: A customer's degree of satisfaction from previous holiday experience ☐

b. Brochures or other specialised and detailed piece of information on various travel destination alternatives ☐

c. Mass media in general: Newspapers, TV, radio. ☐

d. Personal communication: Contact with the travel agent, his or hers ability to persuade the holiday-maker. ☐

B. Destination countries

	1st	2nd	3rd	4th
1. Greece	___	___	___	___
2. Italy	___	___	___	___
3. Portugal	___	___	___	___
4. Spain	___	___	___	___
5. Tunisia	___	___	___	___
6. Yugoslavia	___	___	___	___

(Mark appropriate box from 1 = completely inefficient to 4 = perfect knowledge and extremely efficient information).

3.4. How often does a new destination enter into your programmes? Please specify below;

Which of the following do you consider when you undertake research and planning beforehand in selecting a country, region or resort as your new destination?

a. Cost of going into a new destination in conjunction with the price competitiveness of the new destination in the tourist market. ☐

b. Estimate of demand for various destinations and studies on U.K. overseas travellers' tastes, trends in their choice of destination, changes in popularity ("in" and "out" places). ☐

c. Policies of other competing tour operators, their booking levels, market diversification and/or specialization. ☐

d. Reports and information from your overseas staff on standards and amenities of accommodation and tourist services in the destination country. ☐

e. Policies and measures of governments of the prospective destination as well as the overall political and socioeconomic climate in the destination country. ☐

f. Any other item you consider important: _____ ☐

(Please mark the above items with 1st, 2nd, 3rd, 4th, 5th, according to their order of importance).

4. Preferred tourist resorts-regions

(The question of this paragraph should be completed particularly by those tour operators specializing or having extensive operations in Greece).

4.1 Which are the three most preferred, by your company's clients, resorts and/or regions of Greece? Please circle appropriate locations indicated on the map below and mark them according to their order of importance, e.g. (1), (2), (3).

MAP OF GREECE

Appendix B - Chapter IV

1. Spatial distribution of tourist preferences: Methodological procedure

1.1. Foreign tourist preferences

In order to assess the regional preferences pattern of foreign tourists in Greece the following procedure was applied step by step:

Step 1: The nights spent by each nationality group of foreign tourists (9 nationalities) in each of 25 subregions (see Table 1) of the country have been considered as representative (indicative) of tourist preferences.

Thus, Tables 2, 3, 4 present in a matrix form the recorded preference values of 9 nationalities for the years 1972, 1973, 1974.

Step 2: The original scores matrices Ma, Mb, Mc in the above tables have been transformed into matrices Mal, Mbl, Mcl by standardization (see Tables 5, 6, 7).

Each nationality represented by a column of preferences in the above matrices agrees to a greater or a lesser extent with all other nationalities in the group. The degree of agreement has been measured (Pearsons Product Moment Correlations) by calculating the correlation between all possible pairs of nationalities. Thus, correlation matrices Ma2, Mb2, Mc2 (see Table 8) present the agreement among nationalities regarding preferences.

Step 3: The particular weights of each nationality in relation to the average (common) preference has been calculated by performing principal component analysis upon matrices Ma2, Mb2, Mc2 -- or using Burt's simple factor analysis method (Child, 1970).

Since the loading of each variable (nationality) measures its agreement with the overall view of preference of the whole group of 9 nationalities, these loadings are used as weights to combine the original values (matrices Mal, Mbl, Mcl) into overall scores for each of the 25 subregions. Thus, matrices Ma3, Mb3, Mc3 (Tables 9, 10, 11) are the product of matrices

Ma2, Mb2, Mc2 and matrix ML (loadings matrix).

Step 4: The values of the weighted score matrix have been transformed to percentage values, relative to the biggest score in order to make later comparisons easier. These values are then plotted at the approximate geographical centre of the subregions they refer to and isolines are added. (See Map IV-8).

1.2. Domestic Tourists

The nights spent in hotels by Greek Nationals during the peak month of August (1973) has been considered as indicative of domestic tourist preferences. Peak month statistics, as against total annual or average monthly statistics, were considered to be more pertinent and representative of demand for vacationing since it was assumed that they comprise a stronger "vacationing" and a weaker "business-commercial" built in element. Thus, the nights spent analysis covered a number of settlements (176) of different size grouped as follows:

a. 52 urban centres - statistically defined as those settlements with over 10.000 population.

b. 40 settlements of 4,000 - 10,000 population.

c. 46 " of 1,000 - 4,000 "

d. 38 " below 1,000 population.

The generalized spatial pattern of preferences (see Map IV-9) is produced by plotting the nights spent values at the approximate geographical centre of the area they refer to, and then adding isolines in the same manner as previously.

Table 1

Tourist Regions

Athens proper
Attica - Nomos
Kammena Vourla - Malesina
Delphi - Itea
Chalkis - Eretria
Kyllini - Kaiafas
Pylos - Messini
Corinth - Patra
Hermione region
Methana - Poros
Makriyalos - Platamonas
Thessaloniki - Ag.Triada
Chalkidiki coastal areas
Kavala - Thasos
Pelion subregion
Sporades Isles
Corfu (island)
Ionian isles
Epirus coastal areas
Crete - northern coastal areas
Crete - all other areas
Rhodes
Dodecanese isles
Cyclades isles
Aegean isles (apart from 24, 23, 22, 21)

B. Nationalities - Countries

J1: Un.Kingdom, J2: Austria, J3: France, J4: W.Germany
J5: Switzerland, J6: Italy, J7: Holland, J8: Scandinavian Countries, J9: U.S.A.

Table 2

Preferences of foreign tourists by region and nationality (1972)

Matrix Ma

(in thousands of nights spent)

Regions	Nationalities								
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9
1	441·00	48·60	240·40	269·10	129·10	160·70	139·10	70·10	1120·50
2	491·20	21·00	73·60	258·20	25·80	44·90	53·20	18·20	350·70
3	16·50	·90	9·40	16·30	8·60	1·90	8·70	0·00	7·20
4	12·10	1·90	24·60	22·50	2·80	3·90	11·30	·70	45·30
5	2·00	·30	19·00	11·21	12·90	7·00	·60	0·00	2·00
6	1·00	·40	11·80	6·20	·40	2·90	·50	0·00	9·10
7	4·70	2·90	8·20	14·60	2·00	4·90	2·60	·60	7·20
8	15·30	5·20	131·50	36·00	6·80	39·20	12·70	1·60	21·70
9	7·10	4·20	9·10	32·20	1·30	7·60	2·10	·30	2·90
10	27·60	1·60	8·90	20·00	4·90	3·60	3·80	1·00	12·00
11	11·00	7·30	8·70	21·00	2·00	3·90	5·00	·60	9·50
12	30·10	19·30	53·00	66·20	7·50	37·80	18·70	12·10	85·21
13	38·90	27·20	15·60	65·70	3·60	8·10	4·20	3·50	4·70
14	17·20	8·10	11·80	24·40	4·10	11·20	4·40	1·00	12·90
15	1·40	·30	1·20	1·30	·30	·60	·70	·10	1·00
16	4·80	1·50	4·30	8·80	6·10	6·70	1·20	·30	5·40
17	674·70	21·30	93·40	120·20	11·60	71·40	21·00	2·80	77·10
18	10·60	·30	4·00	1·80	·40	3·70	·40	0·00	3·90
19	5·80	·90	6·70	4·30	1·10	6·90	1·80	·50	3·00
20	213·80	23·40	55·60	187·80	22·40	20·50	57·10	88·80	125·40
21	7·80	2·60	5·30	11·00	1·90	1·70	3·10	·70	8·10
22	307·70	69·50	58·20	510·20	145·20	49·30	341·40	1583·00	106·00
23	7·50	·80	4·30	14·10	2·80	2·20	3·60	6·50	9·10
24	45·40	8·50	25·00	31·60	8·40	11·70	6·80	3·40	37·50
25	6·10	1·50	4·90	8·50	5·80	4·60	2·40	·30	18·90

Table 3

Preferences of foreign tourists by region and Nationality (1973)

Matrix Mb

(in thousands of nights spent)

Regions	Nationalities								
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9
1	414·70	45·50	255·10	313·50	131·80	154·90	131·10	94·10	1054·70
2	514·00	26·30	117·40	335·70	28·00	51·00	67·10	20·90	412·10
3	2·60	2·20	16·10	18·10	6·60	1·80	11·70	0·30	3·30
4	15·60	2·00	30·70	25·80	3·60	4·20	14·70	·90	45·60
5	9·20	1·10	20·70	7·70	8·90	9·00	1·30	·40	5·40
6	·90	·60	10·00	28·60	·70	3·50	1·00	·20	12·40
7	6·20	4·20	11·30	20·50	4·20	4·40	3·30	1·10	7·30
8	21·30	7·90	95·40	53·70	8·60	35·70	14·00	2·00	20·30
9	6·30	3·40	29·10	29·10	1·50	8·40	3·40	·30	3·60
10	39·00	1·40	12·10	38·40	7·90	3·30	8·70	1·20	11·60
11	13·10	14·10	13·10	38·40	1·90	4·70	5·40	1·30	6·20
12	40·80	27·30	56·40	87·70	12·00	40·60	21·90	9·60	82·10
13	44·90	34·10	21·60	111·80	20·80	10·80	3·90	·50	3·60
14	14·10	7·10	10·10	29·10	3·20	7·70	3·80	1·40	11·50
15	1·40	·30	·90	2·00	·40	·40	·30	·10	1·00
16	10·70	2·20	7·00	18·40	10·00	8·10	1·40	·30	7·00
17	798·20	24·50	81·80	145·30	13·50	58·40	35·40	15·40	54·28
18	9·60	·60	4·00	2·80	·60	5·80	·70	·10	4·40
19	6·70	2·00	8·70	7·30	1·70	11·20	2·60	1·10	2·73
20	280·70	35·60	80·50	230·70	33·00	23·70	77·90	167·30	149·90
21	1·40	·40	1·20	3·40	·70	·10	·30	·30	1·60
22	249·40	97·60	53·10	544·00	164·70	42·00	684·20	1743·00	85·40
23	7·90	1·00	5·80	44·30	9·60	2·30	32·00	33·50	9·30
24	57·90	4·80	25·50	59·30	10·00	10·70	9·10	2·80	33·00
25	12·50	1·90	3·40	15·10	10·00	7·40	3·10	1·10	195·20

Table 4

Preferences of foreign tourists by region and nationality (1974)

Matrix Mc

(in thousands of nights spent)

Regions	Nationalities								
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9
1	250·70	36·10	178·30	230·60	83·50	86·70	101·40	77·60	624·40
2	214·90	13·10	77·80	179·70	18·50	21·80	69·80	14·00	244·00
3	6·00	2·90	5·40	8·40	5·20	2·20	7·50	·20	2·00
4	8·00	1·50	17·90	18·70	2·40	1·80	9·00	·50	25·50
5	2·90	·50	41·50	5·60	2·90	4·50	6·70	·00	1·20
6	·40	·70	18·90	27·10	1·60	1·80	·60	·10	6·30
7	3·50	2·20	7·00	13·30	2·60	2·40	1·90	·60	3·90
8	12·60	4·80	92·70	45·00	8·50	18·60	14·50	1·70	17·30
9	2·20	·80	7·70	7·90	3·30	2·20	·90	·20	1·00
10	22·80	1·10	4·90	14·80	5·20	2·00	4·40	1·50	6·90
11	6·70	6·70	5·70	20·00	7·30	1·70	3·50	·40	3·00
12	21·00	16·50	35·40	59·00	8·80	18·90	17·10	7·10	45·70
13	21·50	25·10	8·60	48·90	20·40	6·30	8·10	·70	3·20
14	12·79	6·20	6·60	24·20	3·80	3·70	3·00	1·20	8·30
15	1·80	·40	2·40	1·60	·30	·30	·40	·00	1·00
16	4·80	1·80	4·20	13·50	0·20	4·30	1·00	·30	3·50
17	600·80	16·50	82·10	119·80	17·60	41·10	46·50	13·90	35·90
18	6·40	·40	2·90	2·50	1·30	5·90	·50	·10	2·40
19	1·60	·90	5·10	4·30	0·90	5·50	1·30	·30	1·70
20	202·50	29·50	56·30	247·10	29·70	15·30	51·90	115·70	75·50
21	1·00	3·00	1·10	5·30	·50	·70	2·50	1·60	1·10
22	144·00	56·20	38·60	358·40	112·20	25·30	189·30	795·20	45·90
23	14·10	·70	3·80	36·10	4·90	1·50	18·40	38·10	3·80
24	22·10	4·10	15·40	38·90	8·90	5·60	5·20	1·90	17·80
25	6·40	1·80	4·20	10·80	9·60	1·80	2·20	·40	8·10

Table 5

Preferences of foreign tourists (1972)

Standardised Matrix Mal

Regions	Nationalities								
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9
1	65·31	69·80	100·00	52·62	88·89	100·00	40·67	4·43	100·00
2	72·76	29·91	30·27	50·48	17·60	27·87	15·48	1·15	16·50
3	2·30	·87	3·43	2·95	5·73	·81	2·43	0·00	·29
4	1·65	2·31	9·78	4·17	1·73	2·06	3·20	·04	2·09
5	·15	0·00	7·44	1·95	8·70	4·00	·05	0·00	·05
6	0·00	·14	4·43	·95	·07	1·44	·03	0·00	·38
7	·55	3·76	2·93	2·61	1·17	2·69	·65	·04	·29
8	2·12	7·08	54·47	6·82	4·55	24·11	3·61	·10	·93
9	·91	5·64	3·30	6·07	·69	4·37	·50	·02	·09
10	3·95	1·88	3·22	3·57	3·17	1·87	1·00	·06	·52
11	1·48	10·12	3·14	3·87	1·17	2·05	1·35	·04	·40
12	4·32	27·46	21·65	12·75	4·97	23·24	5·37	·78	3·98
13	5·63	38·87	6·02	12·65	2·28	4·88	1·11	·22	·17
14	2·40	11·27	4·43	4·54	2·62	6·52	1·17	·06	·56
15	·05	0·00	0·00	0·00	0·00	8·00	·09	·07	0·00
16	·56	1·73	1·30	1·47	4·00	3·81	·23	·02	·21
17	100·00	30·35	38·55	23·36	7·80	44·22	6·04	·18	3·59
18	1·42	0·00	1·17	·10	·07	1·94	0·00	0·00	·14
19	·71	·87	2·30	·53	·53	3·94	·41	·03	·09
20	31·59	33·38	22·74	36·65	15·23	12·43	16·63	5·61	5·87
21	1·01	3·32	1·71	1·91	1·10	·69	·79	·04	·33
22	45·52	100·00	23·83	109·00	100·00	38·42	100·00	100·00	4·95
23	·96	·72	1·30	2·52	1·73	1·80	·94	·41	·38
24	6·59	11·85	9·95	5·95	5·59	6·93	1·88	·21	1·72
25	·76	1·73	1·55	1·41	3·80	2·30	·59	·02	·84

Table 6

Preferences of foreign tourists (1973)

Standardized Matrix Mb1

Regions	Nationalities								
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9
1	51·90	46·45	700·00	57·47	79·98	100·00	34·07	5·13	100·03
2	64·35	26·72	45·83	61·57	16·80	32·88	17·40	7·87	39·01
3	21	1·95	5·98	33·03	3·11	7·10	2·97	·12	·22
4	1·84	1·75	11·72	4·39	1·95	2·65	3·75	·85	4·33
5	1·04	·82	7·79	1·05	5·17	5·75	·25	·02	·42
6	0·00	·31	3·58	4·91	·18	2·20	·18	·07	7·09
7	.66	4·01	4·09	3·41	2·31	2·78	·78	·07	·60
8	2.55	7·81	37·18	9·54	4·99	23·00	3·57	·12	7·83
9	·68	3·19	11·09	5·00	·67	5·35	·81	·01	·25
10	4.78	1·13	4·47	6·72	4·56	2·07	2·19	·07	1·01
11	1·53	14·18	4·80	6·72	·91	2·97	1·33	·08	·49
12	5·00	27·75	21·83	15·81	7·05	26·15	5·63	·55	7·70
13	5·52	34·74	8·14	20·25	12·42	6·91	·9[illegible]	·02	·25
14	1·65	6·99	3·62	5·00	1·70	4·91	·91	·08	1·00
15	·05	0·00	0·00	0·00	0·00	·19	0·00	0·00	0·00
16	1·23	1·95	2·40	3·03	5·84	5·17	·29	·01	·57
17	100·00	24·87	31·83	26·44	7·97	37·66	9·14	1·00	5·05
18	1·09	·31	1·22	·15	·12	3·68	·10	·01	·32
19	·73	1·75	3·07	·98	·79	7·17	·60	·07	·16
20	35·09	36·28	31·31	49.58	19·84	15·25	20·21	10·90	14·13
21	·05	·10	·12	·25	·18	0·00	0·00	·08	·06
22	31·17	100·00	20·54	100·00	100·00	27·07	100·00	100·00	8·01
23	·88	1·03	1·93	7·80	5·60	1·42	8·26	2·16	·79
24	7·15	4·62	9·68	10·57	5·84	6·85	2·29	·18	3·04
25	1·45	1·64	2·95	2·42	5·84	4·72	·89	·06	18·43

Table 7

Preferences of foreign tourists (1974)

Standardized Matrix Mcl

Regions	Nationalities								
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9
1	41•72	14•20	100•00	66•70	100•00	100•00	34•07	6•13	100•00
2	35•75	19•30	43•28	49•92	28•80	25•00	17•40	7•87	39•01
3	0•00	3•80	2•43	1•91	7•75	2•20	2•97	•12	•22
4	1•32	1•67	9•48	4•79	3•32	1•74	8•75	•05	4•33
5	•47	•15	22•80	1•12	4•11	4•85	•26	•02	•42
6	•03	•46	10•05	7•15	2•06	1•74	•18	•01	1•00
7	•57	2•74	3•33	3•28	3•64	2•13	•78	•07	•80
8	2•08	6•69	51•69	12•16	12•97	21•18	3•57	•72	1•83
9	•35	•61	3•72	1•74	4•75	2•28	•81	•01	•25
10	3•78	1•06	2•14	3•70	7•75	7•97	2•79	•07	1•01
11	1•10	9•57	2•60	5•15	1•58	7•62	1•33	•08	•49
12	3•48	24•47	19•35	16•09	13•45	21•53	5•63	•55	7•70
13	3•55	37•54	4•23	13•25	31•80	6•94	•94	•02	•25
14	2•10	0•81	3•10	6•33	5•54	3•94	•91	•08	1•00
15	•28	0•00	•73	0•00	0•00	0•00	0•00	0•00	0•00
16	•78	2•13	1•75	3•34	9•34	4•63	•29	•01	•57
17	100•00	24•47	45•71	33•13	27•37	47•22	9•14	1•00	5•05
18	1•05	0•00	1•02	•25	1•68	6•48	•10	•01	•32
19	•25	•76	2•26	•76	1•11	6•13	•60	•07	•16
20	33•69	44•22	31•15	68•81	46•52	17•33	20•21	10•90	14•13
21	•15	3•95	0•00	1•04	•32	•35	0•00	•08	•06
22	23•95	100•00	21•16	100•00	18•83	28•84	100•00	100•00	8•01
23	2•33	•46	1•52	9•67	7•28	7•59	8•25	2•16	•79
24	3•65	5•62	8•07	10•45	12•97	8•13	2•29	•18	3•04
25	1•05	2•13	1•75	2•58	14•72	1•85	•89	•06	18•43

Table 8

Preferences of foreign tourists

Correlation matrices Ma2, Mb2, Mc2 and Loadings (I:1972, II:1973, III:1974)

Regions — Nationalities

J I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9	(Loadings) (ML)
1	1·00	·65	·66	·69	·54	·75	·48	·27	·50	L1 = ·75
2	·65	1·00	·61	·94	·90	·70	·90	·75	·53	L2 = ·94
3	·66	·61	1·00	·55	·65	·95	·44	·13	·84	L3 = ·78
4	·69	·94	·55	1·00	·89	·63	·94	·80	·45	L4 = ·93
5	·54	·90	·65	·89	1·00	·74	·93	·76	·67	L5 = ·95
6	·75	·70	·93	·53	·74	1·00	·92	·21	·89	L6 = ·86
7	·48	·90	·44	·94	·93	·52	1·00	·93	·38	L7 = ·88
8	·27	·75	·13	·80	·76	·21	·93	1·00	·04	L8 = ·66
9	·50	·53	·84	·45	·67	·89	·38	·04	1·00	L9 = ·71
J II	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9	
1	1·00	·51	·66	·52	·43	·58	·40	·23	·51	L1 = ·69
2	·51	1·00	·51	·90	·89	·56	·92	·84	·40	L2 = ·89
3	·66	·51	1·00	·61	·63	·96	·40	·14	·50	L3 = ·79
4	·62	·90	·61	1·00	·86	·50	·88	·77	·51	L4 = ·92
5	·43	·89	·63	·86	1·00	·70	·92	·80	·62	L5 = ·94
6	·68	·56	·93	·60	·70	1·00	·45	·21	·90	L6 = ·83
7	·40	·92	·40	·88	·92	·46	1·00	·96	·34	L7 = ·86
8	·23	·84	·14	·77	·80	·21	·95	1·00	·08	L8 = ·69
9	·51	·40	·90	·51	·62	·90	·34	·08	1·00	L9 = ·72
J III	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9	
1	1·00	·46	·64	·59	·56	·89	·35	·19	·41	L1 = ·68
2	·46	1·00	·48	·92	·61	·00	·90	·82	·43	L2 = ·87
3	·64	·49	1·00	·63	·84	·93	·37	·13	·82	L3 = ·82
4	·59	·92	·63	1·00	·68	·87	·88	·75	·56	L4 = ·93
5	·56	·61	·84	·68	1·00	·89	·39	·14	·89	L5 = ·84
6	·69	·60	·93	·67	·89	1·00	·47	·22	·85	L6 = ·88
7	·35	·90	·37	·88	·39	·47	1·00	·96	·34	L7 = ·79
8	·19	·82	·13	·75	·14	·22	·95	1·00	·08	L8 = ·60
9	·41	·43	·82	·55	·89	·85	·34	·08	1·00	L9 = ·75

Table 9

Preferences of foreign tourists (1972)

Weighted score matrix Ma3

Regions	Nationalities									
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9	Σ
1	48·67	65·35	78·28	48·69	84·62	85·91	35·66	2·91	71·00	521·09
2	54·22	28·01	23·69	46·71	16·75	23·77	13·58	·75	11·71	219·20
3	1·71	·81	2·68	2·73	5·45	·70	2·13	0·00	·21	16·42
4	1·23	2·16	7·65	3·85	1·64	1·77	2·80	·03	1·48	22·61
5	·11	0·00	5·83	1·80	8·28	3·43	·06	0·00	·03	19·54
6	0·00	·14	3·47	·89	·07	1·23	·03	0·00	·27	6·10
7	·41	3·52	2·29	2·42	1·12	2·31	·57	·02	·21	12·87
8	1·58	6·63	42·64	6·31	4·34	20·71	3·16	·07	·69	86·13
9	·67	5·28	2·59	5·62	·66	3·76	·44	·01	·06	19·09
10	2·94	1·76	2·52	3·40	3·02	7·61	·87	·04	·37	16·53
11	1·11	9·47	2·45	3·58	1·12	1·77	1·18	·02	·28	20·98
12	3·22	25·71	16·95	11·80	4·73	19·96	4·70	·50	2·82	89·79
13	4·19	36·40	4·71	11·71	2·17	4·02	·98	·15	12	64·45
14	1·79	10·55	3·47	4·20	2·50	5·69	1·83	·04	·40	30·47
15	·04	0·00	0·00	0·00	0·00	0·00	·08	·00	0·00	0·12
16	·42	1·62	1·01	1·36	3·81	3·27	·21	·01	·15	11·86
17	74·52	28·41	30·17	21·62	7·42	37·99	5·30	·12	2·55	208·10
18	1·06	0·00	·92	·09	·07	1·66	0·00	0·00	·10	3·89
19	·53	·81	1·80	·58	·53	3·38	·36	·02	·07	8·08
20	23·54	31·25	17·80	33·91	14·52	10·68	14·58	3·68	4·17	154·13
21	·75	3·11	1·34	1·75	1·05	·59	·69	·03	·24	9·55
22	33·92	93·63	18·65	92·32	95·20	26·13	87·67	65·68	3·52	516·72
23	·72	·68	1·01	2·33	1·64	·86	·82	·27	·27	8·6
24	4·91	11·09	7·79	5·51	5·32	5·96	1·65	·14	1·22	43·59
25	·56	1·62	1·21	1·31	3·61	2·15	·51	·01	·60	11·58

Table 10

Preferences of foreign tourists (1973)

Weighted score matrix Mb3

Regions	Nationalities									
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9	Σ
1	35·66	41·47	79·35	52·98	74,86	82·84	29·22	4·22	71·79	472·39
2	44.22	23·86	36·37	56·75	15·73	27·24	14·92	5·42	28·01	252·52
3	·15	1·74	4.75	30.44	3·53	·91	2·55	·09	·15	44·31
4	1·27	1·56	9·30	4·05	1·82	2·19	3·22	·04	3·11	26·56
5	·72	·73	6·18	·97	4·84	4·75	·22	·01	·30	18·72
6	0·00	·28	2·84	4·52	·17	1·82	·16	·00	·78	10·57
7	·46	3·58	3·25	3·15	2·17	2·30	·67	·04	·43	16·05
8	1·76	6·97	29·50	8·79	4·67	19·05	3·06	·09	1·31	75
9	·47	2·84	8·80	4·61	·63	4·44	·69	·01	·18	22·67
10	3·29	1·01	3·50	6·19	4·27	1·71	1·88	·05	·72	22·61
11	1·05	12·66	3·81	6·19	·85	2·45	1·14	·05	·35	28·55
12	3·44	24·77	17·33	14·57	6·61	21·57	4·82	·38	5·53	99·02
13	3·79	31·01	6·45	18·57	11·62	5·73	·80	·01	·78	79·56
14	1·14	6·24	2·67	4·61	1·60	4·07	·78	·05	·72	22·08
15	·04	0·00	0·00	0·00	0·00	·15	0·00	0·00	0·00	0·19
16	·84	1·74	1·90	2·79	5·47	4·28	·25	·01	·41	17·75
17	68·71	22·21	25·25	24·37	7·46	31·20	7·84	·69	3·62	191·35
18	·75	·28	·97	·14	·11	3·05	·09	·00	·23	5·62
19	·50	1·56	2·44	·90	·74	5·94	·51	·04	·12	12·75
20	24·11	32·39	24·85	45·70	18·57	12·53	17·33	7·49	10·14	193·11
21	·83	·09	·09	·24	·17	0·00	0·00	·05	·04	0·71
22	21·41	89·28	16·30	92·18	93·61	22·42	85·75	68.79	5·75	495·49
23	·60	·92	1·53	7·19	5·24	1·18	7·08	1·49	·57	25·80
24	4·91	4·13	7·58	9·74	5·47	5·67	1·97	·12	2·13	41.82
25	1·00	1·47	2·34	2·23	5·47	3·91	·75	·04	13·23	30.44

Table 11

Preferences of foreign tourists (1974)

Weighted score matrix Mc3

Regions	Nationalities									
I	J=1	J=2	J=3	J=4	J=5	J=6	J=7	J=8	J=9	Σ
1	28.45	47·25	81·60	62·14	83·77	88·38	26·94	3·67	75·22	497·43
2	24.39	16·81	35·32	46·50	24.12	22·09	13·76	4·71	29·35	217·05
3	0·00	3·31	1·98	1·78	6·50	1·94	2·35	·07	·16	18·03
4	·90	1·46	7·74	4·46	2·78	1·53	2·97	·03	3·26	25·13
5	·32	·13	18·60	1·04	3·45	4·30	·21	·01	·31	28·37
6	·03	·40	8·20	6·55	1·72	1·53	·14	·00	·81	19·39
7	·39	2·38	2·72	3·05	3·05	2·15	·62	·04	·45	14·85
8	1·42	5·82	42·18	11·33	10·87	18·72	2·82	·07	1·38	94·61
9	·24	·53	3·04	1·52	3·98	1·94	·64	·01	·19	12·09
10	2·58	·93	1·75	3·45	6·66	1·74	1·73	·04	·75	19·47
11	·75	8·34	2·12	4·80	1·33	1·43	1·05	·05	·37	20·24
12	2·37	21·31	15·79	14·99	11·27	19·03	4·45	·33	5·79	95·33
13	2·43	32·69	3·45	12·35	26·64	6·14	·74	·01	·19	84·64
14	1·43	7·68	2·53	5·90	4·64	3·48	·72	·05	·75	27·18
15	·19	0·00	·60	0·00	0·00	0·00	0·00	0·00	0·00	0·79
16	·53	1·85	1·43	3·11	7·82	4·09	·23	·01	·43	19·50
17	68·22	21·31	37·30	30·86	22·93	41·73	7·23	·60	3·80	233·98
18	·72	0·00	·83	·23	1·33	5·73	·08	·00	·24	9·16
19	·17	·66	1·84	·70	·93	5·42	·47	·04	·12	10·35
20	22·99	38·52	25·42	64·10	38·97	15·34	15·98	6·57	18·63	238·47
21	·10	3·44	0·00	·97	·27	·31	0·00	·05	·04	5·18
22	16·34	87·10	17·27	93·16	15·77	25·57	79·07	59·83	6·02	400·13
23	1·59	·40	1·24	9·01	6·10	1·23	6·53	1·29	·59	27·98
24	2·50	4·90	6·58	9·74	10·87	5·42	1·81	·11	2·28	44·21
25	·72	1·85	1·43	2·40	12·33	1·64	·70	·04	13·86	34·96

Appendix C - Chapter V

Table 1

Tourist Resources

(Index X)

Spatial* Units	Length of Coast	Cultural Resources	Natural Resources	Index X
	Δ_1	Δ_2	Δ_3	Δ_4
1	5,6	5,5	7,5	6.2
2	15.8	10.0	11.5	12.4
3	8.8	8.0	8.5	8.4
4	12.9	8.5	8.5	10.0
5	18.3	41.0	29,0	29.4
6	4.9	6,0	9,0	6,7
7	9.4	8.5	10.0	9,3
8	11,5	3,0	5.5	6.7
9	5.8	3.5	5.5	4,9
10	7,0	6.0	5.0	6,0
Total	100.0	100,0	100.0	100,0

Δ_1 = Sandy beaches

Δ_2 = Archaelogical sites, monuments, traditional settlements

Δ_3 = Forests, spas, caves, significant landscapes

$$\Delta_4 = \frac{\Delta_1 + \Delta_2 + \Delta_3}{3}$$

* See Map V-1, Chapter V.

Table 2

Indices of Tourist Accessibility, Resources and Potential

Prefectures (Nomi)	(1)	(2)	(3)	(4)	(5)	(6)
	D_j^1	D_j^2	A_j^j	A_j^x	Π_j^1	Π_j^2
Attikis	4.96	13.29	22.63	2.54	914.65	525.80
Etoloakarnanias	1.41	2.44	1.66	1.00	259.73	96.53
Biotias	0.29	1.00	1.26	7.44	53.42	39.56
Evias	1.17	4.14	2.82	6.84	215.52	163.79
Evritanias	0.12	1.00	0.51	1.72	22.10	39.56
Fthiotidas	0.90	2.91	2.98	1.54	165.78	115.13
Phokidas	0.58	1.00	1.31	0.55	107.02	39.56
Argolidas	0.45	1.00	1.60	9.04	82.89	39.56
Arkadias	0.17	1.00	1.43	4.40	31.31	39.56
Achaias	1.30	4.22	2.19	1.49	239.46	166.96
Ilias	0.69	3.76	1.86	1.50	127.10	148.76
Korinthos	0.26	1.00	1.60	6.96	47.89	39.56
Lakonias	0.28	1.00	2.89	1.64	51.58	39.56
Messinias	0.46	2.59	1.85	2.00	84.73	102.47
Zakynthou	0.73	2.59	0.53	1.39	134.47	102.47
Kerkyras	2.32	8.53	2.91	0.60	427.35	337.48
Kephallinias	0.81	4.74	0.92	1.20	149.20	187.53
Leukadas	0.30	1.00	0.42	1.29	55.26	39.56
Artas	0.20	1.00	0.67	1.33	36.84	39.56
Thesprotias	0.71	5.68	0.60	1.81	130.78	224.72
Ioanninon	0.51	3.22	1.81	0.84	93.94	127.39
Prevezas	0.90	2.59	0.72	1.03	165.78	102.47
Karditsas	0.15	1.00	0.51	1.32	27.63	39.56
Larisas	0.42	2.44	1.48	1.61	77.37	96.53
Magnesias	1.08	4.67	2.86	2.43	198.94	184.76
Trikalon	0.18	1.00	0.96	1.23	33.16	39.56
Grevenon	0.13	1.00	1.66	1.04	23.95	39.56
Dramas	0.15	1.00	0.66	1.10	276.31	39.56
Imathias	0.21	1.00	0.57	1.89	38.68	39.56

Table 2 (contin.)

Nomi	(1)	(2)	(3)	(4)	(5)	(6)
Thessalonikis	2.39	6.89	4.82	0.85	440.25	272.59
Kavalas	1.09	3.97	1.80	0.72	200.78	157.07
Kastorias	0.09	1.00	0.44	1.21	16.58	39.56
Kilkis	0.21	1.00	0.24	1.69	33.68	39.56
Kozanis	0.47	2.59	0.52	1.04	86.58	102.47
Pellas	0.17	1.00	0.46	1.79	31.31	39.56
Pierias	0.23	1.00	1.76	0.86	42.37	39.56
Serron	0.21	1.00	0.93	1.88	38.68	39.56
Florinas	0.13	1.00	0.86	0.47	23.95	39.56
Chalkidikis	0.36	1.00	2.07	4.82	66.31	39.56
Evrou	0.79	2.25	1.38	1.06	145.52	89.02
Xanthis	0.17	1.00	0.56	1.17	31.31	39.56
Rodopis	0.15	1.00	1.06	0.97	27.63	39.56
Dodecanissou	2.61	7.41	5.01	2.31	480.77	293.16
Kykladon	0.89	6.46	4.45	9.76	163.94	255.58
Lesvou	0.97	5.32	1.57	0.90	178.68	210.48
Samou	0.78	4.34	0.83	3.45	143.68	171.71
Chiou	0.84	4.61	0.90	1.20	154.73	189.39
Irakliou	2.50	7.60	2.05	1.36	460.51	300.68
Lasithiou	0.29	2.26	1.74	2.05	53.42	89.41
Rethymnou	0.12	1.00	0.97	1.91	22.10	39.56
Chanion	1.20	4.82	1.78	0.97	221.04	190.70

(1) D_j^1 : Total accessibility - Air, sea and road transport network: Traffic flows for each nomos.

(2) D_j^2 : Partial accessibility - Air and sea transport network: Internal frequency of schedules and international connections

(3) A_j^x : Tourist resources of nomos i: Average figures for each nomos.

(4) A_j^x : Tourist resources of adjacent to i regions: Average figures.

(5) Π_j^i : Tourist potential - Case A: Index D_j^i is employed.

(6) Π_j^2 : Tourist potential - Case B: " D_j^2 " "

Table 3

Tourist Enterprises by Category and Nomos

(Number of Employees and Enterprises* in 1979)

Prefectures (Nomi)	Categories of Tourist Enterprises (1) General Tourism	(2) Transport	(3) Hotel	(4) Diversified	(5) Total
Attikis	1810 (138)	164 (14)	19702 (295)	138 (7)	21814 (454)
Etoloakarnanias	--	--	--	--	--
Biotias	--	--	--	--	--
Evias	--	--	160 (7)	--	
Evritanias	--	--	--	--	--
Fthiotidas	--	--	15 (1)	--	15 (1)
Phokidas	--	--	55 (1)	--	55 (1)
Argolidas	--	--	299 (8)	--	299 (8)
Arkadias	--	--	27 (2)	--	27 (2)
Achaias	--	--	277 (7)	--	277 (7)
Ilias	--	--	270 (7)	--	270 (7)
Korinthos	--	--	170 (4)	--	170 (4)
Lakonias	--	--	64 (4)	--	64 (4)
Messinias	--	--	42 (2)	--	42 (2)
Zakynthou	--	--	--	--	--
Kerkyras	35 (5)	--	2200 (40)	--	2235 (45)
Kephallinias	--	--	--	--	--
Leukadas	--	--	--	--	--
Artas	--	--	11 (1)	--	11 (1)
Thesprotias	--	--	--	--	--
Ioanninon	4 (1)	--	60 (3)	--	64 (4)
Prevezas	--	--	6 (1)	--	6 (1)
Karditsas	--	--	4 (1)	--	4 (1)
Larisas	--	--	150 (8)	--	150 (8)
Magnesias	--	--	197 (5)	--	197 (5)
Trikalon	--	--	16 (1)	--	16 (1)
Grevenon	--	--	--	--	--
Dramas	--	--	--	--	--
Imathias	--	--	--	--	--

* In parenthesis

Table 3 (contin.)

Prefectures Nomi	(1)	(2)	(3)	(4)	(5)
Thessalonikis	26 (4)	8 (2)	2231 (32)	—	2265 (38)
Kavalas	—	—	75 (3)	—	75 (3)
Kastorias	—	—	—	—	—
Kilkis	—	—	—	—	—
Kozanis	—	—	8 (1)	—	8 (1)
Pellas	—	—	—	—	—
Pierias	—	—	178 (5)	—	178 (5)
Serron	—	—	—	—	—
Florinas	—	—	15 (4)	—	15 (4)
Chalkidikis	—	—	—	—	—
Evrou	—	—	20 (2)	—	20 (2)
Xanthis	—	—	8 (1)	—	8 (1)
Rodopis	—	—	20 (1)	—	20 (1)
Dodecanissou	125 (8)	—	3802 (75)	—	3927 (83)
Kykladon	—	—	112 (3)	—	112 (3)
Lesvou	18 (1)	—	44 (2)	—	62 (3)
Samou	—	—	37 (3)	—	37 (3)
Chiou	—	—	—	—	—
Irakliou	107 (4)	—	2112 (35)	—	2219 (39)
Lasithiou	—	—	1180 (31)	—	1180 (31)
Rethymnou	—	—	358 (5)	—	358 (5)
Chanion	—	—	130 (7)	—	130 (7)
TOTAL	2125(161)	172 (16)	34055 (616)	138 (7)	36490 (794)

SOURCE: Financial Directory of Greek Companies.
Publ. ICAP Hellas SA.

Table 4

Hotel Building Permits by Nomos and Seat of Tourist Enterprise
(Number of beds, 1975-1978)

Prefectures (Nomi)	Location - Seat of Tourist Enterprise (1) within nomos	(2) nomos of Attica	(3) outside (1) or (2)
Attikis	--	8742	48
Etoloakarnanias	245	494	--
Biotias	--	130	--
Evias	1092	810	--
Evritanias	101	--	--
Fthiotidas	193	462	9
Phokidas	464	340	--
Argolidas	620	300	--
Arkadias	--	117	--
Achaias	929	632	--
Ilias	928	210	--
Korinthos	334	762	--
Lakonias	337	519	140
Messinias	223	267	--
Zakynthou	1333	1089	69
Kerkyras	4005	2133	219
Kephallinias	435	384	17
Leukadas	229	699	138
Artas	114	135	--
Thesprotias	191	16	35
Ioanninon	235	88	--
Prevezas	356	30	47
Karditsas	68	60	--
Larisas	139	--	--
Magnesias	807	313	99
Trikalon	421	--	--
Grevenon	119	--	--
Dramas	--	--	--
Imathias	745	--	--

Table 4 (contin.)

Prefectures (Nomi)	(1)	(2)	(3)
Thessalonikis	115	--	--
Kavalas	123	195	22
Kastorias	360	93	--
Kilkis	24	--	--
Kozanis	246	--	--
Pellas	117	84	--
Pierias	774	37	36
Serron	--	--	--
Florinas	139	--	160
Chalkidikis	311	--	862
Evrou	716	116	--
Xanthis	535	--	--
Rodopis	--	--	--
Dodecanissou	5669	3487	235
Kykladon	1276	2122	--
Lesvou	621	1460	--
Samou	578	942	--
Chiou	74	34	--
Irakliou	5685	1647	--
Lasithiou	3967	1671	565
Rethymnou	969	335	88
Chanion	1445	945	118
Total	38407	31900	2907

Source: Greek NTO

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