Bicycle Racing and Recreation:

Sport, Technology and Modernity,

1867-1903

Part One

[Chapters 1 to 7]

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Abstract

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The thesis explores the early history of bicycle racing and the related activity of recreational cycling, in particular the evolving symbiotic relationships, material and discursive, between participants and the makers of the sport's specialized tool - the bicycle itself. The dissertation presents an historical, social-constructionist account of the emergence of cycling as both a sport and a recreation between 1867 and 1903, focusing on Britain, but with comparative reference to France and the United States.

During its early evolution, the changing design of the bicycle was influenced by considerations of sport and speed, as well as those of comfort, practicality and utility. The thesis assesses the relative causal weight of these social and technical factors on evolving design, in the light of the contemporary debates as to how the bicycle could best harness the capacities of the human body to achieve efficiency, speed, endurance and comfort. Cycling is seen as having had three differing, but closely related, social modes - racing, recreation and utility – each of which made distinct demands and had different impacts on the development of the machine itself.

The thesis employs the methods of social and cultural history, combined with a theoretical framework that treats the bicycle as a technological artifact within a social constructionist approach to the understanding of human artifacts. The dissertation explores the social and institutional organization of cycling and the wider cultural, economic and technological contexts of the sport. Within a broadly chronological frame, it tackles issues of class, nationality, amateurism and professionalism, industry and commerce, the press, human-powered speed, and the physical capacities of the body, and relates them to the cultural transformation called modernity.

The 19th century 'cycling industrial complex' presents a well-developed, early historical example of a modern sport used to market products to consumers. Designers, manufacturers, advertising and marketing personnel and the cycling press were engaged in a new style of commercial activity dedicated to 'the art and pastime' of cycling.[1] Outside the industry, the thousands of consumers of bicycles – racers, recreational riders, and utility riders – were themselves agents in the technological development and social history of bicycle racing and recreation.

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[1] This phrase is taken from the title of a book by Mecredy and Stoney, *The Art and Pastime of Cycling* (2nd Edition, 1890).

Copyright declaration

This thesis is the result of the author's original research. It has been composed by the author and has not been previously submitted for examination which has led to the award of a degree.

Signed

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Without John Weiss' willingness to allow me to borrow and copy material from his collection of periodicals and illustrations my text would have been much less rich. John also spent many hours helping me with the scanning and printing out of my illustrations, which were of uneven quality and collected from many different sources. Neil van der Plas also helped me with scanning and computer-related issues.

Above all, my thanks to Prof. J.A. Mangan, my supervisor at Strathclyde University, who believed in the project from the beginning, recognized the need for a history of early bicycle racing in the wider context of the history of sport in the 19th century and guided me through the research planning and the structuring of the material. I am grateful to him for his constant advice, criticism, encouragement and attention to detail over the last few years. Since his retirement, his support has continued. My thanks, too, to Prof. Humes and Dr. Christie, who helped me administratively, and Prof. John Halliday, who supervised me during the closing stages of submission of this dissertation (all of the Department of Educational Studies, Strathclyde University).

Glossary of technical terms

These definitions are included to ensure that the precise meaning of these frequently used, technical, semi-technical or problematic terms is understood correctly: -

- **bicycle**: in use by 1869 to distinguish the new two-wheeled "velocipede" from other three and four-wheeled velocipedes; the term appears to have entered firmly into general currency by 1869, including the word "bicycling", which was soon abbreviated to "cycling". A public notice from the Borough of Cambridge, dated 3 Dec. 1869, for example, had a headline which read "Caution to Persons using Bicycles and other Carriages" (source – City of Cambridge Public Library).
- **bicyclette**: the word (seemingly French) in fact appears to have come into use to describe a small-wheeled 'safety' bicycle made in England by Lawson in the late 1870s. It appears to have passed into French usage when the various styles of 'safety' bicycle were exported to France from England, and thus to have become the generic French term for the 'safety' bicycle.
- **champion**: loosely used to define a well-known, leading cyclist, usually one who made challenges to and accepted challenges from other "champions".
- **championship**: usually a match between leading "champions", indicating a race at a high level, but not initially with the modern meaning indicating an annual test of supremacy.
- **cycle**: used in a general sense to refer to any two or three-wheeled vehicle propelled by human power.
- **"geared-up ordinary" bicycle**: used to describe those bicycles current in the period between about 1882 and about 1890 which attempted to reduce the size of the front, driving wheel of the "ordinary" (i.e., high-wheeled) bicycle, and thus lessen its danger, by "gearing up" the relationship between pedal rotation and rotation of the front wheel.
- **gearing up and gearing down**: the "gear" of any kind of bicycle is an expression of the relationship between pedalling rate and the rotation of the driving wheel, whether back or front wheel. Thus, to "gear up" is to increase the number of rotations of the driving wheel relative to pedal rate or rotation, and to "gear down" is to decrease the number of rotations of the driving wheel. Obviously, the need for "gearing up" or "gearing down" is also related to the gradient upon which the cyclist is riding.

- **handicap**: a race in which weak or less experienced competitors are given an advantage of time or distance over the strongest. A technique frequently used in cycling in short distance sprint races to create fast, exciting racing.
- **"high-wheel" bicycle**: the term used fairly recently, and mostly in the United States, to describe the large front wheeled bicycle in general use between about 1875 and 1890, known in customary use in Britain as the "penny-farthing" and also as the "ordinary" bicycle.
- **multi-cycles**: bicycles for two, three, four or more riders, mostly used for "pacing" single riders.
- **"ordinary" bicycle**: the term used from the mid-to-late 1880s to describe the high-wheel bicycle, to distinguish the then currently, generally used or "ordinary" bicycle from the newly-introduced "geared-up ordinaries" and "safety" bicycles being introduced from the mid-1880s onwards.
- **paced**: a cyclist who is "paced" receives assistance from other riders who ride in front of him to help him overcome wind resistance, the biggest single impediment to forward movement. "Human pace" is when the rider is helped by other riders; a "pacing-machine" is driven by an electric, steam or gasoline engine.
- **path**: commonly used to refer to a track where bicycle racing took place.
- **"safety" bicycle**: used in general terms to describe the rear-driven bicycles with wheels of the same size, introduced from the mid-1880s onwards, which were safer than the high wheel bicycle because they were more stable and could not pitch forwards.
- **tandem, triplet or quadruplet**: a tandem bicycle has two riders seated one behind the other, a triplet three riders and a quadruplet four riders. There were also quintuplets and sextuplets. Most "multi-cycles" were used for "pacing" single riders.
- **tricycle**: describes any cycle with three wheels.
- **velocipede**: a term used frequently as early as 1830 and into the 1860s and early 1870s to refer to any two, three or four-wheeled human-powered vehicle. In the late 1860s and very early 1870s, used especially to refer to the earliest front-wheel-driven bicycles, and used more or less interchangeably with the word "bicycle" in that period. By the mid-1870s, the word had fallen from general use.
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Chapter One

Introduction

1. The themes and goals of the dissertation

a. Bicycle racing and recreation as the product of an industrialized sport culture

As a study of one specific sport, this dissertation will explore the early years of competitive and recreational cycling as a 'codified, institutionalized and highly commercialized sporting culture',[1] while at the same time outlining and defining the wider historical, social, industrial and cultural context within which the sport of cycling emerged and developed. This, in the broadest perspective, is its intention.

The historical analysis which is attempted here involves and encompasses a variety of approaches or sub-fields within cultural studies, the history of technology and the history of sport, although within the wider field of social history one single method or approach has not been proposed or used. I discuss my approach and methodological issues further in Section 3 of this Introduction. The most pressing goal which has guided the research has been to present a coherent, well-documented account of what actually happened in an empirical sense within the sport and industry in the period, and to examine the main institutional, economic and social factors which impinged upon them. It is not intended to be primarily a sociological study, and its main purpose has not been quantification in a social sciences sense. This is the first comprehensive, analytical, historical account in English of the early development of the sport of cycling. The primary source material, particularly the contemporary press, was crucial in providing this essential material.

Set in a context of sporting expansion, social change and intense technological development, the sport of cycling has evolved over nearly 140 years. Competitive bicycle racing takes its place among the oldest, most popular and most celebrated modern international sports. It joins athletics (track and field), cricket, golf, baseball, soccer, rugby and rowing as one of many significant modern sports which emerged in the second half of the 19th century. These newly developing sports were the product of a diverse range of social, economic and technological activity and change which have been the subject of recent research and inquiry in the emergent field of the history of sport.

Today, cycling is popular worldwide, a competitive sport and an athletic recreation with a deep and complex history. Unoffical 'world championships' in cycling first took place,

between England and France, in the early 1870s.[2] Cycling's earliest national governing bodies, the Bicycle Union (for racing) and the Bicycle Touring Club (for touring), were founded in England in 1878, the League of American Wheelmen followed in the United States in 1880, and France's Union Vélocipédique in 1881. Official World Championships were first held in 1893, promoted by the newly constituted International Cyclists' Association, and cycling was among the small number of sports included in the first modern Olympic Games in 1896.[3] The Tour de France, founded in 1903 and held annually ever since except during the two World Wars, was not organized until the sport was nearly forty years old.

The factory system and industrialism

Yet bicycle racing has its origins even earlier, contemporaneous with the creation of the modern bicycle in Paris in the late 1860s, and its subsequent rapid diffusion into Britain and America.[4] An 1869 illustration of the 'forge' and the 'paint shop' of the Compagnie Parisienne in Paris indicates that the production of the earliest bicycles was characterized by a technologically advanced level of industrial activity, on a much larger scale than any previous velocipede manufacturing (see Fig. 1. 1). Aspects of traditional blacksmith and carriage-making technology were diversified in the production of the earliest bicycles; the tool which would be essential for the new sport was mass-produced and marketed. The sport could be widely disseminated only through an industrial-scale manufacturing process. Cycling was the product of an industrial culture, an early and conspicuous example of the new sports which evolved within that culture. It can be argued that cycling was the prototypical industrial sport. 'As a general rule', writes Neil Tranter, 'the more industrial and commercial the economy, the greater the extent of organized sport and the earlier its inception. It was no accident that Britain, the first country to industrialize, was also the first country to introduce a codified, institutionalized and highly commercialized sporting culture'.[5]

Speed

'The bicycle was inseparable from the idea of speed', asserts Kobayashi in his study of the early bicycle industry, which documents racing in France from the end of 1867.[6] The quest for greater speed is a theme which runs through the dissertation and is addressed in particular in Chapters 6 and 10. From the beginning of 1869, there is plentiful evidence of bicycle

racing on road and track in Britain and America. By mid-1869, the bicycle had penetrated as far as Germany, California and Australia. The appearance of the first two-wheeled velocipedes on the roads of Europe and America immediately invited the comparison of their speed with that of a horse or horse-and-carriage over known routes or specific distances on the road (where the railway ran, it was, of course, faster). In England, in 1868-69, the earliest bicycles were introduced from France into a London gymnastic and sport environment where physical fitness and athletic strength were the concerns of mostly middle- and upper-middle-class men, and bicycles were soon being manufactured in Coventry, Wolverhampton, Birmingham and London. But the velocipede was introduced at the same time into the mainly working-class entertainment culture of the music-halls, circuses and novelty shows, where both male and a few female professionals performed. The juxtaposition of upper-middle class, formal competitive sport and professional popular entertainment was characteristic of the early days of the bicycle, and was continued into the 'boom' of the 1890s, when track racing combined the excitement of athletic speed with the demonstrative show-business of the arena (see Chapter 10). From its earliest days, the industrial and productive capacity necessary for the manufacture of bicycles provided the material basis of the sport.

The question of class – amateur versus professional

The bicycle first came into popularity in England shortly after former athletes from Oxford and Cambridge Universities founded the Amateur Athletic Club (1866). In 1867, this club added a membership clause excluding anyone who was 'by trade or employment a mechanic, artisan or labourer', thereby giving one of the earliest working definitions of amateurism. Cycling found enthusiasts not only among the socially privileged student athletes of Oxford and Cambridge in the early 1870s (see Chapter 3), but also among a proletarian 'professional' class of riders. The formation of amateur cycling clubs proceeded at a brisk pace in the 1870s and 1880s, but early cycling continued its strong connection with popular recreation and profit-making entertainment, that is, with *professional* sport. In this sense, cycling attracted different kinds of people. Lowerson has identified cycling as 'by far the most widespread "growing pleasure for the middle classes", relying on a club core with a wide periphery of individual pursuits and shifting over the whole pastime-athletic sport gamut'. He argues that cycling 'resists historians' attempts to identify class-specific attributes', and that cycling was by 1900 'more distinctly pan-class as a participatory

recreation than any other late Victorian boom sport'.[7] This dissertation attempts, among its other objectives, to elucidate and explore these class dimensions of the sport. Lowerson is not arguing here that cycling was not affected by class considerations, but rather that cycling was to a certain extent, and at different moments, popular among all classes and social groups, especially in the maximum expansion of the 'boom' years of the 1890s.

Participation

The task of analysing and understanding the social and historical character of cycling in the chosen period is complicated by the difficulty of assessing the actual numbers of participating cyclists and the fact of their membership of or participation in (or, indeed, their choice to stay outside of) formally organized cycling clubs or national organizations. In this respect, quantification does become a significant issue.

a. First, questions about the relative scale of cycling, and the numbers of people involved at different times in the period under examination abound, and are addressed here in various places. As the machine developed and changed, how many people rode bicycles, and how many people rode competitively on bicycles? For the purposes of analysis, the total number of cyclists can be divided into two large groups, one group consisting of the many club members whose club affiliations, geographical location and social background can be defined with a certain amount of accuracy, and the other group a large body of recreational enthusiasts (often referred to in contemporary discussion as the 'unattached') who participated in cycling, were discussed in the press, but who were not members of a club. Quantifying these two groups is problematic, particularly as the numbers of the 'unattached' increased in the 1890s. The problem of the 'unattached' is further discussed in Section 1.b. below.

b. Second, since the competitive core of the sport represented only a small proportion of the total numbers of athletically-inclined cyclists, those who rode seriously either in a club or as 'unattached' recreational riders, outside of formal competition, also need to be recognized in a wider sense as having participated in sport. The complications inherent in this shifting division are further discussed in Section 1.b. (The three social and technological modes of cycling; racing, recreation and utility) of this Introduction and also in Chapter 9.

c. Third, in spite of the large amount of historical material which exists on cycling clubs in Britain, France and the United States, and the increasing critical attention given recently to institutional aspects of 19th century sport, no systematic study of the role and activities of the cycling clubs which attracted athletic and recreational cyclists, and were instrumental in producing elite racing cyclists in the 19th century, has yet been carried out. The first serious study of French cycling clubs has appeared only recently.[8] In this respect, research into cycling club formation and the nature of club life in Britain and America is at a rudimentary level, and discussion here should be seen as provisional and posing almost as many suggestions and unanswered questions as it does firm conclusions. Even though more precise quantification still remains to be carried out, the broad outlines of the role and importance of cycling clubs in the social structure of the sport, and their relationship to formal and informal competition, does emerge clearly. The dissertation does not concentrate heavily on club life, but it recognizes its importance. The urban cycling clubs, and the larger national federations and governing bodies, were visible and significant agents of social cohesion and organization within the sport, and produced athletes of all levels, from champions to weekend riders. They were also highly politicized institutions. These issues are discussed in greater detail in Chapter 9.

As well as examining these important questions (as outlined above) of the factory system and industrialism, speed, questions of institutional organization and class and social standing, and levels of participation, the dissertation builds upon the existing literature which has explored the history and significance of the sport, in an attempt to give a wide critical, analytical and comparative perspective on the cultural and technological aspects of the first forty years of bicycle racing in Europe and America. A historiographical and critical review of the literature of cycling is given in Section 2, below, and the approach and methodology is further discussed in Section 3. Both of these sections broaden and deepen the discussion begun here.

National and international dimensions

Bicycle racing was first practiced in France, the United States and England in the period from 1869 to about 1875, and as its influence radiated from its most developed state in those three key countries it became predominantly a British, French, German, Italian, Belgian, Swiss, Dutch and American sport by the last quarter of the 19th century. Competitive

interchanges between the leading national practitioners occurred from the earliest 'championship matches' between England and France in the early 1870s. In the 1880s, international exchanges between Britain, France, Germany and the United States were frequent, indeed international 'championships' were contested, and the sport became significantly more international in the 'boom' of the 1890s, with the inclusion of Italian, Spanish, Australian, South African, Czech, Russian and Danish cyclists, culminating with the first official world championships in 1893.[9]

Global diffusion

Cycling developed most energetically in those countries where there was a confluence of a well-developed road system, a relatively affluent middle-class and a sophisticated industrial infrastructure. Bicycle racing remained, at its professional and upper-amateur core, a predominantly British, French, Italian, German, Belgian, Spanish and American sport through the first half of the 20th century, although Australian, Russian, Scandinavian and Russian athletes had a small presence, and those countries tended to import machines while their own domestic bicycle industry was developing. Only in the last thirty years has the sport been profoundly transformed and further internationalized, particularly by the freeing of the former 'pseudo-amateurs' of the Communist-bloc countries, since 1990 able to compete on the open market, and the addition of, for example, Mexican, Colombian and Japanese participants. Several thousand professional riders from many different parts of the world now participate in a mostly European-based, but globally expanding, year-long, cycling season. As an amateur sport, and as a recreational activity, cycling is now global and universal. But the emphasis here is on the three earliest and leading countries – Britain, France and the United States.

Body and machine

Bicycle racing has always been an extraordinarily demanding athletic activity. The sport is about speed, strength and endurance and tests those human capacities to their limits.[10] It is also about balance, judgement, style and danger. It is a sport whose participants, in a long road-race for example, experience a profound relationship with the natural environment, ride in all weathers, climb high mountains and descend them at break-neck speeds. But cycling also takes place in the man-made environment of the track or velodrome, where specially prepared surfaces and banked corners ensure maximum speed and competition can be seen at

close quarters by spectators. Bicycle racing tests the physical limits of athletes in a variety of disciplines, and because of that pressure, the negative consequences of the sport – the danger of injury from accidents, the temptation to use drugs and stimulants, should also be recognized. Most crucial to the ongoing discussion here is the fact that bicycle racing tests constantly changing and evolving ideas about the design, appropriateness and reliability of highly specialized equipment, and the technological ability of manufacturers to produce it, whose job it is to transform the muscular effort of the "human motor" as efficiently as possible into forward motion. In this sense, body and bicycle have had to be seen as one unit in the realization of power and speed.

Symbiotic relationship between sport and industry

Throughout its history, bicycle racing has expressed and documented an ongoing examination of how the bicycle – an increasingly complex and sophisticated machine dedicated to achieving human-powered movement – could most effectively and efficiently harness the physical capabilities of the human body.[11] The history of bicycle racing has demonstrated a changing and evolving symbiotic relationship between the sport and its specialized tool, the bicycle itself. This relationship is one of the central concerns of this dissertation.

If formal competition has measured the physical limits of cyclists as specialized athletes, and created continual experimentation in designing the best machine for the job in hand, recreational riding and touring have also always included an athletic element, what Lowerson calls 'a very real sense of physical testing', with limits self-imposed by the individual participants, and also a similar experimentation with the best machine for those tasks.[12] Recreational cycling and its associated club life is not the central concern here, but throughout the life of the sport, it has been a significant, semi-competitive athletic activity, and has to be recognized as existing on the periphery of competition and feeding into it. The existence of what are called here 'The three social and technological modes of cycling' is further discussed and problematized in Section 1.b. of this Introduction.

Evolution of the bicycle

In addition to giving an accurate account of events and personalities (discursive, narrative history), one of the most significant issues in charting the crucial symbiotic relationship

between the human body and the bicycle outlined above is an examination and questioning of the processes of technological change, particularly in the 19th century when bicycle design was so fluid and change so pervasive. Why does an artifact such as the bicycle evolve and change and does a theory exist which proposes to explain this change? In this connection, I have found that the most relevant and useful debate is that proposed by the SCOT (Social Construction of Technology) approach, which is non-linear and challenges the technological determinist approach to the shaping of artifacts.[13] In brief, SCOT, as most prominently articulated by Pinch and Bijker in a series of recent papers and books, proposes that technological artifacts are embedded in social factors ('relevant social groups') and undergo a process which leads to what they define as 'closure' or 'stabilization', when a completed stage of the artifact is reached. The SCOT approach is broadly summarized as follows:

> The social environment...shapes the technical characteristics of the artifact. With their emphasis on social shaping, Pinch and Bijker deny technological determinism. Borrowing and adapting from the sociology of knowledge, they argue that the social groups that constitute the social environment play a critical role in defining and solving the problems that arise during the development of an artifact...Pinch and Bijker point out that social groups give meaning to technology and that problems...are defined within the context of the meaning assigned by a social group or a combination of social groups...Closure occurs in science when a consensus emerges that the "truth" has been winnowed from the various interpretations; it occurs in technology when a consensus emerges that a problem arising during the development of technology has been solved.[14]

If my examination and analysis of the relationship between the sport of cycling and the evolution of bicycle design in this dissertation claims any principal guiding idea, it draws on the SCOT approach in proposing that the exigencies of the sport provided a broad and significant number and variety of 'relevant social groups' which influenced the emergence of the many designs of bicycle in the 1870s and 1880s, leading in the 1890s towards at least a partial 'closure' of bicycle design in the solid-tyred and then the pneumatic-tyred 'safety' bicycle. These 'relevant social groups' might include, for instance, manufacturers, bicycle racers (both professional and amateur), clubmen, the press, institutional officials, promoters, track owners, consumers of bicycles and of the sport of bicycle racing, each of whose interests exert influence on the shaping of the artifact and on the sport. These ideas will be further presented and discussed in Section 3 of this Introduction.

In summary, then, this dissertation attempts to provide an historical and analytical account of the emergence of bicycle racing and bicycle technology between the late 1860s and about

1903, focusing to a large extent on Britain, but for reasons of historical continuity and comparison also investigating France and the United States as the two other major national players. It gives an outline of the social and institutional organization of cycling and the wider cultural, economic and technological context of the sport in its main centres of activity, and it attempts to provide a conceptual and critical framework within which the sport, and its interactions with the bicycle industry, can be better understood. The approach and method are discussed in greater detail in Section 3.

b. The three social and technological modes of cycling: competition, recreation and utility

A significant problem in considering and defining the most appropriate approach to the present research has been the wide-ranging nature of the phenomenon of cycling in society in the period between 1867 and 1903. The fact that cycling in its broadest sense as a diverse and expanding activity had three modes - competition, recreation and utility - complicates matters. Bicycle racing, for example, might appropriately and logically be studied by a social historian or a social scientist/sociologist, looking at club life, the structure of competition, the nature of spectatorship, or the role of amateurism and professionalism, whereas the analysis of the industry and bicycle technology might more usefully be undertaken by an economist or an expert in materials' science. An examination of practical transportation issues would benefit from the breadth of vision of a geographer or a statistician. But recognizing the appropriateness of input from specialized historical disciplines, and the need to be open to insights from other specialized fields of inquiry, only makes more pressing the need for a broad definition of the subject as 'social history' and 'the history of sport'. Where diverse aspects of social history are involved, should one dominant, specialized approach be sought or preferred?

How should the history of the horse be written, by comparison? Would agriculture be the slot in which to place it (tilling the fields), or transportation of people and goods (essential economic activity), or hunting (expression of class exclusivity), or war (the cavalry charging)? In fact, all those aspects would need to be taken into consideration in defining an accurate and meaningful social history of the horse, including the fact that through selective breeding human agency has shaped the horse historically to perform optimally in various situations, to answer particular needs, foremost among them speed. Mandell writes that 'the possession and

demonstrative use of superior sport horses remained an essential symbol of wealth and political power in England....the most prized and verifiable quality of a fine horse is its speed....for millenia and nearly everywhere horses have been raced to give evidence to prospective buyers. Races of fast horses established the prestige of their owners'.[15]

Somewhat in the sense that the horse has historically been a tool for the transportation of people and goods and for recreational and sporting purposes, the bicycle also developed various functional possibilities and modes from its inception in the late 1860s. It was at first a novelty used mostly for competitive and recreational sport and for entertainment (see Chapter 2), but from the beginning it also fulfilled a practical (although at first limited) transportational role. These different but inter-connecting social and practical functions made differing demands on the bicycle industry and had differing social and economic impacts. The balance between these two broad modes shifted and changed historically and affected the varieties and changing design of the bicycle, and is a theme I pay close attention to here. From the days of the early popularity of the high-wheel bicycle in the mid-1870s, 'sport' itself can be sub-divided into two categories of activity: first, actual formal competition and speed trials, and, second, recreation often involving strenuous exercise (century runs, club runs and touring) but without formal competition. Hence, for the purposes of examination and analysis, I shall introduce these three broad social aspects or modes of cycling - racing/competition, recreational riding and utility transportation – which need to be clarified and taken into consideration here.

In considering questions of method and approach (further discussed in Section 3 below), these three categories or modes can also be seen as defining viable SCOT categories ('relevant social groups') in the development of bicycle technology in the 19th century. It can be argued that each group of users (racers, recreational riders, utility cyclists, and its associated institutions) brought its particular interests to bear on the bicycle manufacturers, to make machines more appropriate to its needs. Of particular interest in the dissertation has been the influence of the racing cyclists, who made intense demands on the industry, but I have also had to be aware of the differing needs of recreational riders. The needs of utility cyclists were, again, different from the other two groups, and had their own particular influences. The three groups, however, were not mutually exclusive, and interchange between them frequently occurred. The same person, for example, might compete on

Saturday, go for a club run on Sunday and ride his bicycle to work on Monday, either on the same or on different machines. How should this person be categorized for the purposes of historical examination? The complexity of this issue has had to be confronted on an ongoing basis throughout the dissertation.[16]

Bicycle racing and recreation was a new sport in the sense that it did not develop from a previous, less-developed prototype, as did, for example, soccer, rugby or baseball, or even skiing and sailing. It sprang into existence, as it were, 'primitive' and not yet fully formed, at the moment of the velocipede craze of the mid/late 1860s.[17] Men on self-propelled machines had not previously indulged in organized sport with them. The key innovation was the machine itself – the velocipede/bicycle. The young sport borrowed its social organization from other sports such as gymnastics and pedestrianism, and created institutional teams and clubs such as existed at the universities. But its dependence on a specialized machine meant that it had its own intrinsic characteristics from the start. The sport relied on an expensive, sophisticated, high-quality tool, with which it had a complex, technological relationship. Bicycle racing can be defined as a 'modern' sport in the sense that it depended on the industrial manufacture and consumption by participants of specialized equipment dedicated uniquely to that sport, and on developing an efficient and comfortable relationship between athlete and machine. Bicycles grew from the forge, but production in numbers demanded the factory. The sport was thus defined by an inevitable and mutually beneficial relationship with bicycle manufacturers, who themselves needed the sport to test and improve many technological and practical aspects of their design and production process. Ultimately, of course, they needed to sell their products.

This dissertation, in addition to exploring the wider cultural significance of cycling competition, identifies sport (competition and recreation) as a key factor in the evolution of early bicycle design, particularly in the three most significant large-scale changes in design, the evolution of the high-wheel bicycle (familiarly known as the 'ordinary', or 'penny-farthing') in the 1870s, the development of the 'safety' bicycle in the mid-to-late-1880s, and the universal acceptance of the pneumatic tyre in the early 1890s. It is argued here that the emergence of the high-wheel bicycle was driven primarily by sporting rather than by utilitarian considerations, that its rise to exclusive popularity over a period of 12-13 years can only be explained through an understanding of the logic and imperatives of sport (see Fig. 1.

2). The high-wheel bicycle was difficult to mount and dangerous to ride, unsuited to city streets and a challenge on rough, muddy or stony country roads. It was ridden primarily by energetic, athletic younger men, prepared for risk and adventure on the open road and the racing track; it hinted at practical utility without providing it for more than a devoted few.[18] The rise of the tricycle in the late 1870s and 1880s, which was extensively used in racing, also offered the promise of safer, recreational and utility cycling to a wider public, including women. The popularity of the high-wheel bicycle as a sporting vehicle created a demand for better roads for cyclists and the general public through the 1880s and 1890s. When the diamond-framed, solid-tyred 'Rover safety' bicycle emerged in the mid-1880s, its speed was emphasized as much as its safety, and it was tested and recognized as a fast and efficient racing machine at the same time that it was promoted to the consumer for practical transportation. Thus a discourse about both sporting use and practical, functional efficiency was evident in the discussion about and production of these rival designs.[19]

It was only with the ascendance of the pneumatic-tyred 'safety' bicycle in the early 1890s that its successful design formula brought recreational and practical mobility (as well as higher racing speeds) to a wider public than had been able to use either the high-wheeler, the tricycle or the solid-tired 'safety'. Racing helped to evaluate rival versions of the 'safety' bicycle, and demonstrated the convincing superiority of the pneumatic tyre in terms of both speed and comfort over the solid tyre, on both road and track. This process is charted in Chapter 6. In the 1890s, cycling spread beyond the athletic and social cycling coteries (the many different kinds of cycling clubs) of the 1870s and 1880s to appeal to a wider group of users. This expansion is further discussed in Chapter 9. As has been explained above, however, this wider recreational and utilitarain use is not the major concern of this thesis. From the early 1890s, at the same time as cycling was in the process of becoming an everyday practical habit, the sport was expanding into a major participant and spectator phenomenon, giving rise to a competitive and recreational 'boom' which is discussed in Chapter 10. In no other sport does this unusual juxtaposition of competition/recreation and utility occur. It poses special problems of analysis.

By the mid-1890s, bicycle racing was practised on a specialized version (lighter, stronger, stripped of unnecessary accesories) of what was then in the process of becoming a ubiquitous household and consumer item. Through the promotion of racing on purpose-built tracks and on the road, impressive displays of speed and endurance were realized. The general public

could compare the exploits of professional stars with their own humbler efforts on the bicycle. Indeed, evidence indicates that the racing mode tended to set many of the fashion trends in machines and clothing for recreational cyclists.[20] Non-competitive activities, however, were not confined to short evening or weekend trips. For some, recreational touring was another facet of sporting cycling, a physically taxing pastime, sometimes in the 1890s consisting of major international journeys.[21] From the early days of the bicycle industry, competition was recognized as an ideal medium for the marketing and selling of bicycles, tyres, clothing and other necessary cycling accessories. Racing was an ideal 'site' within which the emergence of modern techniques of advertising can now be identified, directed at a specialized group of recreational and utilitarian consumers, creating an early paradigm for modern sport organization. (See Fig. 1. 3)

A conjunction of two of these modes - competition and practical utility - was vividly expressed in the long-distance place-to-place races and sponsored road races which began with the first Bordeaux-Paris race in 1891, further explored in Chapter 7. Although long-distance racing had been practiced since the early 1870s, the well-publicized races promoted from the early 1890s onwards demonstrated the long-distance capabilities of the modern pneumatic-tyred bicycle and constituted the beginnings of the existing 'classic' European bicycle racing calendar. They demonstrated the distances that trained athletes (and human beings in general) were capable of covering. Sponsored by newspapers and embraced as publicity opportunities by bicycle and tyre manufacturers, these races showed that racing could be used as a means of selling bicycles, tyres and general and sport-related newspapers to the consumer. The bicycle industry continued to make conspicuous use of the sport to publicize and market its products to the consumer, a trend that is still typified in the relationship between consumers and the annual Tour de France, a huge international event which at the same time tests new products and defines taste and fashion for competitive and recreational cyclists.

c. The social and historical scope

The character and nature of bicycle racing as a sport is not, of course, merely the product of a process of technological development (however it is explained) and the improvement of bicycle technology. Technological change does certainly occur for a variety of different reasons – new ideas, new materials, new tools, new sources of funding, new social conditions,

new demands and the new needs of competitive athletes and recreational users.[22] But the sport itself is an expression of deeper human urges - the desire of participants to compete and excel, to solve technical problems, to form and join clubs and create governing bodies, to measure and time achievements and to break records, to promote competition and profit from it, and of the enthusiasm of spectators willing to pay to watch the racing. So that all the cultural ramifications of sport in its widest social, economic and technological contexts are the subject of this research, and the object of its analysis.

This dissertation provides an historical account of the emergence of bicycle racing between the late 1860s and about 1903, focusing to a large extent on Britain, but also investigating France and the United States as the two other major national players. It gives an outline of the social and institutional organization of cycling and the wider cultural, economic and technological context of the sport in its main centres of activity. In charting the early growth of cycling as a sport in Britain, France and the United States, it also attempts to provide a framework for understanding its wider international diffusion and history. The growth of the sport in the United States, Germany and Holland was heavily dependent on the British model and British machines, and this model was also influential in France, although the French developed different patterns in their competitive organization. I am aware that French developments have not been given as much detailed attention as they deserve here, and offer only the excuse of time and space constraints and difficulties of access to French source materials.

The dissertation recognizes the wide diffusion of cycling as a recreational, non-competitive pastime, and the associated widespread growth of cycling clubs, many of which used the bicycle as a hook upon which to hang other socially cohesive activities. The club background was a significant underpinning for the core of competitive amateur athletes, and a training ground for many of the professionals. Chapter 9 especially recognizes the relationship between cycling as a sport and recreation and cycling as a practical means of transportation, but a wider exploration of utility cycling has been outside its scope. The thesis locates bicycle racing as a sport set in the context of a large bicycle manufacturing industry with important centres in the English Midlands, France and the United States. It attempts to situate and understand these aspects of the sport in the wider context of cultural and historical change, recognizing the impact of cycling upon habits of mobility and patterns of leisure and

recreation. It attempts to animate the biographies of the principal actors who were involved in this early period of cycling - riders, trainers, journalists, bureaucrats, promoters, publishers, publicists, entrepreneurs and manufacturers - men whose 'modern' careers contributed to defining new styles of athletic activity, new habits of leisure and recreation and new ways of marketing products within the context of a modern sport.

This account views bicycle racing as a culturally significant sport which impacted large numbers of participants and spectators and took place within the wider cultural, economic and technological contexts of recreational and utility riding and a rapidly expanding consumer industry. Cycling as a sport was enmeshed with the industrial and commercial concerns of the bicycle manufacturers, enabling them to showcase and advertize their products. Cycling as a public and private athletic activity, and the growth of cycling clubs, expressed the varied class cohesions and athletic aspirations of the participants, heavily middle-class but also including working-class and upper-class components.[23] As the brand-new sport and recreation of cycling emerged in England in the early 1870s, it brought new liberal and democratic (i.e., inclusive rather than exclusive from a class perspective) elements into athletic activity, expressed in the shared and egalitarian camaraderie of the public road and the maintenance and enjoyment of a new technological plaything. Cycling was predominantly an urban, broadly middle-class activity, indulged in by the professional, retail and business classes, people with time to spare at weekends, who had some disposal income. But a few aristocrats rode bicycles seriously, and both the lower middle-class and the working-class participated in competitive and recreational cycling. In his cycling novel, *The Wheels of Chance*, H.G. Wells comments about his anti-hero Hoopdriver, a draper's shop-assistant about to undertake a cycling holiday, that 'even in a shop assistant does the warmth of manhood assert itself, and drive him against all the conditions of his calling, against the counsels of prudence and the restrictions of his means, to seek the wholesome delights of exertion, and danger and pain'. Cycling provided new opportunities for participation in recreational sport, and to redefine the social relations encountered within its boundaries.[24]

Within bicycle racing a tension was maintained between sport as business (professionalism) and sport as honourable competition and an expression of athletic excellence (amateurism), and this class and economic element will be kept in mind and explored. In Chapter 3, it will be explained how Gerard Cobb, president of both the newly formed Bicycle Union and the

Cambridge University Bicycle Club, challenged the Amateur Athletic Club's strictly segregated definition of 'amateur' and 'professional' and argued for competition between the categories as a way of improving athletic standards and performances. Cobb's club organized races between leading amateurs and professionals in the late 1870s, where it was demonstrated that there was little difference in the abilities of the two categories of athlete. 'Bicycling being an entirely new pastime, presents a very favourable opportunity for taking a new departure in the matter, and for introducing a fresh condition of things obviously conducive to the development of sport and agreeable to common sense', Cobb told the executive of the Bicycle Union in 1878. The present situation in sport, Cobb thought, was 'a condition of things wholly irreconcilable with the true interests of national athletic development, and entirely repugnant to common sense'.[25] In an 1877 letter on the subject, Cobb wrote that the current amateur rule was 'unreasonable, unusual, and detrimental to the progress of bicycling... We can never be sure that we have got the perfect machine and the perfect rider until competition has been pushed to its utmost in all directions' (see Appendix L).[26]

Such expressions of an ambitious cultural destiny for the new sport were often heard from its proponents, suggesting that cycling and cyclists were a new social grouping, with specific needs and an unconventional outlook. The distinctions between amateurism and professionalism were not removed, but constantly debated and redefined as cycling developed. By the 1890s, the sport had attained new levels of excellence and organizational complexity and sophistication within both categories of competition, and was marketed to a paying audience with efficient, modern, promotional and advertising techniques which will be further discussed in Chapter 10.

Cycling on public roads brought to the surface various legal issues, the sometimes tense relationships between cyclists and other road-users and discussion of varied issues, such as, for example, proprieties of dress and social behaviours for both men and women. As a primary means of personalized transportation and a recreational vehicle which occupied a significant position chronologically between horse-riding and the rise of the motorcycle and the motor car, the bicycle gave both men and women a new freedom, independence and mobility in their working and leisure lives. Also, while it acknowledges the importance of recreational touring and utility riding, and recognizes that a fine line separates recreation from sport, this account does not attempt to give a comprehensive narrative of the impact of recreational and touring

cycling. It concerns itself principally with competitive cycling, its organization and its cultural, economic and technological background, its repercussions and its significance. The fascinating and richly documented issue of the contribution which the bicycle made to women's emancipation in the 1890s and later is, except for some brief mentions, beyond the scope of this dissertation.[27]

As this work progressed, and the large amount of documentation and the complexity of the issues was apparent, it became evident that much would have to be left out. I concentrate heavily on developments in Britain, but nevertheless pay close attention to, and attempt to provide the main outlines of, the parallel development of the sport in France and the United States. Closer critical attention will need to be paid in future to the early period in France (1867-75), to the early development of American bicycle racing (1880-1890) and to the emergence in France and Belgium in the 1890s of what is now regarded as the 'classic' road-racing sport. Wider research into recreational and club cycling in the late 19th century should also be undertaken, and closer attention paid to gender issues and women's racing. The chronological limits have been chosen for the following reasons: 1867 as the starting point because, as has been explained earlier, it marks the first occurrences of racing on the 'modern' bicycle in France, and, more arbitrarily perhaps, 1903 as the approximate ending point, because that was when the 'monument' of cycling, the Tour de France stage race, was promoted for the first time.

This thesis, therefore, in order to elucidate the history and development of bicycle racing in Europe and the United States in the last quarter of the 19th century, has inevitably required me to tackle the themes of class, nationalism, industry and commerce, speed and the capacities of the human body, and also the whole question of 'the modern' and modernity. Sport history, a branch of history which has emerged in late modernity, recognizes that mass culture and leisure patterns in the late 19th century produced an explosion of participation, spectatorship and sponsorship (in a linked inter-dependent relationship), all of which are highly visible in the sport of cycling. The central themes or topics which have been crucial in motivating the organization of the thesis are outlined in this Introduction. They are, first, the ambivalent nature of the bicycle, on the one hand as a tool of competitive sport and leisure recreation and on the other hand as a mode of utility transportation; second, the inextricable relationship

between bicycle sport and the emerging bicycle industry and patterns of commerce and consumption.

2. Historiographic review

a. Cycling in the history of sport

In 1866, a writer in the *Contemporary Review* stated that: 'It would be difficult to point to any part of daily life in which the last half-century has brought about a greater change than in out-of-door exercise', and in the same year *Blackwood's Magazine* confirmed that: 'The development of "muscular" education both at our public schools and universities is a fact which is beginning to attract a good deal of attention'.[28]

This mid-19th century expansion of interest in sport and exercise in general is the broad social context within which the emergence of the sport of cycling has to be seen. As an aspect of the growing field of Victorian and 19th century studies, critical discussion of the rise and evolution of modern sport is a large and active area of historical and intellectual inquiry. In effect, in outlining the context for the examination of cycling here, nothing less than the rise and historiography of recent modern sport history is involved, most of the works cited here having been produced in the last twenty years. Some of the seminal historical explorations of modern sport, which have been particularly influential in the research and writing of this dissertation, are briefly reviewed here.

J.A. Mangan has been particularly prolific. His *Athleticism in the Victorian and Edwardian Public School* (1981) was the first major study of the games ethos which dominated the lives of Victorian and Edwardian public school boys and students (discussed further here, relating to cycling, in Chapter 3. 4). This book represented a breakthrough in the social and cultural history of sport and helped to lay the foundations for subsequent approaches to the subject. His later *The Games Ethic and Imperialism: Aspects of the Diffusion of an Ideal* (1986) charted the spread of these practices and ideals outside Britain, and is an examination of the dissemination throughout the empire of the hugely influential ideology of athleticism. It is also relevant in understanding the transmission of the sport of cycling from England into the United States and Germany.[29] Mangan has expanded on these themes in dozens of journal articles, among which two ("Oars and the Man" and "Social Darwinism, Sport and English Upper Class Education") were particularly helpful.[30] The growth of cycling within the English universities, charted in Chapter 3. 4, owes much to Mangan's analyses, although to

understand the popularization and 'democratization' of cycling sport remarked on by Lowerson (see p. 4-5 above), and its expansion into an international spectator-sport in the 1890s, we should look outside the world of the public schools and universities to middle-class and popular commercial culture. Mangan recognises this in his recent collection of essays, *A Sport-Loving Society: Victorian and Edwardian Middle-Class England at Play* (2006), which emphasizes the class dimensions of sporting change:

> ...the English middle class was to be found in the vanguard of the Victorian and Edwardian 'sports revolution' which in time had such extraordinary global consequences – political, cultural, economic, aesthetic, emotional and spiritual. And a revolution was precisely what it was. It was wholly unlike anything that preceded it: 'sport, in its modern, organised, commercialised and extensive form, was truly an "invention" of the Victorian and Edwardian age (quoting Tranter, see below).[31]

Other earlier works, in particular Peter Bailey's *Leisure and Class in Victorian England* (1978) and John Lowerson's *Sport and the English middle classes, 1870-1914* (1993) also focus on the spread of sport among the middle-classes.[32] In charting the evolution of modern sport, Neil Wigglesworth, in *The Evolution of English Sport* (1996), argues that the proletarian and rural origins of much recreation in the rapidly changing 19th century also have to be taken into account, and constructs a thematic approach, outlining 'commercialisation', 'professionalism', 'recreationalism' and 'amateurism' as categories of activities, divisions which are particularly relevant to the realities of the expanding sport of cycling.[33] In an excellent account, Neil Tranter's *Sport, Economy and Society in Britain, 1750 - 1914* (1998) argues that 'it would be quite wrong to suppose that the history of sport in late-19th and early 20th-century Britain was one of general, continuous expansion', at the same time as he reaffirms that 'in the course of the Victorian and Edwardian eras most of the major sports were transformed from purely local to national and in some cases even international activities.' Tranter also asserts a fact particularly relevant to this study of cycling, that 'sport obviously became a major industry during the Victorian and Edwardian periods'.[34]

For the deeper, sociological nature of sport activity, Allen Guttman's three works, *From Ritual to Record: The Nature of Modern Sports* (1978), *Sports Spectators* (1986) and *Games and Empires: Modern Sports and Cultural Imperialism* (Columbia: 1994) are all essential reading, particularly in understanding the nature of quantification and

international competition in modern sport. Maarten Van Bottenburg's *Global Games* (2001) continues this discussion.[35] Also, for an understanding of the physiological, scientific, medical and training context of the history of modern sport, Berryman and Park, *Sport and Exercise Science* (1992) and John Hoberman, *Mortal Engines*, are important.[36]

Much of the extensive examination of the history of sport mentioned above focuses on the social and economic organization of sport in history. However, critical inquiry into the technology of sport is an even more recent field, and tends to concentrate on sport science and medical-related issues such as doping and nutrition. The historical relationship between competition and the 'tools of the trade', the actual hardware of sport, has been less thoroughly explored, and a historical focus on this area constitutes the originality of my inquiry here. One recent study of sport technology (Miah and Eassom, 2002) asserts that 'the problematisation of technology in sport has gone largely unnoticed in historical, philosophical and policy studies of sport'. The writers maintain that 'recreational and elite sport have moved increasingly into a commercialized, highly scientised domain, where the basis for progress has been through technological change...Throughout sport, the relevance of technology is clearly apparent and raises very difficult challenges for sports federations'.[37] One of the essays in this book addresses the changes and advances in skiing, a sport which, like cycling, has become increasingly technologized.[38] Perhaps it would be true to say that, with advances in modern materials science, there is today hardly a sport which goes unaffected by technological change: the older sports such as golf, tennis, skiing, rowing, even athletics (not an equipment-dependent sport) have all undergone change, while new sports such as hang-gliding, wind-surfing, mountaineering, and mountain biking, exist only because of contemporary manufacturing capabilities and materials technologies.

b. Source review

From the beginning of the sport in 1868-69 (as described in Chapter 2), there was frequent recognition of the need to chart the history and evolution of the bicycle as a machine and of cycling as a sport, and there is plentiful 19th century primary source material and later secondary critical material relating to both. From the earliest days, there was a need to explain the rise of the bicycle in an historical sense, and the bicycle was widely compared and contrasted with the other prevailing modes of transportation:

walking, the horse and the railways. As is frequently noted throughout this account, the originality, speed and independence of the bicycle, and its progress and improvement, were the subject of a great deal of discussion and comment in the contemporary press in the 19th century.

First, I should identify and briefly characterize the numerous texts, as well as the large quantity of journalistic sources, which were milestones in the historical description and documentation of the sport and industry of cycling within the chosen research period, that is, from 1867 to 1903. This material, which I have used as a primary source, frequently contains a backward glance, a historical awareness and perspective, as a comparison with contemporary developments. Commentators on the state of the sport and the latest developments in bicycle technology were aware of an evolution which was occurring; the word "progress" was frequently used in describing it. These early historians were frequently enthusiasts and participant-observers, which has both advantages and disadvantages for the writer of a 21st century history. They were often not disinterested observers, and neither were they sociologists or trained historians, so that these limitations should be borne in mind in evaluating them. Many of them, perhaps even most of them, were journalists. They were often in very close contact with the events they were describing, and thus even if they were involved "insiders", their passionate motivation and (in the case of Griffin and Sturmey, for example), their compulsive drive towards a comprehensive cataloguing of the contemporary bicycle scene for commercial reasons makes them important and largely reliable factual sources.

It should also be emphasized that, while certain 19th century book-length texts are easily recognizable as historically significant, important historical accounts do not always come as complete books, or completely digested systematic points of view, but are as likely to be presented as articles in the daily, weekly or monthly press of the period, or in commercially-driven material – catalogues, directories or year books, for example. Indeed, it is argued frequently here that much of the most significant documentation and historically revealing material is to be found in journalistic outlets – articles, editorials and advertisements – which reflect and respond to events as they occurred, in an immediate and intimate sense.

If there is a large amount of overlap in the source material used here between that which addresses itself primarily to the sport and that which documents the industry, then this is further evidence of the relationship between the two which is one of the central preoccupations of the dissertation. These sources are discussed below (Primary sources) and in Section 2. c (The role of the press, 1867-1903).

A second category of source material which should be identified here consists of secondary historical and critical accounts written after and outside the research period (see below, Secondary sources). This is a more diverse and problematic area, not least because more than a century of literature (from about 1903 to the present day) has to be briefly reviewed. If I confine myself here to those publications which have concentrated critically on the history of cycling as competition, the list is not a long one, for much of the history of cycling has been told in terms of the description of the principal races in photographic picture-books, and (particularly in the case of the French history) in terms of the repetition of the athletic exploits of the mythic heroes of the 20th century sport, 'les géants de la route', Christophe, Coppi, Bartali, Anquetil, Bobet, Poulidor, Merckx, Hinault, et al.[39] 19th century cycling has been poorly covered in a critical, historical sense. Yet, if the scope is broadened to take account of the wider recreational issues and aspects of the technological history of the bicycle which are the focal point of this study, then there is a considerable list which has to be recognized and differentiated. More particularly, with the growth of interest in the history of sport as a sub-discipline of its own, there have been several significant studies on the history of cycling which should be recognized as having relevance to and complementing my own studies. These are described below (Secondary sources).

- **Primary sources, 1867-1903**

As will be further discussed in Chapter 2, the earliest historical accounts of the beginning of the bicycle in England tended to focus on technological and manufacturing aspects of the 'fad' or 'fashion' which greeted its first appearance. The bicycle was a brand-new phenomenon and early accounts of it had both an explanatory and an advertising or proselytizing function. These short books were intended primarily to give background information and instruct new riders on choosing a machine and learning to ride it, yet they did not just pay attention to the new machine itself. They are also notable for showing an

awareness of the history of velocipeding and are an important source of illustrations and information about experimentation in human-powered vehicles ('velocipedes') in the period between about 1820 and 1865. They were also intermittently aware of the wider implications of the present and future practical utility of human-powered vehicles. Two typical titles are, *The Velocipede, its history and how to use it* and *Velocipedes, Bicycles and Tricycles, How to make and how to use them, with a sketch of their history, invention and progress.*[40] The various forms of the velocipede 'form an amusing chapter of the history of invention', wrote 'Velox' in 1869, though 'whether velocipedes will ever become a necessity of our civilization... it is impossible to say, though appearances would warrant such a prediction'. The advantage of velocipedes was that 'they enable individuals to travel faster and greater distances with a less expenditure of vital force than by walking, provided the machine is as light and simple in its construction as possible'.[41] The authors of these books frequently attempted a brief 'history' of the velocipede, identifying its ancestry in the hobby-horse popular earlier in the century. 'Velox' was no exception, including a chapter on "The Velocipede of the Past".

That the 'modern' bicycle was already seen as having an interesting history in the early part of the 19th century is indicated by the titles and contents of two further examples of these books. One was entitled *The Velocipede, Its History, Varieties, and Practice*, and another *The Velocipede, Its Past, Its Present and Its Future* [42] The perspective of these first chroniclers of the bicycle could thus be termed broadly progressivist. 'The progress of the Bicycle seems steady and sure... it seems now to be a general favourite', wrote one, and 'Velox' asked himself 'whether velocipedes are only the "toy of the hour", or are destined to become a permanent adjunct to our civilization and every-day life or not'.[43] Racing was described only in very general terms ('We are told that 123 miles have been accomplished within the twenty-four hours, and that fifty miles in five hours have been repeatedly accomplished'.[44]), and although athletic concerns were not much in evidence or discussed, they were nonetheless occasionally recognized: 'The advantages to health are very apparent', wrote 'An Experienced Velocipedist', adding that at-first-suspicious learners upon gaining experience had 'often afterwards described the easy and rapid locomotion as an enjoyment which was *positively intense*'.[45]

Alfred Howard's *The Bicycle for 1874; A Record of Bicycling for the Year* was the first of several annuals published in the 1870s which provide an in-depth view of early high-wheel development in England. Howard called this book 'an authentic record of the bicycling of the year... the first attempt of the kind'. He further commented that 'the bicycle is the most important machine of the day for developing the human frame, and promoting the health both of the youth and the adult'.[46] Nahum Salamon's *Bicycling: Its Rise and Development, A Text Book for Riders*, also published in 1874, was another key text in the early growth of the sport of cycling, published as the high-wheel bicycle was emerging as a viable tool for both racing and athletic touring.[47] 'The newspapers have fully recognized the importance of the Bicycle movement', wrote Salamon, 'and duly record the achievements of its votaries... Ten thousand persons have assembled at one time to witness a Bicycle contest, and the best manufacturers are in arrears with their orders for machines... The records of matches and feats are sufficiently full to furnish material for a history of Bicycling'. Salamon, who worked in the bicycle industry in London, functioned primarily as an editor of his book, for it is a compendium of information, about learning to ride and giving details of routes to follow on tours in Britain and in Europe. However, Salamon's original contributions included an historical section on "The Birth of the Bicycle" ('Bicycling has a history of its own... ') and a significant section on clubs and rules to be followed by both amateurs and professionals in competition, which is in fact the earliest systematic documentation of club formation within the young sport.[48]

Charles Pratt's *The American Bicycler* is the key historical text of early American cycling and its club and competitive background.[49] Pratt was an attorney who came to specialize in patent issues for the Pope Manufacturing Co., the largest American bicycle company in the 1880s. He was the President of the first North American cycling club, the Boston Bicycle Club, and one of the founders of the League of American Wheelmen in 1880. His connections within the upper-middle-class New England business, journalistic and cycling club world allowed him to be witness to, and to give a reliable (if unbalanced) account of, the early bicycle movement in the United States. Connected with the industry, the press and the emerging club and racing worlds, Pratt was ideally situated to understand their evolution and history. Norcliffe comments on this book that 'not only was it the guiding light for the 45 bicycling clubs that had been formed in North America by 1880, but it continued to serve as the Bible for cycling clubs through to around 1890... In his lifetime, Pratt was considered

the highest American authority on cycling matters'.[50] Club riding on the road, thought Pratt, 'must ever be the fullest test of both bicycle and bicycler... and give greater satisfaction to the larger number', yet he recognized that 'races are an important department of almost every sport, develop its capabilities, and interest the general public more intensely'.[51]

In *The American Bicycler*, Pratt provided a 'historical sketch' of the bicycle, he reviewed American racing and gave a list of American clubs, as well as a draft sample of club membership, with 'By-Laws, Rules, and Regulations'. The advantage of recreational clubs, he wrote in 1880 (noting the existence of 230 British cycling clubs and the recent formation of nearly 50 American clubs), were:

> good fellowship, companionship for spins, and social standing in the bicycling community, special stimulus to interest, and incentives to excellence in riding. They afford opportunities for comparison of experience and of opinions, for obtaining information, and for associated or disciplined riding on interesting occasions... They give occasions for forming new acquaintances and valuable friendships... The general advantages which, of course, every members shares arise from the general principle that in union there are strength and wisdom.[52]

In the 1st edition, Pratt also compiled the earliest bibliography of American cycling, listing the mostly British periodical sources which were at that moment (1879) the primary stimulus for the American sport.[53] (see Chapter 4, The diffusion of bicycle racing into the United States in the late-1870s)

Charles Spencer was a notable presence in the history of cycling for his participation in bringing velocipedes from Paris to Coventry in 1868, thus introducing them commercially to England, and for his subsequent presence in the industry. In his *Bicycles and Tricycles, Past and Present*, written in 1882-83, Spencer looks back on more than a decade of his personal involvement in the expansion of the sport and industry and his book is the first attempt to write a full account of those years. 'When I first introduced the Bicycle into this country in 1868', he wrote, 'I little imagined to what a pitch of excellence, elegance, and usefulness it would attain. Still less did I foresee how universally popular would become an exercise which was at first regarded simply as a professional sport, and not likely to be taken up by the general public'.[54] Spencer is also notable for his publication in *Bicycles and Tricycles* of a 20-page section on "The Literature of Cycling', which he claimed was 'the first bibliography ever attempted of our pastime'.[55]

No 19th century cycling text is more idiosyncratic, fanatical and exhausting for the reader than Karl Kron's *Ten Thousand Miles on a Bicycle*, self-published by Kron in 1887.[56] Yet it gives an extraordinarily comprehensive and insightful account of a moment of sporting and recreational history. If Pratt gave a coherent, brief and articulate account of the early days of cycling in the United States, Kron wanted to be its Boswell, filling nearly 800 pages of minute print with truly encyclopedic, autobiographical documentation of many aspects of the sport and pastime. No current historian of cycling in the 19th century can afford to ignore Kron's obsessively detailed description, or the source material which he lists. Kron is especially interesting in his descriptions of recreational road-riding on the East Coast of the United States, and in fact stated in his 'Preface' that 'the true spirit and permanent charm of cycling are best exemplified by the army of quiet riders who never display themselves upon a track'. The significance of the bicycle for Kron was 'as a health-preserver, as a freshener and prolonger of life..., as a travelling companion and aid to every-day locomotion', and he was, he wrote, not appealing 'to racers and athletes'.[57] Among the many valuable resources contained in this detailed and compulsively indexed book is a fifty-page bibliography entitled "The Literature of the Wheel", and a chapter on the foundation of the League of American Wheelmen and its personnel.

Two British journalists, H. Hewitt Griffin and Henry Sturmey, occupy a special place in the historiography of cycling (and the history of the growth of the consumer market for bicycles) for the extent and depth of their technical documentation of the bicycle. Present at the annual trade shows with pen and paper in hand, their work appearing week after week, year after year, in newspapers, periodicals and handbooks, they were meticulously reliable in their descriptions and reviews of the technological changes within the industry through the 1870s, 1880s and 1890s, and unrivalled in their knowledge of the sport. Their work is thus filled with evidence of the kinds of social and economic relationships which are the object of this study. Griffin compiled an important series of annual handbooks for the industry and consumer variously entitled *Bicycles of the Year*, or *Bicycles and Tricycles of the Year*.[58] In 1890, Griffin published the first edition of his *Cycles and Cycling*, a wide-ranging exposition of the subject which went through three subsequent editions, in 1893, 1897 and 1903. In the last edition, Griffin wrote that his 'history of the cycle, that ever interesting yet never exhausted subject, has been carried further back and amplified in every direction, making this the most complete chronicle of the cycle which has ever been published'.[59]

Like Griffin in the titles described above, Henry Sturmey provided thousands of product reviews, and assessments of manufacturers' specifications and quality, over a twenty-year period, during which he was editor of *The Cyclist* and perhaps the most widely respected and deeply knowledgeable journalist in the industry. He compiled the *Indispensable Bicyclist's Handbook* (1878-87), the *Tricyclist's Indispensable Annual and Handbook* (1881-84) and the *Indispensable Handbook to the Safety Bicycle* (1885). He was editor of *The Cyclist and Wheel World Annual* (1882-86) and *The Cyclist Year Book* (1891-98). All of this material was not only very useful to the industry and the contemporary consumer, but now constitutes crucial source material for the bicycle historian, especially because it not only records the processes of technological change and details about companies within the bicycle industry, but provides a great deal of information about the numbers, locations and size of cycling clubs.

Another editor and journalist who was active and outspoken from about 1880 to the end of the research period was George Lacy Hillier, a crucial and dominating personality who is often discussed in this dissertation. A champion racer in the early 1880s, Hillier's later position as editor of *Bicycling News* gave him a platform from which to air his opinions about most aspects of the sport of cycling, and he became an especially ardent defender of the values and traditions of amateurism, which he thought expressed what was most valuable and morally uplifting about the sport. Professionalism, he thought, resulted in moral decline. A consummate committee man and bureaucrat, Hillier served on the board of the National Cyclists' Union and represented English amateur racing in international competition. Hillier's Badminton *Cycling*, a large book which was first published in 1887 and republished in new editions with many changes and additions in 1889, 1891, 1894 and 1896, was a hugely influential tome which became the most widely available and authoritative text-book of cycling in the 1890s. Verbose and long-winded, and consequently under-utilized and under-appreciated by historians of cycling, Hillier's Badminton *Cycling* covers every technical and social aspect of the sport and industry, including an extended 'Historical' chapter, chapters on 'Riding', 'Racing', 'Touring', 'Training', 'The Press and Cycling Literature' and chapters on cycling institutions, the National Cyclists' Union and the Cyclists' Touring Club.

Hillier's 1889 chapter on the 'History' of racing contents itself with charting the chronological emergence of the sport and its leading performers, 'to chronicle the past of the sport which promises to have so remarkable a future'. He does not set out to understand cycling in a wider sociological sense, or to explore its earliest origins. He does, however, make a distinction between cycling and 'all other branches of athletics'. These other branches of sport, he argues, 'conduce to a healthy habit of body, sound wind, and strong, muscular limbs, yet... fulfil no purpose of value to the community at large'. Cycling, however, 'has an economic side, which in real value, in its relations to everyday life, far exceeds the merely competitive developments of the pursuit.' He goes on to describe 'the practical use of the wheel in daily life... its hygenic value as a means primarily of healthy exercise....and... its great convenience in the stern business of life, whether as a means of economy in time or in money'.[60] As a social critic, therefore, Hillier shows an early awareness of what I have described above as 'The three social and technological modes of cycling'.

Two other texts should be given a brief mention. R.J. Mecredy and A.J. Wilson's, *The Art and Pastime of Cycling* (first edition 1889, subsequent editions 1890 and 1893) is a characteristic example of a genre of book published as the sport expanded with the advent of the safety bicycle from the athletic high-wheel coterie to a wider general public. It was at the same time a historical account, a how-to manual, and also concerned with dress, fashion and 'the pleasures and advantages' of the sport. 'The Art of Cycling', write the authors, 'is by no means a simple one; even the most experienced have much to learn, and the difficulties of acquiring the necessary knowledge are increased by the number of faddists – men of one or two ideas – who pose as authorities, and lead others astray'.[61]

Archibald Sharp's, *Bicycles and Tricycles: An Elementary Treatise on their Design and Construction*, published in 1896, was important as the first technical manual which explored bicycle construction from a mechanical and engineering point of view, thus linking the sport theoretically with crucial questions about design and the strength of materials. 'A bicycle or tricycle is a more or less complex machine', he wrote, 'and for a thorough appreciation of the stresses and strains to which it is subjected in ordinary use, and for its efficient design, an extensive knowledge of the mechanical sciences is necessary. Though an extensive literature on nearly all other types of machine exists, there is, strange to say, very little on the subject

of cycle design'. Sharp's book, therefore, takes its place as the earliest comprehensive scientific analysis of bicycle design and construction.[62]

Here it must be said that as the cycling phenomenon expanded in the 1890s, the number of books written about diverse aspects of the subject increased enormously, and it becomes harder to single out those which have special interest and importance historiographically, since many different aspects of the wider topic are of interest to the historian. Racing, touring, training, physiology and health, the pleasures of cycling, women's cycling, maintenance, how to choose a bicycle, the impact of the bicycle on the general public – all are addressed by many different authors.

As Paris became the centre of French cycling, French texts became more numerous and important. Though the French club-oriented, industry and technical literature from the 1880s appears to be less rich than the British and American equivalents, a surge of writing about the bicycle occurred in the 1890s. Of outstanding importance are the works of Louis Baudry de Saunier, including in particular *Histoire Générale de la Vélocipédie* (1891), *Le Cyclisme Théorique et Pratique* (1892, containing a 50-page 'history of cycling', and nearly 90 pages on racing), *Les Mémoires de Terront* (1893) and *L'Art de la Bicyclette* (1896). Essentially a journalist riding the crest of the wave of the bicycle's popularity in France from about 1890, Baudry de Saunier's books explored seriously the history of the sport and earned him the title of 'historian of French cycling'. In *Les Mémoires de Terront*, Baudry de Saunier reported Terront's spectacular Paris-Brest-Paris ride and his breaking of the 1,000 km record, and turned a bicycle racer into a popular icon. In a chapter on racing in his *L'Art de la Bicyclette*, Baudry de Saunier makes the connection which is one of the principal themes of this dissertation:

> Since the very beginning of cycling, racing has had the important function of showing, through remarkable performances, the economy, the ease and speed of a new type of transportation. Racing has always been, and still is the best school of instruction for bicycle makers.[63]

H.O. Duncan should also be mentioned. A man with deep roots in both competition and commerce, he will be encountered on many occasions here. His *Vingt Ans de Cyclisme Pratique* (1897) was the first comprehensive account of the then booming business of bicycle racing in Paris, the world centre of the sport. Cyclist, champion, manager,

importer and retailer, Duncan typified the professional promoter who made bicycle racing into a profitable, dramatic spectator sport. Duncan identifies and describes 'a new class' of people in the sport, who he calls 'managers, directors, administrators', he himself being perhaps the most important example, and devotes a chapter to examining their activities. In *En Suivant Terront, de Saint Petersbourg à Paris, à Bicyclette* (1894), Duncan used the account of his romantic personal adventures with Terront to publicize cycling. In his later, *The World on Wheels* (1928), Duncan looked back over the large span of his own career, giving many important insights into it.[64]

Henri Desgrange, the founder of the Tour de France, gave many insights into his philosophy of sport in his *La Tête et les Jambes*, a series of fictional letters written to a young cyclist (1898).[65] Another book, *Le Cyclisme* by Marcel Viollette et al (1912), although it was published slightly outside the research period, also gives valuable insights into the competition of the period.[66]

Comment on the physical development of the athlete and training technique occurs throughout the period under examination, and gives evidence of the seriousness with which the sport of cycling was approached. As themes which permeate the literature of the period under discussion, training issues for specialized athletes and medical and health issues relating to cycling for the average rider can both be seen as belonging in the category of an ongoing and increasingly specialized medical/scientific debate. The earliest text which specifically addresses training in cycling was by H.L. Cortis, a record-breaking English high-wheel rider, who in 1882 became the first rider to cover 20 miles in an hour. Entitled *Principles of Training for Amateur Athletes: Its Advantages and Evil, with Special regard to Bicyclists*, the book was sold in both Britain and the United States.[67] Hillier devotes a whole chapter to training in his Badminton volume. 'Training, as applied to athletics, may be defined as the preparation of the body for new and unaccustomed strains, and the gradual fitting of the human frame to undergo the severest physical exertion'. he wrote. Until recently, 'the only persons who underwent serious training were men who made the sport they practised a profession'. However, Hillier argues,

> the racing cyclist of today should avoid the old system altogether, and do his best to get the assistance of a modern advisor who works upon reasonable and rational lines... There is no doubt that a mental training goes on side by side with the physical development...a reflex action of the mental over the physical powers,

which has very much to do with success.'[68]

In 1893, Hillier published another volume, *Amateur Cycling, with Hints on Training*.[69] The same year, Arthur Zimmerman, who had just won the first official world championships in Chicago, put his name to a book, *Zimmerman on Training, with Points for Cyclists*.[70] In French, H.O. Duncan contributed two books which further expanded the training debate. The first, published in 1890 was *L'Entrainement à l'Usage des Vélocipedistes, Coureurs et Touristes et des Amateurs des Sports Athlétiques* (with L. Superbie), and the second (1897) his already mentioned *Vingt Ans de Cyclisme Pratique*, which ranges over the whole subject of bicycle racing, including tactics and training issues.[71]

While this does not pretend to be a comprehensive summary of all the important texts directly relating to the sport and industry during the research period, it does include those texts which the author considers relate most centrally and fully to the issues under examination here. They are particularly relevant as emanating from precisely those 'relevant social groups' (the term used in Pinch and Bijker's SCOT analysis) which are discussed at more length in Section 3 (Methodology) of this Introduction.

Further primary documentation was also created by actual competition (race programmes, advertizing material) and the social infrastructure of cycling (reports of governing bodies, club records, annual reports). There is also the commercial paraphernalia of the bicycle industry (the machines themselves, catalogues, production records, reviews of the year).

- Secondary sources

A series of general histories of cycling between about 1920 and 1970 (usually defining history in chronological/evolutionary terms) repeated many factual inaccuracies, and the early history of the sport and industry was not in general well researched during this period. Examples of these are Arthur Judson Palmer, *Riding High: The Story of the Bicycle* (1956) and *Fifty Years of Schwinn-Built Bicycles: The Story of the Bicycle and Its Contributions to Our Way of Life* (1945), a company history.[72] Reminiscences and memoirs of those who had actually been involved in the historical process have a tendency to be more accurate and compelling, such as the Duncan (1928), Du Cros

(1938) and Armstrong (1946) accounts described just below. More recently, however, along with recognition of the importance of a critical examination of the history of sport in general, a more probing sociological and technological analysis has been carried out, directed not only at research into essential facts, but also at wider meaning and significance. Although this does not pretend to be a comprehensive survey, the main outlines of this more recent historiography are given here. Only the authors, titles and dates of works mentioned are given, while publication information in full can be found in the Bibliography.

First, mention should be made of the work of the International Cycling History Conference and its annual *Proceedings*, which have been published since 1990, the most recent fifteenth volume adding to the now extensive research into many aspects of the social and technological history of cycling. The continued existence of this Conference is an indication of the health and critical breadth of inquiry into the history of cycling in many different parts of the world. In presenting a continuous flow of historical material and inquiry into the subject, the journal of the Veteran-Cycle Club, *The Boneshaker*, should also be recognized. Rather than proposing any particular approach towards the telling of history (beyond their shared interest in the social significance of the bicycle), these two forums give an opportunity for sharing and examining a wide range of 'raw' information and source material, thus enabling historical inquiry.

Three outstanding works of the personal reminiscence/memoir-type have been particularly informative and useful to me in positioning myself as a historian of the earlier, selected period (1867 – 1903). Perhaps the most thorough attempt to give a comprehensive history of the bicycle when it was published, H.O. Duncan's *World on Wheels* (1928) probably gets closer than any previous work to accurately identifying the outlines of a satisfactory factual narrative history. Duncan's Part VI, "The Story of the Bicycle, Sport, Pastime and Industry", occupies more than a hundred pages of the precisely remembered activities of a dynamic man, well placed in the centre of the industry and sport.[73] Essential reading for an understanding of the technological dynamics of the invention of the pneumatic tyre in the period from 1885 to 1895 is Arthur du Cros, *Wheels of Fortune: A Salute to Pioneers* (1938). Du Cros gives a 15-page chapter on "The Evolution of the Cycle". Written by a man who was closely involved with Dunlop and a key player in the early pneumatic tyre industry, the

book is a crucial (and still perhaps not thoroughly utilized) account of the links between cycling sport, finance and technology. Also important for an understanding of the inter-connectedness of popular consumer-oriented journalism and cycling in the early years (explored in Section 2b of this Introduction) is Arthur Armstrong, *Bouverie Street to Bowling Green Lane: Fifty-five Years of Specialized Publishing* (1946). This book is also very informative on the continuum of technological progress from the bicycle industry towards the motorcycle and the automobile, and is an outstanding exploration of the role of the press in the dissemination of modern sport and transportation technology.

Another work which should be noted here is Norman Dunham, "The Bicycle Era in American History" (Harvard University: Ph. D. thesis, 1956), a very uneven, but still pioneering work, which accesses many previously neglected sources and recognizes the press as a crucial source. Dunham writes vaguely that he 'has attempted to depict the social and economic conditions in the periods involved, and to show how the bicycle affected American life'.[74] Although the work may be said to have set a new standard for critical examination of the sport and industry of cycling and its social impact, and certainly covers a lot of ground, it lacks direction and focus, the author himself admitting that he bit off more than he could chew. Above all, it fails to define its direction of inquiry, and thus to organize its approach satisfactorily. Nevertheless, in its many details it is an informative and useful source.

Several more recent publications complete this brief survey. The history of American racing is touched upon in Robert A. Smith, *A Social History of the Bicycle – Its Early Life and Times in America* (1972) and once more explored in Peter Nye, *Hearts of Lions – The History of American Bicycle Racing* (1988). As a general social account, Jim McGurn's book *On Your Bicycle: An Illustrated History Cycling* (1987) accurately covers the ground, with excellent sections on club life and racing developments. Keizo Kobayashi, *Histoire du Vélocipède de Drais à Michaux, 1817–1870* (1993), has explored the early French history, principally the industrial activity, but also gives an important account (pp.237-308) of the earliest velocipede racing in France. This author himself may claim to have played a small part in the historiographic dynamic of the literature of cycling history. His book, *King of the Road, A Social History of Cycling* (1975), was an attempt to understand the evolution of the bicycle within a wider social setting, and to

explore it as a technological and social phenomenon. Although it was perhaps too accepting of the chronological/evolutionary approach, and too Eurocentric in its approach, this book has been accepted as an accessible and factually reliable historical account.

Most recently, Christopher Thompson's dissertation, "The Third Republic on Wheels: A Social, Cultural and Political History of Bicycling in France from the Nineteenth Century to World War II" (Ph. D. thesis, New York University, 1997) is another valuable contribution to the social history of the French sport, while Hugh Dauncey and Geoff Hare, *The Tour de France, 1903 – 2003: A Century of Sporting Structures, Meanings and Values* (2003) is the first close examination in English of the sport's most important bicycle race. Significant recent titles in French include Philippe Gaboriau, *Le Tour de France et Le Vélo: Histoire sociale d'une épopée contemporaine* (1995) and Paul Boury, *La France du Tour: Le Tour de France – Un espace sportif à géographie variable* (1997). David Gordon Wilson's recent (2004) new edition of his classic work, *Bicycling Science*, pays abundant attention to the interaction of sport and technology in many different designs of bicycle. Most recently, Glen Norcliffe's *The Ride to Modernity: The Bicycle in Canada, 1869-1900* (2001) examines the period from 1870 to 1900 from a geographer's perspective, his conclusions about the role and function of sport paralleling many of this writer's, and David Herlihy's *Bicycle: The History* (2004) again attempts to give a comprehensive account of cycling history. Lastly, special recognition should be given to Rüdiger Rabenstein, *Radsport und Gesellschaft: Ihre sozialgeschichtlichen Zusammenhänge in der Zeit von 1867 bis 1914* (1991), a work which closely coincides with my own interests and addresses many of the issues explored here, where sport, technology and society intersect and interact. A translation of Rabenstein's book would be a valuable contribution to the literature of the subject (see the Bibliography for publication details of the books cited in the last two paragraphs).

Most recently, Thomas Burr's still unpublished Ph.D. thesis "Markets as Producers and Consumers: the French and U.S. National Bicycle Markets, 1875-1910", a work which Burr defines as 'economic sociology', opens up a new perspective on comparative national markets, and on taste and fashion in cycling sport, recreation and utility, which is likely to become a standard work once published.[75]

There is thus no shortage of writing on the history and significance of the bicycle, and most of these accounts recognize the importance of the sport. How, then, should this wide range of later critical writing be characterized? Essentially, the historical accounts belong in one of two categories. First, and this group is in the large majority, they attempt to give what I have called a chronological/evolutionary account of technological development, 'essentialist' accounts of a Darwinian nature, charting the 'progress' and 'improvement' of the bicycle from a primitive to a more advanced state, usually ending in praise for the current 'perfection' to which modern technical accomplishments have elevated the bicycle. In this approach, emphasis is put on priority inventions, heroic inventors, and the evolution of the actual machines themselves, with sport as a marginal by-product of the machine itself. Second, in the minority, are those accounts which strive to give a wider, more culturally inclusive, socially contextual history and critique of the bicycle and the sport, which recognize that technology does not develop with an inherent or intrinsic internal motivation, but is driven by a variety of forces and social groups, including sport as a crucial factor. Thompson's and Burr's accounts certainly fall into this second category.

It is this second approach which, in my opinion, is likely to lead to a better understanding of the bicycle as an instrument of sport, on the connections between the sport and the industry, on the role and social significance of the sport of bicycle racing and on its economic and social organization. Once again, the ideas of the social construction of technology (SCOT) proponents and 'relevant social groups' comes to the fore. Additionally, Rabenstein (1991), Norcliffe (2001) and Dauncey and Hare (2003) have been substantially guided by aspects of this approach, and I have attempted to make a contribution in this direction here, which is explained further in Section 3. Norcliffe, for example, pushes the idea of 'modernity' to the forefront of his social history of the bicycle in Canada. He writes that in his study, 'the emphasis has been on practical matters of innovation, design, mass production, mass consumption, improved infrastructure, and social practices in specific Canadian settings', and at the same time he adds that, 'Although the bicycle era was only a brief episode in the complex drama of modernity, it provides a number of insights into the workings of the broader cultural movement...From the time of the Industrial Revolution through to the present, modernity has unfolded through a relentless sequence of innovation and rejection...bicyclists were writing a particular history of modernity'.[76]

Iain Boal, in a recently published article, "The World of the Bicycle", complains that 'the field of bicycle history remains complacently oblivious of the critical ferment produced by the social and revolutionary movements of the second half of the twentieth century'.[77] He argues that 'bicycle history is cripplingly essentialist', that 'essentialism leads to, or perhaps springs from, a fetishizing of the artifact' and 'results in the *déformation* of the historian of technology'. He further comments on 'the Darwinian framework informing many accounts of bicycle design history, which acts to naturalize the evolution of forms' and on 'the compulsive search for origins, the moment of invention'. He concludes by arguing for 'a radical opening up of research methods, angles of approach, and dimensions of causal agency....cycle historians should be drawing substantially from cultural studies, "history from below", post-colonial studies, and the legacies of the feminist, environmentalist, and third world struggles'. Thus, he suggests the use of a much wider social and political perspective in constructing a global historical approach, and a refusal to be limited by the chronological and evolutionary explanations which have characterized so much of bicycle history to date.

- Illustrations

Because cycling was a sport which was sold to and consumed by the general public, there is also a wealth of illustrated material available to the historian, and graphic sources complement and enrich the textual sources. For this reason, I have made extensive use of photographs and contemporary illustrations here, including advertizing material. This is for three principal reasons. First, graphic publicity played a crucial role in the popularization of cycling as a sport, in establishing its status as a novel aspect of life and consumer recreation at the end of the 19th century, and it should be seen as an essential component of its history. If press reports, programmes and machines themselves as artifacts are important sources of historical information, so too are photographs and illustrations. Since cycling was a sport which encouraged consumerism and pride of possession, a great many portrait photographs survive showing individual owners with their machines. Second, photographs add a tactile, visual quality to the contact with historical reality. The glass plate from which a print was made (and from which a photograph printed in the media was copied) was in actual historical contact with an instant of historical time. Of course, the information depicted within the frame of the

photograph, like a press report or an autobiographical account, has to be understood and interpreted, but it should be recognized as an immediate and important source of historical data. Third, what did the machines which are discussed in this text look like? For those who are not familiar with them, the differences between a 'velocipede' of 1869 and a 'high-wheeler' of 1880, between a 'dwarf safety' of 1886 and a 'diamond safety' of 1893, may not be easily and accurately understood. Illustrations will make it easier to analyse and understand the sequence of design changes in the evolution of the bicycle.

Traditional discussion of historical methodologies too often focuses exclusively on textual, literary sources and minimizes other forms of representation. The use of photographs and other images to illuminate the historical moment and its wider context should, then, also be seen as part of my approach. I see this thesis as drawing on recent work in visual culture which seeks to give a proper historical weight to photographs and other kinds of images.[78]

c. The role of the press, 1867 – 1903

> "Cycling, all the world over, is by far the most richly endowed of any sport whatsoever by newspapers". (H.H. Griffin)[79]

To mention only books, and complete works published as books (such as annuals, handbooks or guides), would be to minimize the importance of other kinds of texts which were certainly read as widely as books, probably more widely, during the research period. I am thinking here not only of the ephemeral daily and weekly general press, but also of those specialized periodicals which were marketed to an audience consisting of sports enthusiasts and cyclists who were club members, or those who worked within the bicycle industry. This second category were very specifically the product of those 'relevant social groups' of journalists and bicycle industry personnel most likely to influence the development of the sport and recreation of cycling.

Cycling as a new social, economic, sporting and transportation activity was deeply embedded in late 19th century urban history, and press discussion of it might be compared in scale and scope to comment on the computer and the Internet in the late 20th century print media. Both were new phenomena which were analyzed for the effects they were having, or might be having, on society. Both phenomena affected deeply the ways in which many people used

their time, communicated with each other and interacted in their social and economic lives, and in both cases the print media provide the historian with a window through which to examine the past. In the second half of the 19th century, cycling was both a new sport and a new stage of a revolution in personal transportation which predated the automobile and aviation.

The task of understanding and interpreting the early history of cycling is made both rewarding and daunting by the existence of this large quantity of primary press documentation, an extraordinarily rich vein of cultural history perhaps unequalled by that of any other late 19th century sport. The wealth of documentation was noted at the time by H.H. Griffin, whose work has already been noted above. In 1896, Griffin wrote that 'cycling, all the world over, is by far the most richly endowed of any sport whatsoever by newspapers'.

The novelty of the sport was especially newsworthy in the early period (the 1870s and 1880s), when unusual records for speed or fast times over known routes or distance were constantly being accomplished, but as the cycling boom of the 1890s began, the coverage of both competitive and recreational cycling (and related social issues) became pervasive in the press, a conspicuous and controversial aspect of modern life which seemed always to make for an interesting and controversial story. Apart from the racing itself, many other aspects of cycling, such as the expanding industry, the formation of the many clubs, the conflicts with horses and other road-users, the condition of the roads and the need for their improvement, cycling fashions, the medical debate about cycling and health, cycling for women (should they, or shouldn't they?) were all seen as aspects of modern life worth commenting on and examining in the daily press. Within the coverage of cycling in the press, therefore, a variety of differing opinions about the values and qualities of daily social life, and the role of athletic and recreational exercise in it, can be found expressed. The contents of the press is a reflection of debate, discussion and disagreement within the wider society. Comment in the press also frequently contains a sense of historical progression, most often an awareness of rapid change and a conviction of progress towards a future technological perfection not yet realized.

During a time when sport in general occupied a gradually increasing amount of space in the daily press, newspapers and specialized periodicals were especially rich in their coverage of cycling.[80] In February 1887, the *St. James's Gazette* commented:

> It is not so long ago that there were fewer bicycles in England than there are now "cycling" newspapers. Omitting those of the latter that died in infancy, there are at present published in this country 17 journals, all dealing more or less exclusively with "cycling" affairs. This list does not include the sporting papers that only devote part of their space to the popular relaxation. Most of the cycling journals are monthlies, and several of them are of imposing appearance and profusely illustrated'.[81]

In the United States, Colonel Albert Pope, of the Pope Manufacturing Company, commented in the mid-1890s: 'There is not an industry in the country, large or small, that has as many trade papers as the cycling trade. There are altogether too many. It seems as though when any man or boy, who thinks he can write, gets out of a job and has no money, he feels called on to start a cycling paper'.[82]

In the early period, English publications such as *Bicycling News* (published from 1876), *Bicycling Times and Touring Gazette* (published from 1877) and the *Bicycle Journal* (published from 1876) recorded and documented in great detail the rise and spread of club cycling and racing in England. Comment in the major dailies was the exception. Later, there was a great deal of reporting and commentary in major daily newspapers such as *The Times*, the *New York Times*, the *Chicago Tribune* or the *Boston Globe*, many of which had weekly columns devoted exclusively to cycling by the 1890s. Regional newspapers in Britain and the United States also contained extensive coverage. On certain occasions, an annual League of American Wheelmen Convention, for example, a major trade show in London, an important French road race, or a discussion of women's fashion, a special supplement of a daily or weekly newspaper might be devoted exclusively to cycling.[83] General sporting papers also contained coverage of cycling, with London's *Bell's Life*, *Sporting Life*, *The Field* and *Sport and Play* notable examples in the early period, and typical examples in the 1890s being *Harpers*, or the *Illustrated London News*.

Most significantly, there was phenomenal growth in the specialized cycling press during the last decade of the 19th century, catering to the club athlete, the enthusiast/consumer, the tourist and racing fan, maintained by the advertizing budgets of the bicycle industry. This specialized cycling press was on the cutting edge of the growth of interest in sport in general. An excellent and under-utilized account of the inter-dependency between British cycling and the young press empires of Edmund Dangerfield, Alfred Harmsworth

and Charles Sisley is Arthur Armstrong's *Bouverie Street to Bowling Green Lane* (1946). The Bibliography gives an overview of the size and extent of this outpouring of the cycling press in the period; it does not pretend to be comprehensive.

From 1892, France had a daily cycling newspaper, *Le Vélo*, which was challenged in the marketplace in 1900 by a second daily, *L'Auto-Vélo* (later to become *L'Auto*).[84] *Le Vélo* vied in the Parisian market-place with another daily, *Paris-Vélo*, published from 1893 to 1897. These publications situated themselves at the centre of French cultural, literary and athletic life, embracing bicycle technology and mobility as an aspect of modernity. As an example of the plethora of titles available in France in the mid-1890s, advertisements included in an 1892 publication by Baudry de Saunier included the following list of cycling-related magazines: *La Bicyclette*, *Le Bulletin Officiel de l'Union Vélocipédique*, *Le Cycle*, *Le Cycliste*, *Le Cycliste Belge*, *La France Cycliste*, *L'Industrie Vélocipédique*, *Le Monde Cycliste*, *La Revue des Sports*, *La Revue du Sport Vélocipédique*, and *Le Véloce-Sport*.[85]

Cycling, Britain's oldest surviving cycling paper, founded in 1891, has been in continuous existence since then, as has the *Cyclists' Tourist Club Gazette*. *Wheeling*, a weekly owned by publisher and entrepreneur Harry Etherington, ran from 1884 to 1901. A typical issue of *Wheeling* from the mid-1880s consisted of 32-36 pages, made up of about 20 pages of advertizing and about 16 of editorial matter. A special issue for the Stanley Show (an annual winter trade event,) published 2 February 1887, consisted of 36 pages of advertizing and 28 pages of editorial text. An annual set of issues of *Wheeling* for this period fills two bound volumes, each nearly three inches thick. Other publications of comparable bulk include, to mention only some of the major publications, *Bicycling News* (begun in 1876 and published throughout the period) (see Fig. 1. 3) and *The Cyclist* in Britain, *Véloce-Sport* in France and *Bicycling World* and *Bearings* in the United States. American periodicals, based in New York, Boston and Chicago, such as *Bearings*, *Bicycling World*, *League of American Wheelmen Bulletin*, *The Referee*, *Springfield Wheelmen's Gazette* and *The Wheel and Cycle Trade Review*, are also bulky productions.

For the historian, therefore, it is evident that this extraordinary wealth of press documentation of cycling presents both a huge opportunity and considerable problems of digestion and interpretation. The sheer quantity of it has significantly affected the contents of this account and my historical approach to it, persuading me that cycling was very much a public activity, a conspicuous fact of everyday life. The press accounts provided evidence that those who were most actively involved in the unfolding historical movement, and who left this extensive documentation behind them, were worth paying close attention to. Cycling as an economic and sporting activity was dependent for its expansion and growth on the printed media, to advertise its products, to publicize and report its races and to organize itself socially. The sport, the industry and the press existed in a mutually beneficial and profitable social, economic and entrepreneurial relationship.

From the mid-1870s onwards, the monthly and weekly cycling press publicized a variety of club activities and races. In the 1880s, the press reported the arrival of the 'safety' bicycle. From the early 1890s, as will be explained in Chapter 7, the press in France and the United States (though not in Britain) became actively involved in the sponsorship of road races as a way of boosting circulation, a successful business formula which led to the foundation of modern European road racing and to the press sponsorship of the first Tour de France.

The media helped to give coherence and definition to a geographically scattered special interest group. For example, in June 1886 the *National Cyclists' Union Review and Official Record* was introduced, the first time that the governing body of the British sport had published its own journal. It promised that the N.C.U. had 'no desire to compete with the various journals and magazines devoted to cycling now so freely issued from the press, and which give ample facilities for the reporting and discussion of the various matters constantly cropping up in the cycling world', and tribute was paid to 'the most valuable aid afforded to the Union by the press during the past eight years, which has kept our members informed'.[86]

In the United States, the League of American Wheelmen was closely associated with the publication of a journal, *Good Roads*, dedicated to improving the condition of American roads, and illustrating the profoundly inter-connected way in which sport and recreation impacted other practical aspects of social life.[87] *Bicycling World*, founded in 1877 as *The American Bicycling Journal*, was published uninterrupted for more than twenty years. The

editorial in its first issue was directed at those who were 'desirous that they should benefit themselves and their posterity morally, mentally, and physically, by sparing a portion of their time for healthful exercise in the open air, expanding their chests and their hearts equally in so doing'.[88]

Thus, the growth of cycling was closely linked with the expansion of its own specialized press, catering to the new sport and the recreational interests of its readers. The press reflected the preoccupations both of its journalists and the audience for which they were writing. The risks of an approach which makes extensive use of press reports as a principal source should also be recognized. Press accounts are frequently self-interested and need to be approached critically, bearing in mind the point of view, the financial interests and the particular class or political slant of writers and editors. Nevertheless, the amount of 'pure' factual information, passionate opinion and extended discussion of topics of current social, economic and sporting interest contained in the press is constantly stimulating and revealing.

3. Methodology: research strategy and the design and originality of the approach

a. Historical method

The dissertation has involved the construction of a discursive, analytical narrative account, drawing on the most informative primary sources and paying close attention to chronology, an account which seeks to understand the essential structure of historical events and social and economic relationships. But it is also necessary to recognize that in creating this historical narrative, a personal selection and certain chosen criteria have been used and imposed, and these should be identified and spelled out.

In an essay, "From Social History to the History of Society", in which he sets out to examine and define his understanding of 'social history', Eric Hobsbawn asks, 'How are we to write the history of society?' He answers his question by describing three 'signposts'. First, he says, 'The history of society is *history*; that is to say it has real chronological time as one of its dimensions. We are concerned not only with structures and their mechanisms of persistence and change, and with the general possibilities and patterns of their transformations, but also with what actually happened'. Second, he writes, 'The history of society is, among other things, that of specific units of people living together and definable in sociological terms'. Third, 'The history of societies requires us to apply, if not a formalized and elaborate model of such structures, then at least an approximate order of research priorities and a working assumption about what constitutes the central nexus or complex of connections of our subject, though of course these things imply a model. Every social historian does in fact make such assumptions and hold such priorities'.[89]

Hobsbawn usefully outlines three aspects of the approach adopted here, which may be summarized as: a) an examination of historical chronology, b) an examination of the relationships of 'specific units of people' (close to the SCOT concept of 'relevant social groups' discussed below), and c) an examination of research priorities and of 'the central complex of connections' of the subject. These are certainly three of the most salient priorities.

In constructing such a narrative of, and a critical discourse about, the social and economic history of a complex sporting activity during a period of about 30 years, how can the chosen

approach and method be further described and justified? The answer is only partly contained in the recognition above (in Section 2.c. above) of the wealth of written documentation on cycling, particularly the newspaper and periodical press, and the poverty of current critical examination of it. The investigation takes advantage of the contemporaneous flowering of cycling as a sport and the late-Victorian expansion of the newspaper and periodical press, and this primary source material has been intensively interrogated here in order to provide the basis of a narrative history of the principal events, actors and social institutions. But it can only be seen as one source of the material from which the formulation of an analysis and conclusions can be made. The telling of history, then, using this empirically-grounded narrative method based in written source material, contributes to the analysis of the "shaping" factors in cycling and its events, significant facts, conjunctures and developments within the wider processes of historical change. The use and analysis of the press and other published documentation is, therefore, one central aspect of my approach. But it does not in and of itself constitute a method. [90]

The range of subjects and themes which has had to be addressed also needs to be recognized, and the inclusion of the many different aspects of the history justified. Essentially, this discursive history explores various different aspects of life - economic, industrial, technological, institutional, recreational and sporting - and does not easily lend itself to a one-dimensional, or a one-discipline, inquiry. Reflecting on the phenomenon of cycling which had expanded to a great extent over the previous twenty years, the author of the Badminton *Cycling*, a book which became the standard work on the subject during the 1890s, wrote:

> It is however not only as a means of locomotion that the cycle has produced a change in this and many foreign countries. The manufacture of these carriages has caused a considerable trade to come into existence, and a new and very exciting mode of racing has been added to the sports of the world. The historian of cycling has therefore something to say of it as a trade, as a sport, and as a pastime: beyond this, again, there is something to be said as to the social organization to which it has given rise, and the not inconsiderable industry to which the requirements of the cycling public give employment outside the limits of the cycle-builder's factory.[91]

The writer of the above, describing his thoughts in 1887, understood the difficulties of evaluating the history of cycling in his own century. These difficulties persist. Competitive and recreational cycling, both equipment-dependent sports, were enmeshed in a network of cultural, economic and technological institutions. Thus, the close relationship the sport had in the 19th century with a diverse range of cultural and technological factors (outside actual

competition or recreation) has required that this dissertation pay attention to a variety of social, cultural, economic and technological issues and themes.

These themes need constantly to be kept in view in proposing a broad-based social history of bicycle racing and recreation. They may be seen as the analytic categories with which I am concerned, the dimensions of analysis, or the underlying justifications of the narrative methodology. They are the motors or drivers of my research. In a wider sense, these themes or categories may be seen as preoccupations not only of the social historian and sociologist, but in particular of the historian of sport. In no particular order of importance, the following are among the themes addressed here:

- The nature of actual competition itself and its institutional and organizational framework.
- Spectatorship and its constituents.
- Records and record-breaking as a driving force within competition.
- Socialization and club formation, including questions of masculinity, gender exclusivity and female inclusion.
- Institutionalization within the sport, from local clubs to regional, national and international governing bodies; the search for international acceptance and standardization within competition and its political dimension.
- Class and its social correlates, in particular its relationship to amateurism and professionalism.
- Sport as a testing ground for machines, the structure of manufacturing and industry, entrepreneurship, advertising, marketing and patterns of consumption and distribution, technical innovation and associated annual style changes.
- Legal issues concerning the bicycle as a vehicle on the public road, both for sport and recreational use.
- Physiological and training issues in cycling as a sport.
- The significant role of the press in disseminating cycling news and selling consumer products.

All these social, cultural, economic and technological themes, which historically constituted the wider underpinning of cycling as a sport, have had to be considered in laying out and defining a methodological approach for this dissertation, and in constructing a narrative. I have attempted to explore the principal points of inter-connection to show the essential social,

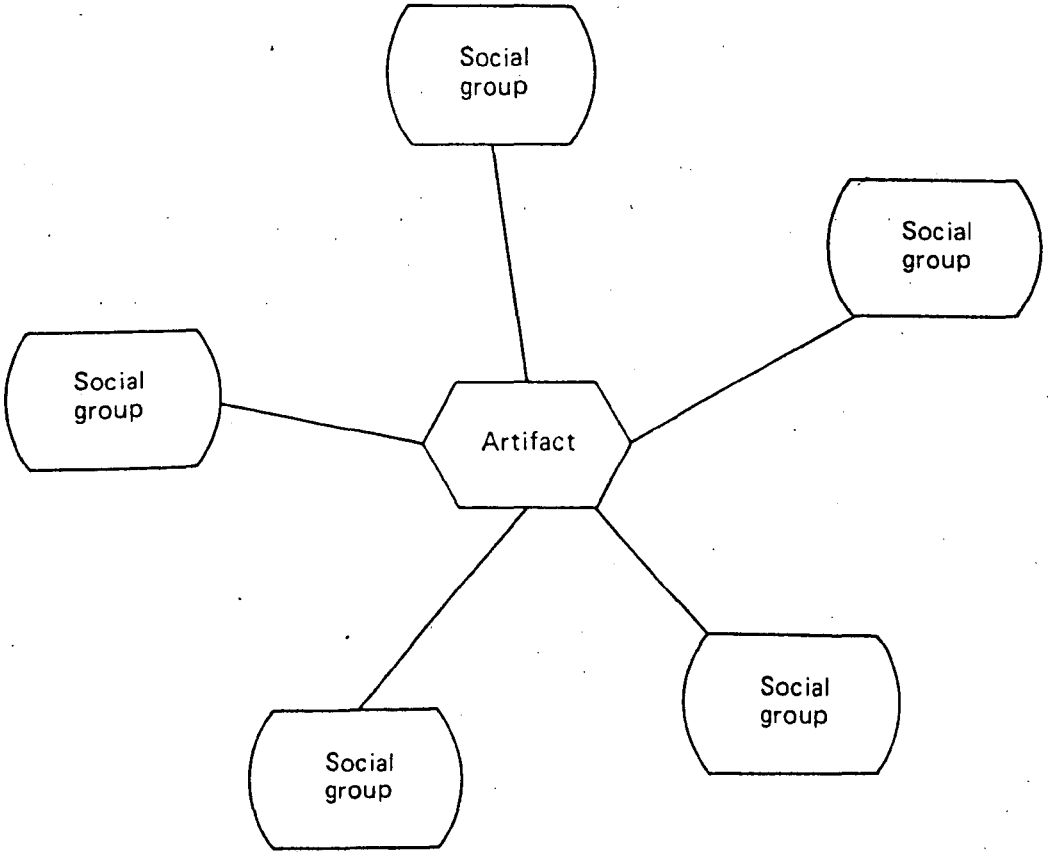
cultural and economic matrix defining and constituting the sport. In evaluating the best method to use in this examination, it seemed appropriate to make use of a broadly chronological approach, to chart the principal directions and relations, the evolving historical features, of cycling as a cultural and technological movement. Wherever appropriate, I have attempted to relate cycling to other contemporary sports, but have not set out to make these comparisons a crucial part of my examination. Other sports, particularly those with an equipment-dependent basis such as rowing or skiing, shared various aspects of the cycling story. Nevertheless, cycling's unique equipment-dependency, and its three-mode structure, gave it a special status among sports.

What were the specific factors which lay behind a particular manifestation of the sport? If a major newspaper successfully sponsored a race, that was certainly a significant fact. If American cyclists were invited to Britain and won British championships, that too was certainly a significant fact. If technological advances such as the development of the 'safety' bicycle and the pneumatic tyre quickly effected huge changes in the entire sport and redefined recreational possibilities for thousands of people, then those too were obviously significant facts. The approach therefore has a tendency to be qualitative rather than quantitative, to be descriptive rather than sociological. Although statistics, for instance about club membership, bicycle production or speeds achieved in racing, have been given where appropriate and available (Chapter 9 for example), the dissertation is not primarily about numbers or statistics, but about cultural, social and technological movements and trends within history. I am neither setting out to write an economic history of the bicycle as a machine, or of the bicycle industry, nor attempting to impose one particular approach or viewpoint, as a sociologist or social scientist might do.

b. The relevance of the social construction of technology (SCOT) approach

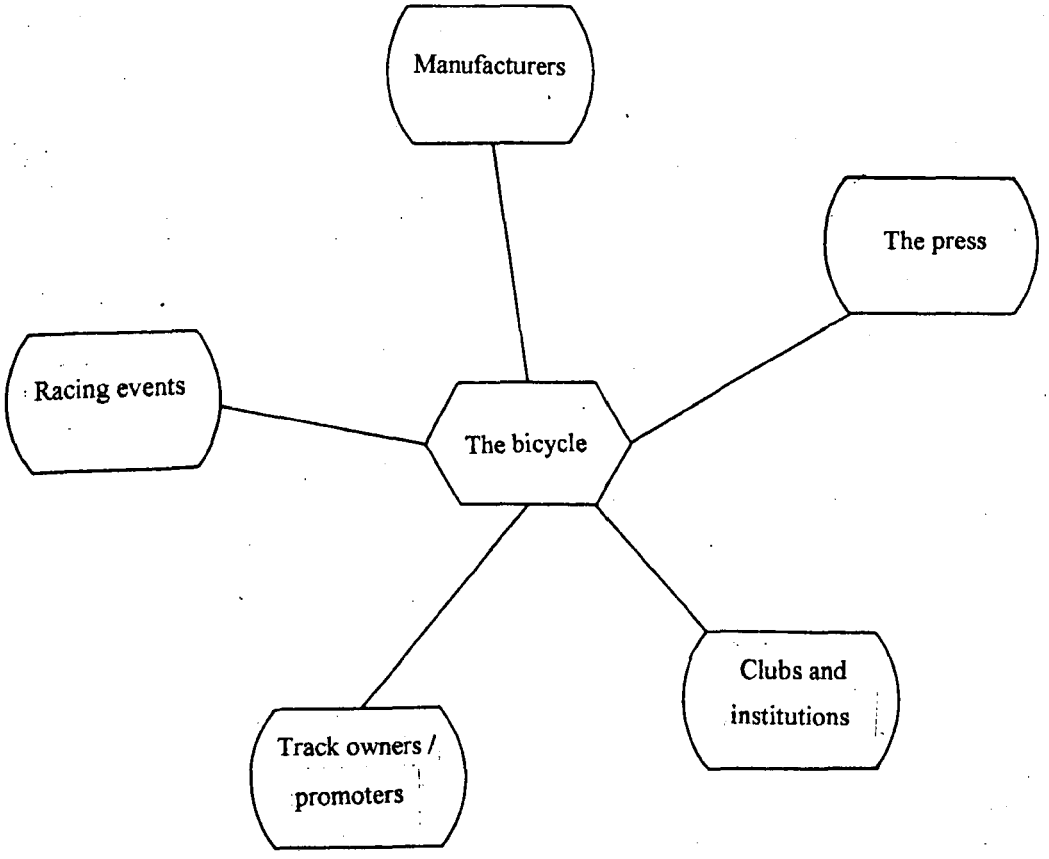
In considering the nature of the approach here, the SCOT (social construction of technology) analysis of the nature of technological evolution and change has been found to be relevant and helpful, although it does not in itself constitute a method. It is necessary to view the historical accounts and source material relating to cycling not only in the light of recent advances in the history and sociology of sport but also in science and technology studies.

Although not without its problems as currently argued with reference to bicycle technology, the SCOT approach provides a conceptual framework within which to consider and attempt to make sense of evolving technology, particularly with its suggestion of 'relevant social groups' which contribute towards 'shaping' technological change. In a section of his book *Of Bicycles, Bakelites, and Bulbs* entitled "Empirical research to identify relevant social groups", Bijker constructs a diagram as a heuristic to illustrate the relationship of the 'relevant social groups' to the artifact (see Fig. 1 overleaf).[92] In the wider social history which is outlined here, these 'relevant social groups' can easily be defined, for example, in the racing cyclists, the designers and manufacturers, recreational users, clubmen and women, utility users, promoters, advertisers, managers, etc, who had input into both the emergence of machines themselves and the definition of the sport as it developed. I have taken the Bijker diagram and inserted categories specific to the social history of cycling to illustrate the relationship between the bicycle and those 'relevant social groups' which impinged historically upon it (see Fig. 2 overleaf). It is also in the details of these 'relevant social groups' that we can most often hope to quantify, in a sociological sense, the relative contributions of the groups. The 'relevant social groups' may fairly easily be identified in the analytical categories and the social, cultural, economic and technological themes discussed in the previous section (3. a.):



Related to an artifact, the relevant social groups are identified.

Fig. 1. 1. Diagram from Wieber Bijker, *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change* [Section 2. 4., p. 47, "Empirical research to identify relevant social groups"] identifying various social groups which relate to and affect a technological artifact.



Related to an artifact, the relevant social groups are identified.

Fig. 1. 2. Using the heuristic proposed by Bijker, the diagram may be expanded and used to illustrate the inter-relationships between racing and recreation (the sport), manufacturers, clubs and national institutions, owners and promoters, and the press, defining these entities as 'relevant social groups' which impacted the evolution of the bicycle.

One of the main emphases of my account is the charting and demonstration of a dynamic relationship between sport and technology. Why do artifacts – in this case, sports equipment, bicycles – evolve in the way that they do? This is a category of historical inquiry which does not have much of a precedent. Many accounts from the period under investigation emphasize the impact of the sport on developing bicycle technology. In the passage below from 1911 it is clear that one of the more controversial contemporary commentators, George Lacy Hillier, understood the crucial role that sport had played in the evolution of bicycle technology:

> Cycling has many claims on the community outside the race path, and it is quite conceivable that it might in course of time have attained its present position without the aid of racing, but its rapid advance is indubitably due in a very great degree to cycle racing and racing men. The experience gained by the manufacturers in their efforts to meet the demands of the latter for lighter and consequently faster machines assisted very materially in the improvement of the cycle, as constructed for the ordinary user, and it is a mere truism to assert that the roadster of today is simply the racer of yesterday.[93]

The originality of the particular approach of this thesis is to put the early sport of cycling from 1867 to 1903 in a central position, and to examine the social factors which impinged upon it, created it and changed it. I examine its nature, its significance, its meaning, its origins, its early growth and development, its symbiotic relationship with the bicycle industry, the growth of social institutions within it, the comparative development of the sport within the three principal countries involved, and the nature of cycling as an aspect of modernism as it became a fully-fledged spectator sport at the turn of the century.

The thirty-year period studied here, as has been suggested above, provides many well-documented examples of the emergence and evolution of new institutions within a 'modern', equipment-dependent sport. The sport of cycling, as we have previously emphasized, depended on, co-existed with and was a stimulus to, the growth and development of the bicycle industry. Sport and technology cross-fertilized each other, as they continue to do today. The relationship, however, was not always a comfortable one and there was often tension between them.[94] Bicycle racing depended on the development of an optimally efficient machine, but this mechanical evolution was not socially neutral, it did not develop according to a pre-determined, self-contained, inherent technological logic, but has to be seen and explained as the product of a social as well as a technological process.

A tendency in writing about the evolution of the bicycle from 1867 to about 1900 has been to explain the evolution of the many different designs of bicycle and tricycle as having been propelled by internalized design and technological considerations, a kind of logical, linear mechanical 'improvement' progressing inevitably towards a finalized, perfected, stabilized artifact, with sport as posterior 'application', a mere effect of technological development. This is the 'essentialist' definition of technological evolution. In such a historical narrative, sport is seen as a social activity that shifts and changes as a result of technological advances, or in reaction to them, but is not credited with being constitutive of them. In fact, as we can see clearly from our present historical perspective (where technological change within cycling still progresses at a rapid rate), a 'stabilized artifact' has never in fact occured, and the definition of 'the bicycle' is constantly being renewed through a process of both social and technological construction (the pressures of various new 'relevant social groups'). A widely quoted, currently available account of the evolution of bicycle design by Wieber Bijker, for example, makes use of the evolution of bicycle technology as one facet of an attempt to construct a general theory of the social construction of technology, but in it, in this writer's opinion, sport is under-valued as a determining factor in the evolution of bicycle design, even though wide social influences are acknowledged.[95]

In this much-publicized recent work on the history of technology, Bijker pays lip-service to the significance of sport in bicycle design, but underestimates the role of sport in, for example, the birth and death of the high-wheel bicycle. Any historian exploring early cycling (as sport or technology) must cope with the difficulty of analyzing and explaining the bewildering variety of machines produced by the bicycle industry between 1870 and 1900, and in particular with how to explain the high-wheel bicycle. As an experimental playing field for sport historians, sociologists and historians of technology, the evolution of the bicycle provides an ideally complex and sophisticated subject. In choosing bicycle technology as one of the focuses of their investigations, Bijker understood and appreciated the bicycle's value as a technological test-case although the details of his research is sometimes questionable. But he fails to allow for the centrality of sport as a factor in shaping bicycle evolution.

The perceived functional illogicality of the high-wheel bicycle, the alleged technological 'detour' described by Bijker, becomes comprehensible only when the machine is seen from the perspective of sport, when it is recognized that the exigencies of sport were the principal

determinants of its design and technology. The demands and challenges of sport cycling provided a constant new impetus for technological advance, from its earliest days. In a catalogue of his bicycles from 1874, bicycle manufacturer and leading English professional champion John Keen claimed proudly for his machines that:

> in contests with the most improved machines of other makers they have always maintained their great superiority. The greatest and fastest runs on record have been performed, both by professional and amateur riders, on these machines. The Championship of the World was won by John Keen on one of his own machines, and this Championship is still held by him.

When a World Championship was at stake (the one described here was still an 'unofficial' championship), maximum speed using the best available machine was a crucial consideration.[96]

As an example of the relevance of the SCOT approach, I would cite the rise and fall of the high-wheel bicycle. This machine cannot be explained in terms of the logic of a technological determinism, but only in terms of the various 'relevant social groups', the athletic clubmen and the innovative manufacturers who developed, created and used it, and of other groups which were excluded from using it. This is further argued in Chapters 3 and 5. The high-wheel bicycle 'relevant social groups' did NOT include two other important potential user-groups: those who might use personal transportation for utility purposes; and women, who were excluded because of the danger and the impossibility of riding the high-wheel bicycle in long skirts. Once the safety bicycle had been put into production, however, utility users and recreational users constituted much larger, influential 'social groups', which completely turned their backs on the high-wheel bicycle, driving it into extinction in the space of several years, and significantly affecting the forward movement of both the bicycle industry and the sport. The value of the use of the 'relevant social groups' as an instrument of analysis here is that it allows us to examine and define the relative influence of different categories of people on the unfolding social and technological reality.

The emergence of both bicycle racing and recreational cycling from 1870 onwards offers for study and analysis a well-documented early model of interaction between sport, design, manufacturing, marketing and the consumption of recreational leisure in modern society, a pattern of social and commercial activity which still exists today in an intensified form. Cycling developed fast, and 'improvements' and new designs were constantly launched into

the market. Function, fashion and the exigencies of sport all played a part. But the introduction of the 'safety' bicycle and the pneumatic tyre revolutionized the industry and the sport, and opened efficient and comfortable cycling to a wider constituency. The inclusion of women in recreational cycling was a significant expression of their social emancipation. New needs were created and exploited and new demands were stimulated by advertising.

Cycling sport, with its demand in the last quarter of the 19th century for speed and endurance and its record-breaking impetus - the obsessive compulsion to attempt to surpass previous performances – thus drove forward to a great extent the dramatic technological progress of the bicycle. Competitors with the best equipment were always favoured to win bicycle races. When the 'safety' bicycle was found to be not only safer but also faster than the high-wheel bicycle, a dramatic and rapid shift in technology and style occurred within racing. The advantages of the pneumatic tyre were quickly understood to lie in both its speed and its comfort. These radical technological design changes were demonstrated and proven by elite racers before they were introduced to the general public, which accepted them enthusiastically (see Chapter 6).

The varied and complex development of cycling created a wide range of categories of races and records. Racing on both road and track resulted in a variety of different kinds of competition, appealing to different kinds of athletes (for example, pure speed over shorter distances and endurance races over longer distances on the track; massed-start races, time trials, place-to-place rides on the road). In all the different kinds of cycling competition, the urge towards accurate measurement of time and distance, the quantification of the athletic process, was extremely strong. National and international governing bodies were founded; national and international championships quickly emerged. From the late 1870s onwards, world records for short and long distances were recorded and energetically attacked, and by the turn of the century, as will be described in Chapter 10, previously unimagined speeds and distances had been achieved.

c. The social history of cycling and its relationship with adjacent fields

I have been conscious all along that I have been working, in many respects, in an unploughed field. The findings therefore constitute, first and foremost, an act of historical recovery of the early history of bicycle racing (which overlaps with the closely related fields of recreational

cycling and utility cycling).

I have not, as a social scientist might, taken some abstract postulate within the field of the sociology of sport and then proceeded to test it against a case study drawn from the history of bicycle racing. Nevertheless, the dissertation constitutes not only a narrative account but is at the same time a theoretical engagement concerning the history and development of cycling and the causal factors – prominent among them the varied exigencies of competitive and recreational sport - shaping the design of the bicycle in the period 1867-1903. The theoretical framework is, broadly speaking, "social constructionist", and in particular - with respect to the domain of human artifacts - the approach that goes by the acronym SCOT (Social Construction of Technology), which I have justified and elaborated in Section 3. b. above.

Because the history of the bicycle – and the sport of cycling - depends on the factory system and industrialism, it has been necessary to consider the economic aspects of production, and to that extent it does draw on economic history. However, it is not intended as a contribution to business history, but is framed within the goals and methods of social history and the history of technology, and their interaction.

In approach this dissertation belongs to the field of social history. It is structured, broadly speaking, discursively and as a chronological narrative, though with some quantitative data and evidence displayed in tabular form. The research and the work of interpretation have been deeply informed by the visual and photographic record. It is an empirically-based inquiry, and deploys the tools of the historian. Its findings are the fruit of archival research and close familiarity with primary historical evidence drawn from late 19th century sources, both primary and secondary, interpreted in the light of recent theoretical advances in the sociology of science and technology. That is to say, the social historical aspects of the dissertation are theoretically congruent, and mesh with, those aspects of the inquiry that focus on the machine itself, viz. the bicycle, and fall under the rubric of the sociology of technology.

The approach to the technological realm taken in the dissertation is one that refuses to regard artifacts as a self-contained, self-evolving objects and insists on embedding them firmly in their social and cultural environment. This approach leads to a series of fruitful questions: What are the forces shaping the evolution of this or that particular artifact? What are the

'relevant social groups' (to use SCOT-theoretical terminology) that influence and shape, in this case, the bicycle as a technological artifact? Who, and what, were the agents with a causal role at this formative period in early cycling history?

Notes to Chapter 1 - Introduction

[1] Neil Tranter, *Sport, Economy and Society in Britain, 1750-1914* (1998), "The 'revolution' in sport", p.29.

[2] Should the word 'Britain' or the word 'England' be used? This has been problematic and there is no totally satisfactory resolution to the problem. 'Britain' includes England, Scotland, Wales and Northern Ireland, and therefore any use of the term 'Britain' or 'British' implies the inclusion of all four countries. Nevertheless, the 'British' sport and industry was centred to a large extent in England, and Scottish and Irish cycling had a distinct character and formed institutions which were to an extent independent of those centralized in England (in London or the industrial Midlands, for example). I have, therefore, most often use the terms 'Britain' and 'British' to include general aspects of social and cultural history and the term 'English' when it most appropriately excludes Scotland, Wales and Ireland. For a general discussion of the problematic nature of the terms 'Britain' and 'British' in the light of English hegemony of the British Isles see Tom Nairn, *The Breakup of Britain* (London: Verso Books, 1990).

[3] The cycling events included a 1 lap (1/3 km) time trial, a 2 km match sprint, a 10 km track race, a 100 km track race, a 12 hour track race and an 87 km road time trial (see Chapter 7). The other sports included in the 1896 Olympics were: athletics/track and field (including 100m, 400m, 800m, 1500m running, 110m hurdles, high jump, pole vault, long jump, triple jump, marathon, discus), fencing and shooting. 245 men from 14 countries competed in 43 different events. See: David Wallechinsky, *The Complete Book of the Summer Olympics* (Boston, New York and London: Little, Brown, 1996).

[4] I have purposefully avoided the use of the word 'invented' here, since exploration of the moment of 'invention' of the bicycle is too complex to undertake within the scope of this dissertation. However, the athletic aspects of riding the Draisine or hobby horse in the 1818-1820 period, as well as various kinds of 3 and 4-wheeled human-powered velocipedes in the 1820-1860 period, should not be discounted. Although there were some earlier, experimental bicycle-like 'velocipedes' which probably date to the 1840s (see Andrew Ritchie, "The Velocipede of Alexandre Lefebvre and Problems of Historical Interpretation", *The Wheelmen*, #59, Nov. 2001, pp.10-21 for a discussion of these pre-bicycle velocipedes), it is now generally agreed to accept 1865-66 as the date

of the first manufacture of the 'modern' bicycle in Paris, before its slightly later diffusion to the United States (1866-68) and Great Britain (1868-69). As the illustration of the Compagnie Parisienne (Michaux) factory makes clear (see Fig. 1. 1), the production of this bicycle was on a large, industrial scale.

[5] Neil Tranter, *Sport, Economy and Society in Britain, 1750-1914* (1998), "The 'revolution' in sport", p.29.

[6] Keizo Kobayashi, *Histoire du Vélocipède de Drais à Michaux, 1817 – 1870* (Tokyo: Bicycle Culture Centre, 1993), pp.237 – 239.

[7] John Lowerson, *Sport and the English Middle Classes*, 1870-1914, pp.116-17.

[8] Poyer, Alex, *Les Premiers Temps des Véloce-Clubs: apparition et diffusion du cyclisme associatif français entre 1867 et 1914* (Paris: L'Harmattan, 2003). Poyer notes, for example, the predominantly urban nature of cycling clubs, with only about 30% of clubs being rural in 1914, and the Paris region having about a fifth of all clubs. He also notes the gap between utility bicycle usage and competitive/sporting practice. There were about 3½ million bicycles in France in 1914, but only 4% of those belonged to a club. In 1890, club members made up 10% of bicycle users (p.306).

[9] Recently published research has outlined the extent of the sport in Bohemia, where about 900 Kohout bicycles were manufactured in the 1880s. See Jan Kralik and Jaroslav Vozniak, 'The History of Kohout High-Wheel Bicycles', *Proceedings of the 10th International Cycling History Conference*, pp.25-31.

[10] As will be documented in Chapters 4 and 10, bicycle racing, particularly in the later 1880s and 1890s, encouraged well-advertised, public tests of stamina. The hunger for long-distance events and super-human feats of endurance and strength was a tradition reaching back into the 18th and 19th centuries, when marathon horse-riding and 'pedestrian' (running and walking) tests had taken place, often on a place-to-place basis, frequently the result of an upper-class wager. See - Don Watson, "Popular Athletics on Victorian Tyneside", *International Journal of the History of Sport*, Vol. 11, No.3 (Dec. 1994), pp.485-94; Walter Thom, *Pedestrianism; or, An Account of the Performances of Celebrated Pedestrians during the Last and Present Century; with a Full Narrative of Captain Barclay's Public and Private Matches; and an Essay on Training* (Abderdeen: Chalmers, 1813); Anon, *Memoirs of the Life and Exploits of George Wilson, the Celebrated Pedestrian, who Walked 750 Miles in 15 Days, etc* (London: Dean and

Munday 1815); Thomas Elworth, *Sketches of Incidents and Adventures in the Life of Thomas Elworth, the American Pedestrian* (Boston, 1844); 'Stonehenge', *British Rural Sports; Comprising Shooting, Hunting, Coursing, Fishing, Hawking, Racing, Boating, and Pedestrianism* (London: Warne and Co., many editions in 1870s and 1880s). But long-distance road racing, in the 1890s and from 1903 onwards in the Tour de France, was also a demanding test of strength and stamina.

[11] See Anson Rabinbach, *The Human Motor: Energy, Fatigue and the Origins of Modernity* (Berkeley: University of California Press, 1990).

[12] Lowerson, op. cit., p.117.

[13] An active debate still surrounds the SCOT approach to understanding and interpreting technological change. See Trevor J. Pinch and Wiebe E. Bijker, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other"; Chapter 1 of *The Social Construction of Technological Systems - New Directions in the Sociology and History of Technology.* This account was later published in a revised form as "King of the Road: The Social Construction of the Safety Bicycle", in Wiebe J. Bijker, *Of Bicycles, Bakelites and Bulbs – Toward a Theory of Sociotechnical Change.* Stewart Russell criticizes Pinch and Bijker in "The Social Construction of Artefacts: A Response to Pinch and Bijker", and Pinch and Bijker respond with "Science, Relativism and the New Sociology of Technology: Reply to Russell", both in *Social Studies of Science* (London, Beverly Hills and New Delhi, SAGE), Vol. 16, 1986. Trevor Pinch summarizes objections to SCOT in Robert Fox, ed., *Technological Change*, 1996, pp.17-35. Nick Clayton reviews the historical accuracy of Pinch and Bijker's account of the bicycle in "Of Bicycles, Bijker, and Bunkum", *Cycle History 10 – Proceedings of the 10th Cycle History Conference.* *Technology and Culture*, Vol. 42, #2 (April 2002, pp.351-373), contains an exchange between Clayton ("SCOT: Does It Answer?") and Pinch and Bijker ("SCOT Answers, Other Questions. A Reply to Nick Clayton"), with a response from Bruce Epperson ("Does SCOT Answer? A Comment"). The most recent addition to this discussion is Paul Rosen, *Framing Production – Technology, Culture, and Change in the British Bicycle Industry* (Cambridge and London: MIT Press, 2002).

[14] "Common Themes in Sociological and Historical Studies of Technology", in *The Social Construction of Technological Systems - New Directions in the Sociology and History of Technology*, p.12.

[15] Richard Mandell, *Sport, A Cultural History* (1984) pp.137-38. Mandell writes further: 'The thoroughbred horses....were subjected to long-term preparations which we can call "training". Expensive horses had to be meticulously, almost scientifically, nourished, conditioned and exercised...Success in early modern English sport was not the result of prayers but of rational applications of time, energy, intelligence and financing'. p.141.

[16] A recent exemplary expression of this dual nature and function of the bicycle can be seen in the development of the mountain bike in Northern California. The mountain bike, which originated in the 1970s as a 'cultish' racing and recreational machine on the fire-trails of Marin County, was quickly and unexpectedly transformed into a globally popular and fashionable urban utility bicycle and seized upon by the bicycle industry. Mountain bike sales exploded, and its wider sporting potential was also quickly recognized. Off-road and downhill competition grew, sponsored by the industry, and within a few years had won Olympic recognition. A new style of utility bicycle and a new sport emerged almost at the same time. Informal sport fertilized technological innovation; innovation was then channelled into utility; and finally the exigencies of the consumer marketplace once again stimulated sport. One of the pioneers of the mountain bike has said of the early days of informal down-hill racing: 'Races were a meeting place for the most innovative riders and builders because such events provide the most severe tests of performance available'. Charles Kelly, quoted in *Cycling Weekly*, 1 January 2000; see also Frank Berto, *The Birth of Dirt - Origins of Mountain Biking* and Frank Berto, "Who invented the mountain bike?", *Cycle History 8, Proceedings of the 8th International Cycle History Conference.*

[17] The account in Chapter 2 will show how bicycle entertainment in the late 1860s borrowed from various other kinds of indoor and outdoor sporting activity.

[18] In this sense the high-wheel bicycle was far less 'practical' than, for example, the four-wheeled velocipedes of Willard Sawyer, manufactured earlier in the 1850s and 1860s, which offered stability and safety (see Ritchie, *King of the Road*, pp.39-46).

[19] Starley and Sutton, makers of the Rover safety bicycle, in 1885 advertized their machine in the following way – 'Have you seen the Rover safety? If not, do so at once –

and try it. Pronounced by experts the Fastest Cycle ever yet made. One trial will prove this'. (*Wheeling*, 26 August 1885).

[20] For example: 'Energized by the general enthusiasm in the new sport and pastime, practically every male convert to cycling developed an irrepressible ambition to emulate on the street and road the popular favorites of the race track, and as a consequence road racing models were demanded which resembled in every respect save in strength and weight, the track machines. Handlebar, tire, pedal, toe clip and gear styles were set for years by the racing men', *Cycle Age and Trade Review* (U.S.), 16 Aug. 1900.

[21] See Duncan Jamieson, "Bicycling Touring in the late 19th Century", *Proceedings of the 12th International Cycling History Conference.*

[22] If it is true in general that formal competition has served to advance cycling technology, it is also true that in certain instances, technological change or 'progress' has been held back by the rules and regulations imposed on the sport by organizers or governing bodies. One noteworthy example of this is the reluctance of Henri Desgrange (founder of the Tour de France) to allow multiple-gearing in the race when tourists in France were already making extensive use of *dérailleur* gears. This resistance did not break down until the end of the 1930s. For a variety of reasons, regulations have been made by the Union Cycliste Internationale as to the type of bicycles allowed in various categories of races.

[23] Lowerson's definition of cycling as 'more distinctly pan-class than any other late Victorian boom sport' will be carefully examined here. As cycling clubs grew in number in the 1890s, though the majority appear to have been rooted in the urban middle-class, many distinctly working-class clubs can be found attached, for example, to the industrial work-place, and fashionable upper-class clubs were also momentarily popular in the mid-1890s.

[24] Chap. 1, 'The Principal Character in the Story', in H.G. Wells, *The Wheels of Chance*, first published in 1896 (many editions).

[25] Gerard Cobb, President of the Bicycle Union, address to executive members, *The Country*, 21 Dec. 1878; also issued as a reprinted speech (Cambridge University Library, Cambridge University Bicycle Club papers, Add. 7628).

[26] 'The Amateur Question', *Bicycling News*, 24 Aug. 1877.

[27] There was, indeed, women's racing from the beginnings of the sport, with professional high-wheel racing regularly reported in the 1880s, amateur tricycle riding in the later 1880s and pneumatic-tyred racing in the boom years of the 1890s. It is surprising that more work has not been done on women's bicycle racing. The character of much of this racing, however, particularly when it was promoted by men, was that it was balanced between genuine athletic competition and risqué, profit-making entertainment. See, for example, Heather Drieth, "Tillie Anderson the Terrible Swede: America's Women's Champion", *The Wheelmen* #56, May 2000, pp.2-10.

[28] "Athletics", *Contemporary Review* 3 (1866), p.374; "Light and Dark Blue", *Blackwood's Edinburgh Magazine* 100 (1866), pp.446-60. All quotations from Roberta J. Park, "Athletes and Their Training in Britain and America, 1800 – 1914", in Jack Berryman and Roberta Park, *Sport and Exercise Science – Essays in the History of Sports Medicine* (Urbana and Chicago: University of Illinois Press, 1992).

[29] J.A. Mangan, *Athleticism in the Victorian and Edwardian Public School: The Emergence and Consolidation of an Educational Ideal* (Cambridge: Cambridge U. P., 1981) and *The Games Ethic and Imperialism: Aspects of the Diffusion of an Ideal* (Frank Cass: London, 1986).

[30] J. A. Mangan, "Oars and the Man: Pleasure and Purpose in Victorian and Edwardian Cambridge," *British Journal of Sports History*, Dec. 1984, pp.245-271 (recently republished in J. A. Mangan, *A Sport-Loving Society: Victorian and Edwardian middle-class England at Play*, 2006, see below); "Social Darwinism, Sport and English Upper Class Education," *Stadion* VII Autumn 1982, pp.93-116.

[31] J. A. Mangan, *A Sport-Loving Society: Victorian and Edwardian middle-class England at Play* (Abingdon: Routledge, 2006), p.2.

[32] Peter Bailey, *Leisure and Class in Victorian England* (London: Routledge, 1978); John Lowerson, *Sport and the English middle classes* (Manchester: Manchester U.P., 1993).

[33] Neil Wigglesworth, *The Evolution of English Sport* (London: Frank Cass, 1996).

[34] Neil Tranter, *Sport, economy and society in Britain, 1750 – 1914* (Cambridge: Cambridge U.P., 1998), pp.14 and 22.

[35] Allen Guttman, *From Ritual to Record: From Ritual to Record* (New York: Columbia U.P., 1978); *Sports Spectators* (New York: Columbia U.P., 1986); *Games and Empires*

(New York: Columbia U.P., 1994); Maarten Van Bottenburg, *Global Games* (Chicago: University of Illinois Press, 2001).

[36] Jack Berryman and Roberta Park (eds.), *Sport and Exercise Science: Essays in the History of Sports Medicine* (Chicago: University of Illinois Press, 1992); John Hoberman, *Mortal Engines: The Science of Performance and the Dehumanization of Sport* (New York: Free Press, 1992).

[37] Andy Miah and Simon Eassom (eds.), *Sport Technology: History, Philosophy and Policy*. Research in Philosophy and Technology, Vol. 21. (Oxford: Elsevier, 2002). This book was published by the Forum for the Analysis of Sport Technology, which describes itself as 'an international ethics research network'. If the examples of the bicycle industry and the sport shoe industry are typical, then it is evident that most of the close analysis of sports equipment in the last twenty years has been carried out for the marketplace by equipment manufacturers, rather than by historians.

[38] Gertrud Pfister, "Sport, Technology and Society: From Snow-shoes to Racing Skis", *Sport in Society*, Vol. 4, #1, Spring 2001, pp. 73-98.

[39] An example of this kind of well-researched account of racing is Jean Durry, *La Véridique Histoire des Géants de la Route* (Lausanne: Edita, 1973), but this is not a social history of cycling.

[40] About fifteen informational booklets on the earliest bicycles were printed in England in 1869. Some were in effect manufacturers' manuals. Titles include: 'Velox', *Velocipedes, Bicycles and Tricycles, How to make and how to use them, with a sketch of their history, invention and progress*; 'An Experienced Velocipedist', *The Velocipede, its history, and practical hints how to use it*; 'A Working Mechanic', *The Modern Velocipede: Its History and Construction*; J. Firth-Bottomley, *The Velocipede, its past, present and its future.*

[41] 'Velox', *Velocipedes, Bicycles and Tricycles, How to make and how to use them, with a sketch of their history, invention and* progress (London: Routledge, 1869), pp. 12–15.

[42] J. T. Goddard, *The Velocipede, Its History, Varieties and Practice* (New York: Hurd and Houghton, 1869); J. F. Bottomley-Firth, *The Velocipede, Its Past, Its Present and Its Future* (London: Simpkin, Marshall and Co., 1869).

[43] Bottomley-Firth, op. cit., and 'Velox', op. cit.

[44] 'Velox', op. cit., p.118.

[45] 'An Experienced Velocipedist', *The Velocipede, its history, and practical hints how to use it*, pp.31-32.

[46] Alfred Howard, *The Bicycle for 1874. A Record of Bicycling for the Year* (Preface, p.v). Howard also published *The Bicycle for 1877* and *The Bicycle for 1878.*

[47] N. Salamon, *Bicycling: Its Rise and Development, a Test Book for Riders* (London, Tinsley Bros, 1874).

[48] Salamon listed 8 'Metropolitan Bicycle Clubs' and 10 'Provincial Bicycle Clubs'. He also advocated 'the expediency of such a federation of clubs as would lead to the substitution of one set of rules for the number that at present exist. The Football Clubs have recently, very much to the common convenience, adopted a uniform set of rules; and we feel assured that if the Bicycle Clubs were to appoint delegates to a central meeting in London, the expediency of such a step would be at once, and unanimously, admitted'. The Bicycle Union was, in fact, founded in London in 1878.

[49] Charles E. Pratt, *The American Bicycler, A Manual for the Observer, the Learner, and the Expert* (Boston: privately printed, 1st ed. 1879, 2nd ed. 1880).

[50] Glen Norcliffe, "Clubs, Modernity and the Inner Citizen: the Montreal Bicycle Club, 1878-1890", unpublished mss.

[51] Pratt, op. cit., 2nd ed., "Races, Courses, Time, etc.", p.150-164.

[52] Pratt, op. cit., 2nd ed., "Clubs – Rules – Meets and Runs', p. 165-186.

[53] Pratt, op. cit., 1st ed., "Literature", pp.200-203

[54] From the "Preface" to *Bicycles and Tricycles: Past and Present. A complete history of the machines from their infancy to the present time* (London: Griffith and Farran, 1883), reprinted by Oakland, California: Cycling Classics, 1996. Spencer had previously published a book called *The Modern Bicycle* in 1870.

[55] As Spencer pointed out, this bibliography had been assembled by H. Blackwell of the Canonbury Bicycle Club and first published in the *Cyclist Annual* for 1882.

[56] 'Karl Kron' (Lyman Hotchkiss Bagg), *Ten Thousand Miles on a Bicycle* (New York: Karl Kron, 1887). Chapters which are especially interesting for their historical insights include, Chap. 27, "Boneshaker days'; Chap. 31, "Statistics from the Veterans"; Chap. 32, "British and Colonial Records"; Chap. 36, "The League of American Wheelmen"; Chap. 37, "The Literature of the Wheel".

[57] Kron, op. cit., "Preface", p.5.

[58] These were published between 1879 and about 1892. His *Bicycles and Tricycles of the Year 1886* was subtitled, 'A chronicle of the new inventions and improvements introduced each season, and a permanent record of the progress in the manufacture of Bicycles and Tricycles'.

[59] H.H. Griffin, *Cycles and Cycling* (London: George Bell, 1903), Preface to 4th edition, p.viii.

[60] Viscount Bury and G. Lacy Hillier, *Cycling* (London, Longmans, Green and Co., 2nd Ed., 1889, pp.53-54).

[61] R.J. Mecredy and A.J. Wilson, *The Art and Pastime of Cycling* (Dublin: Mecredy and Kyle, 1890), Preface to the 2nd edition, 1890.

[62] Archibald Sharp, *Bicycles and Tricycles: An Elementary Treatise on their Design and Construction* (London: Longman, 1896; reprint Cambridge, Mass. and London: MIT Press, 1977), Preface.

[63] Author's translation. Baudry de Saunier's books will be found listed in the Bibliography. The author has written a short account of him in "The Cycling World of Paris in 1893", *The Boneshaker* #143, Spring 1997. None of Baudry de Saunier's works has been translated into English.

[64] For works by H.O. Duncan, see Bibliography.

[65] Desgrange, Henri, *La Tête et les Jambes* (Paris: L. Pochy, 1898).

[66] Viollette, Marcel et al, *Le Cyclisme* (Paris: Pierre Lafitte, 1912; facsimile by Editions Slatkine, Geneva, 1980).

[67] H.L. Cortis, *Principles of Training for Amateur Athletes: Its Advantages and Evil, with Special regard to Bicyclists* (Coventry: Iliffe and London: Etherington, 1882. Distributed in the U.S. by Overman Wheel Company).

[68] Hillier, *Cycling*, op. cit., Chapter 6, 'Training', pp.210-227.

[69] G.L. Hillier and W.G.H. Bramson, *Amateur Cycling: with Hints on Training* (London, Dean and Son, 1893).

[70] A.A. Zimmerman, *Zimmerman on Training, with Points for Cyclists* (Leicester: F.W.S. Clarke, 1893).

[71] *L'Entrainement à l'Usage des Vélocipedistes, Coureurs et Touristes et des Amateurs des Sports Athlétiques*, with L. Superbie (Paris: R. Dalvy, 1890). *Vingt Ans de Cyclisme Pratique. Etude Complète du Cyclisme de 1876 à ce Jour* (Paris: F. Juven, 1897).

[72] This aspect of the historiography has been ably examined by Derek Roberts in *Cycling History: Myths and Queries* (Pinkerton, 1991), who writes: 'Since the 1939-45 war there have been many books purporting to give histories of cycling or of some aspects of it. Some have been written by authors who specialize in selecting subjects about which they know little or nothing, reading what books they can find about them, and then producing new books. Unfortunately their original lack of knowledge always comes through'. Another example of these neo-histories would be the much-quoted John Woodforde, *The Story of the Bicycle* (London: Routledge and Kegan Paul, 1970).

[73] Duncan's early history is not so accurate, and the most valuable parts of his account are his insights into events in which he himself had participated.

[74] Dunham, "The Bicycle Era in American History", p.5.

[75] "Markets as Producers and Consumers: the French and U.S. National Bicycle Markets, 1875-1910" (Ph. D. thesis, Davis, California, 2005).

[76] Norcliffe, *The Ride to Modernity* (2001), pp.248, 252, 255).

[77] Iain Boal, "The World of the Bicycle", in Chris Carlsson, ed., *Critical Mass: Bicycling's Defiant Celebration* (AK Press: Edinburgh and Oakland, 2002), pp.167-174.

[78] See for example, Michael L. Carlebach, *The Origins of Photojournalism in America* (Smithsonian Institution: Washington, D.C., 1992); Marianne Fulton, *Eyes of Time: Photojournalism in America* (New York: Little, Brown, 1988); Estelle Jussim, *Visual Communication in the Graphic Arts: Photographic Technologies in the 19th Century* (New York: Bowker, 1983); Fred Ritchin, *In Our Own Image: The Coming Revolution in Photography* (New York: Aperture, 1990).

[79] H.H. Griffin, "Cycling Twenty Years Ago", *Cycle Magazine*, April 1896, pp.425-28. Certainly, this is the kind of historical claim, coming from an industry insider, which might legitimately be suspected of partisanship. No research that I am aware of has attempted to examine the numerical and circulation data for press runs in other specific sports (a research project which would certainly produce interesting results), so the truth of Griffin's claim will have to remain unverified.

[80] According to Tony Mason, 'Sporting news was taking up a larger portion of the daily press at the end of our period than at the beginning, and the range of sports covered was much wider... the 1890s appear to be the key decade when papers became larger and the area of sports news really grew'. See "Sporting News, 1860-1914", in Michael Harris

and Alan Lee, *The Press in English Society from the 17th to 19th Century* (Associated University Presses, 1986).

[81] *St. James's Gazette*, 19 Feb. 1887, quoted in *Wheeling*, 23 Feb. 1887.

[82] Albert Pope, "Pope on the Trade Association", *Bearings*, 26 Jan. 1894.

[83] See for example: *The Ladies' World, Outing and Bicycle Number*, July 1896 and *New York Tribune, Bicycle Day Supplement*, 22 Feb. 1898 (both New York papers).

[84] According to B. Déon and J. Seray, *Les revues cyclistes des origines à nos jours*, the newspaper *Le Vélo - Journal quotidien de vélocipédie* was first published 1 Dec. 1892 and continued publication until November 1904.

[85] Baudry de Saunier, *Le Cyclisme Théorique et Pratique* (Paris: Flammarion, 1892).

[86] *National Cyclists' Union Review and Official Record*, No. 1, Vol. 1, June 1886.

[87] Mason, P.P. "The League of American Wheelmen and the Good Roads Movement, 1880 - 1905" (University of Michigan: Ph. D. thesis, 1957). Mason charts the growth of the Good Roads Movement throughout the United States, showing how some state L.A.W. organizations were much more active and radical in their approach than others, and how the political aspects of pressing for better roads were not always compatible with the recreational goals of the League.

[88] *The American Bicycling Journal*, Vol.1, No.1, 22 Dec. 1877.

[89] Eric Hobsbawn, "From social history to the history of society", in *On History* (Weidenfeld and Nicholson: London, 1997).

[90] In saying this, however, I am aware of a danger. As I have emphasised elsewhere, newspaper journalism, although it constitutes primary source material, and gives the immediacy of reporting on events as they unfold, is in certain senses as subjective as, say, a commercial catalogue or an advertisement. A newspaper article or editorial constitutes a selected event, a personally interpreted version of history. By their nature, these are not 'pure' primary sources. They are, nevertheless, often outstandingly descriptive and contain much detailed information, comment and opinion. Such sources also often contain a retrospective 'turn' of their own, looking back on the recent past and comparing recent developments with earlier developments, with the result that the 'primary' source is also a source of historical perspective. In addition, I frequently make use of comments by the participants and players in the events described, and I am

equally aware that the use of such evidence must be treated with care and critically interpreted since those involved often had an interest in the events they described.

[91] "Introductory", Viscount Bury and George Lacy Hillier, Badminton *Cycling* (1889 edition), pp.2-3. First published in 1887, the Badminton *Cycling* went through several further editions in the 1880s and 1890s.

[92] "King of the Road: The Social Construction of the Safety Bicycle", Chapter 2 of Wiebe Bijker, *Of Bicycles, Bakelites, and Bulbs* (1997), p. 47.

[93] George Lacy Hiller, "Cycle Racing", *The Encyclopaedia of Sport*, 1911, pp. 57-66.

[94] Two examples of this tension are: 1) the suspicions aroused in the 1880s and 1890s within amateur institutions of professionals supported by the bicycle industry, and 2) the control by the world governing body of the sport, the Union Cycliste Internationale, since the turn of the century, over precisely which bicycle designs should be allowed in competition for world records.

[95] See Bijker, *Of Bicycles, Bakelites and Bulbs*, op. cit., p. 19; 'The high-wheeler has been described as a mechanical aberration, a freak. Its faults were its instability, the insane difficulty of getting on and off, and the fact that the large front wheel was driven and steered at the same time, which could be very tiring on the arms. This will be the leading historical question of this chapter: How can we understand this detour as part of the construction of the safety bicycle?'

[96] The catalogue entitled 'Keen's Bicycle', from which this quotation was taken, is in the Science Museum Library, London and shows Keen as having been in business at 'Surbiton Hill, Kingston-on-Thames, Surrey'.

Chapter Two

The origins of bicycle racing in England: technology, entertainment, sponsorship and publicity

1. Outline: first manifestations of an original sport

A remarkable characteristic of the early sport of cycling was the novelty of its arrival as an athletic activity and the speed of its development. In this sense, it was perceived as 'the latest thing,' and its adoption and practice as modern, a sign of progress. A telling sporting image was used on the front cover of *Le Vélocipède Illustré* throughout 1869: it showed a woman wearing tights and a divided skirt, carrying time's arrow to which is attached a banner labelled 'Progrès', riding a velocipede which is projecting the rays of a bright light forward.[1] (see Fig. 2. 11)

By 1873, there were seven bicycle clubs in London and twenty-two others 'in the provinces'.[2] Alfred Howard, the Secretary of the Surrey Bicycle Club, wrote in 1874 that 'of all the pastimes and athletic exercises with which we are acquainted, none has so rapidly come into public favour, and retained its hold thereon so firmly, as the art of bicycle riding'.[3] In the same year, Nahum Salamon corroborated Howard's opinion and wrote that 'during the last 3 years, the Bicycle movement has rapidly advanced in public favour'.[4] By 1876, an editorial in a national newspaper called bicycling 'a great national pastime which has become not only a popular but a fashionable amusement',[5] and Alfred Howard wrote that 'the year of grace, 1876, will form an important period in the history of bicycle riding, for the pastime has increased rapidly and surely amongst all classes, and in place of being looked at with derision and curiosity is regarded and recognized as a useful and healthy exercise, and a valuable addition to the means of locomotion'.[6] Cycling, according to this last account, had thus by 1876 gained credibility both as a sport and as a means of transportation.

Most accounts of the beginnings of the bicycle in England in the late 1860s and 1870s have tended to focus on the technological and manufacturing aspects, the evolution of design and the brief flowering of what has been acknowledged as a 'craze' - the two-wheeled 'velocipede' was a brand-new phenomenon.[7] These accounts note the appearance of many contemporary publications on the subject, which were mostly of the 'how to' variety, intended to give background information on velocipedes and instruct new riders on choosing a machine and learning to ride it. The authors often added a brief, and invariably inaccurate, 'history' of the velocipede, as if to give its arrival status and viability. Two typical titles

were, *The Velocipede, its history and how to use it* and *Velocipedes, Bicycles and Tricycles, How to make and how to use them, with a sketch of their history, invention and progress.*[8]

The earliest competitive aspects of cycling as a sport, however, have not received much critical attention or examination. This chapter therefore examines the origins and early evolution of the sport of bicycle racing in Britain. A number of basic questions are asked:
- How much evidence is there of the earliest bicycle competitions and races?
- What kinds of events were they?
- What were the social, economic and technological stimuli behind them?
- Who organized them and where were they held?
- What sort of people competed and spectated?
- Who made the bicycles and what kind of relationship did the bicycle makers have with the riders?

Some further questions are also posed about the cultural context in which these competitions took place:
- Within this time period, 1869 and the early 1870s, how typical or untypical were they of athletic contests in general, and what were the main characteristics they shared with other contemporary sports events?
- From a social perspective, how were they perceived at the time and how should they now be viewed?
- To what extent were they class-specific?

The earliest years of the bicycle's existence saw not only the manufacture of the machine itself, and its sale to those men with an interest in a new athletic activity (women were in general excluded from velocipeding), but also the rapid development of an original sport. How can this new sport – using a new tool, the bicycle - be described and explained? The first bicycle competitions took place in the context of existing athletic and social institutions before developing their own distinct characteristics (see Fig. 2. 1). It is argued here, following suggestions already introduced in the Introduction, that the well-documented velocipede movement which erupted in England in 1869 was as much concerned with sport and entertainment as it was about the potential of the new vehicle for utility and transportation, and that competitive sport, recreation and utilitarian transportation were three

interconnected aspects of this technological and cultural movement.[9] It is further argued that the new sport of bicycle racing in England gave a powerful technological and economic stimulus to the young bicycle industry, and that racing and design improvements interacted with and stimulated each other in the early development of the bicycle.

Bicycle racing began to gain popularity in England early in 1869, when English bicycle making was still an embryonic industry. It was stimulated by the sport that was already established in France and the United States.[10] From early 1869, a surge of velocipede activities occurred, with races, displays and competitions of various kinds held at public venues. Competitions were organized in various locations, on road and track, outdoors and indoors, where a promoter could hope to make a profit, a social festivity was occurring, or a faster time over a known route might be achieved. Riders competed for money, for equipment, or for a valuable cup. Indoor racing was held in halls and gymnasiums, and outdoor racing on fields and prepared tracks. Bicycle racing was integrated into horticultural shows and into athletic meetings which also included running, jumping, hammer-throwing and horse-riding. Race meetings, which were mainly but not exclusively an urban phenomenon, often included exhibitions of bicycles organized by makers and costume competitions for the riders.[11]

Professional athletics (running, walking, prize-fighting and horse-racing, for example) was already well established in England in the 1860s, and organized amateur athletic activity was emerging in the context of the new athleticism of the public schools and the old Universities.[12] Some early bicycle racing occurred in a proletarian context similar to that of the older sport of professional pedestrianism, in which races were held either on an enclosed track or place-to-place on the open road.[13] The high initial cost of a bicycle may well have restricted involvement by working-class athletes, although, as will be explained later, clubs came into existence partly to overcome this difficulty. In other respects, indoor bicycle competitions were closer to circus or music-hall entertainment. Indeed, to the unaccustomed eye, balancing on a velocipede may well have appeared at first to have been a trick, akin to juggling or other gymnastic activities.

Early bicycle racing provides an excellent example of the emergence of a new mass-spectator sport in the mid-19th century and of the marketing and consumption of a novel

spectacle. Bicycle makers attempted to ride an entrepreneurial wave; promoters saw the opportunity to make money; good riders sought other riders to compete against; sufficient urban spectators had enough leisure time and disposable income to attend events.[14] The sport emerged quickly from its varied origins and began to exert its specialized priorities and needs, foremost among which were smoother, faster surfaces and better, lighter bicycles. By the mid-1870s, bicycles had improved enormously and cycling had evolved its own institutions and clubs and become a well-established professional and amateur sport, supported and sustained by a flourishing manufacturing industry. From necessarily improvised beginnings, an extensive network of amateur clubs and race meetings had grown up and national calibre professional 'champions' such as James Moore, Fred Cooper, David Stanton and John Keen had emerged, travelling widely to compete for substantial amounts of money in front of large crowds of spectators. International racing was also established between England and France, and national and 'world' championships organized. Five years was sufficient to see the sport firmly popularized.

Early bicycle racing should be viewed not only in a middle-class context but also in the wider context of proletarian and lower middle-class cultures where feats of strength, speed and endurance were admired and increasingly marketed in the mid-Victorian period. Many early competitors in London, the Midlands and the North were from the 'mechanic' class (that is, wage-earners employed by manufacturing industries in manual trades), though bourgeois athletes did race bicycles as the amateur clubs grew. The bicycle, however, appears to have been socially 'modern' in the sense that many of its devotees were from the emerging middle-class of wholesale and retail merchants and the urban professions.

About the audience, the spectators, it is more difficult to be precise and specific, although reports provide many clues. What kinds of people went to early bicycle races? Probably the answer to this question is that it depended on the locality and cultural environment within which individual events were promoted. Whereas there were frequent descriptions of the crowd as, for example, 'select', or that 'the greatest order prevailed' at a race, there are few reliable or detailed accounts of the social background of the spectators. Industrial Wolverhampton, for example, was a substantially working-class city, and yet the *Wolverhampton Chronicle*, reporting a bicycle race in 1873, noted that the large crowd

'represented all classes of the community', and its account suggested an event made respectable by the presence of well-dressed women:

> The view from the upper terraces was exceedingly beautiful, for, comingled with the husbands of the present and the future, the feminine element of our population largely patronised the scene, the varied colours of their costume and diverse style of bonnets, relieved the uniformity of male attire and afforded a study of the fashions which many of our Black Country lasses no doubt carefully treasured in their mind.

Such a report tends to contradict the assumption that the spectators at a bicycle race in Wolverhampton would inevitably have been exclusively male and working-class, and suggests that the proletarian 'Black Country lasses' who attended were envious of the fashions of the wealthier women who were also there.[15]

Women are not recorded as having participated regularly in the club formation and the racing which constituted the velocipede movement. The only accounts of their participation describe evidently risqué, exploitative displays of gymnastic and athletic ability in the urban music-hall environment of European and American capital cities and occasional races in France which, it could be argued, might be viewed as progressive, genuine athletic contests even though they, too, were risqué and unprecedented. Entertainment rather than athletic prowess or exertion appears to have been the main reason for these performances involving women. Diarist Arthur Munby decided, after he had seen two women riders from the Paris Hippodrome perform in London in June 1869, that 'there was nothing indecent in their performance, or in the girls' behavior, if once you grant that a woman may, like a man, wear breeches and sit astride in public'.[16] But women's presence in this early bicycle entertainment milieu should be noted as the harbinger of their later progressive participation in cycling in the 1880s and 1890s.

Outline of Chapter 2

Section 2 (The beginnings of commercial bicycle production, 1865-69) gives an overview of the beginning of commercial bicycle production in the period 1865-69. It introduces the assertion that competitive sport – as a conspicuous, public testing ground - was a crucial factor in early bicycle evolution.

Section 3 (The influence of velocipede developments in France and the United States on the English sport, 1867-1869) gives an account of the influence on English bicycle racing of the earlier industrial development and growth of the sport in France and the United States. It suggests that well-developed social sport institutions in England may well have played a part in encouraging the bicycle industry as well as in the growth of competitive cycling.

Section 4 (Charles Spencer's London gymnasium and the spread of the bicycle) examines one specific point of arrival of the French velocipede, in the English athletic and gymnastic context, at Charles Spencer's London gymnasium.

Section 5 (Bicycle competition as athletic novelty and public spectacle) looks at various manifestations of the new sport in England, emphasizing the experimental nature and the novelty of different kinds of competitive events. A successful commercial formula was difficult to create and amateur racing was in an embryonic state.

Section 6 (Links between manufacture and sport) observes that there was a strong connection between centres of bicycle manufacturing and the promotion of racing events. It argues that the sport was more likely to thrive in these urban centres. Wolverhampton is examined as an example of this assertion. There was a logical and geographical technological and economic link between riders and makers, and John Keen is introduced as an example of a champion rider who was also an important small manufacturer.

Section 7 (Varieties of competitive activity) further examines the various kinds of indoor and outdoor, track and road, competitions which occurred in this early period, 1869-70. The promotion of outdoor racing in taverns is described, and one tavern owner, O.E. McGregor, identified and documented.

Section 8 (An elite emerges: match racing and championships) describes the development of an elite level of championship competition which tested the speed, strength and tactical skill of the best riders. National and international championships were developed.

2. The beginnings of commercial bicycle production, 1865 - 69

The hobby horse or 'pedestrian accelerator', popularized in England in 1818-19 (and slightly earlier, in Germany, as the Draisine), was the first commercially produced vehicle which enabled a person to balance and steer on two wheels. It had no drive mechanism and was powered by the legs pushing alternately against the ground.[17] The period 1820-60 saw well-documented, spasmodic experimentation in three- and four-wheeled velocipedes, and possibly the successful building of treadle-and-crank-driven two-wheeled velocipedes by Scottish artisan-mechanics Kirkpatrick Macmillan and Gavin Dalzell, for which a strong argument can be advanced that they were the earliest 'bicycles', in the sense that they were two-wheeled machines which could be balanced and steered at the same time as being propelled continuously forward.[18] Although there is evidence of hobby-horse races in 1819 and occasional three- or four-wheeled velocipede speed trials later, the vast majority of these machines did not progress beyond the prototype stage, were not put into production, and consequently could not effectively enter into any kind of competitive or sporting context. The first front-wheel driven bicycles were produced in Paris between 1865 and 1868 by Michaux and others, creating a fashionable craze which included a considerable amount of racing. The United States followed closely behind, while what was sometimes referred to as the velocipede 'mania' in England began early in 1869.[19]

The bicycles considered in this chapter were initially heavy machines with wooden, cast-iron or steel frames and wood-spoked wheels rimmed with a metal band. These earliest machines were the product of an advanced carriage and blacksmith-shop technology, but were soon being mass-produced in larger numbers, using more sophisticated manufacturing processes. Technical development was rapid, and by about 1874 the heavy early velocipede was transformed, with a light, tubular frame and wire-suspension wheels with solid rubber tyres, typified by the bicycles of champion rider and manufacturer John Keen, which are more fully described in Chapter 3. The most conspicuous design change was the enlargement of the front wheel to cover more ground with each pedal stroke and the reduction in the size of the rear wheel (see Fig. 2. 2). The evidence of reports and discussion in the documentation of the period strongly supports the assertion that racing events were a crucial factor in this early evolution of the bicycle. Competition brought together the latest designs and technological developments in a conspicuous public testing ground, and

demonstrated clearly the weaknesses of old and the merits and demerits of new approaches.[20]

3. The influence of velocipede developments in France and the United States, 1867-69, on the British sport

Historical evidence indicates that an energetic young industry together with an associated velocipede sport, similar in many respects to the British sport described in this chapter, emerged in France and America before it emerged in Britain and that the English industry and sport was initially stimulated from abroad. An ongoing interest in 3 and 4-wheeled velocipedes in Britain ensured the willing reception there of the new two-wheeled velocipede. The relevant outlines of French and American developments will, therefore, be described, as they influenced events in Britain. This development, the influence from abroad on the beginning of the British bicycle industry, has been discussed at length by Andrew Millward, with an emphasis on the economic history, in a paper, "The Genesis of the British Bicycle Industry, 1867-1872".[21]

With a rapidly developing velocipede manufacturing base, the French sport quickly reached a sophisticated level from 1867-70, with outdoor road and track racing organized. The velocipede was enthusiastically embraced, and a Parisian and regional club structure quickly organized. American velocipede sport, equally fast-moving in 1868 and 1869, appears to have emphasized indoor entertainment although there was also outdoor track racing. In France, the Franco-Prussian War of 1870-71 interrupted manufacturing processes and disrupted sporting activity, and in the United States what was a brief athletic and entertainment fad appears to have quickly lost its appeal. In Britain in the early 1870s, however, manufacturers learned from French technological advances and an energetic sports culture embraced the new velocipede. With the arrival of the velocipede in Britain, from the beginning of 1869, the British sport took off with impetus and with an unbroken cultural and organizational continuity.

An important question to be asked here is, then, how to explain and account for this problematic development and geographical diffusion of both a manufacturing industry and the reception of a new sport?

The earliest French bicycle racing has been documented by Keizo Kobayashi in research which probed French press sources.[22] Kobayashi has found that racing occurred as early as

1867 and was popular and well-distributed in France in 1868, when at least 21 race meetings occurred. Reports in *Le Vélocipède Illustré* and Parisian and provincial newspapers provide extensive documentation of racing in 1869 when 180 races or race meetings occurred, and in 1870 when 77 events were held until the outbreak of war with Prussia in August. Races were initially organized by velocipede makers (including the prominent Parisian maker, Michaux) and existing athletic organizations, and later promoted by velocipede clubs and 'fête' committees. The majority of races were short-distance track races, but place-to-place road races were also held, often between prominent locations, for example, from the Champs-Élysées to Versailles, or Paris to Rouen. It is clear that athletic use of the velocipede was responsible for popularizing and developing it: 'Velocipedes have become a rage. Everybody talks of them', wrote the Paris correspondent of a London paper, *Orchestra*; 'Athletes and gymnasts led the way, and now you see them in the hands of old, young, serious and gay'.[23]

Clubs were formed specifically to encourage and organize velocipede racing. There were two clubs in Paris and Rouen, and clubs existed in Marseille, Avignon, Beauvais, Bordeaux, Chartres, Nantes, Rennes, Le Havre, Lyon and Versailles. By 1870, there were about 40 clubs in France although no central organization had been created.[24] Many of these races are well-documented, showing lists of starters, the name of manufacturers of the bicycles ridden, and the amounts of prizes awarded. Several 'stars', such as Hippolyte Moret, André Castera and James Moore, emerged from this period of French racing, who won races all over France and whose careers were international in importance.[25] Kobayashi documents velocipede racing for women on at least twenty occasions in France and Belgium, often occurring on the same occasion as men's racing, including the emergence of a group of women performers identified by their first names or nicknames, i.e., 'Miss Olga' or 'Miss America'.[26] (see Fig. 2. 3)

The most significant French road race in this early period was a Paris-Rouen race, sponsored on 7 November 1869 by René Olivier, owner of the velocipede company Compagnie Parisienne, and Richard Lesclide, editor of *Le Vélocipède Illustré*, who wanted to stimulate business and encourage riding by proving that 'on the Bicycle it is possible to cover considerable distances, with much less fatigue than walking, and in a much shorter time', and offered 1,000 francs as first prize. The industry would be stimulated by the competition

and demonstration of the practical utility of the bicycle. There were no limitations of design or size of wheel, the rules stipulating only that machines had to be powered by muscle-power and that no outside help was allowed.[27]

The activity across the Channel did not go unnoticed in England. Before the velocipede reached England, accounts of the Parisian craze appeared frequently in the British press. In August 1867, *The Field* wrote of 'the mania for velocipedes at present existing in Paris', and reprinted an account from *Le Sport*:

> From nine to eleven in the forenoon the space about the Cascade is crowded by the amateurs and spectators of these races. Among the most assiduous and skilful of the former are to be observed Prince Joachim Murat, the Prince de Sagan, M. Blount, Count Onesimo Aguado, Count Georges d'Orgeval, Count de Saint-Sauveur and several others. Many of these have become so skilful as to go 24 kilometres (15 miles) an hour without the least fatigue. Some grand races during the autumn are at present being organized, the course to be gone over extending from the Rond-point of the Champs Élysées to Saint-Cloud. Several trials have been made, and the distance has been done in thirteen minutes. In fact, some considerable bets were made on that occasion. These gentlemen are about to form a velocipede club to be devoted to the new sport.[28]

It is clear from this and other accounts which appeared in the British press, including *The Times*, *The Mechanic* and *English Mechanic*, that Parisian velocipede activities were widely reported and stimulated interest in the new sport in Britain. In February 1869, an article in the London *Times* asked, 'How long before the velocipedestrian mania attacks young England? France revived the obsolete machine and gave interest and excitement to its use... From our neighbours across the Channel the furore migrated to our brethren across the Atlantic, passing over us'.[29]

Reports of the Parisian velocipede craze also appeared in American newspapers, and racing undoubtedly began in the United States shortly before it occurred in Britain.[30] The Paris correspondent of the *New York Times* reported to its readers in August 1867 that: 'the experts in this new and cheap mode of locomotion make twelve miles an hour, and a higher speed will be attained... The young men of leisure are said to be organizing a club for racing, which of course will only embrace "gentleman riders"'.[31] By August 1868, a shipment of French velocipedes was reported to have arrived in New York, and in September a French-style velocipede was introduced by its maker, Pickering. By November, 1868, the *New York Times* commented prophetically:

> We plainly foresee another 'field-sport' about to be added to our slender American catalogue, or at least another athletic game. The Paris velocipede is now so firmly naturalized here that we have simultaneously a local report of regular two-wheelers racing in Central Park and one of a race in Boston... We presume that 'velocipede clubs' will now be formed, and velocipede contests waged; then of course will follow velocipede matches for the 'Velocipede Championship of the United States' and then international matches for the 'Championship of the World'[32]

Harper's Weekly reported that: 'A number of professional inventors are now laboring to bring it to American completeness', and *Scientific American* commented that 'like every other machine which we have copied from other peoples, this has been materially improved by American mechanics'.[33] The *New York Times*' 1868 prediction above was accurate: the business and sport of velocipeding quickly became fashionable in New York, Boston, Indianapolis and Chicago and the press, including the prestigious *Scientific American*, printed copious reports of the craze, including its spread outside the original centres. *Scientific American* reported that, 'The velocipede fever is raging in Massachusetts... the Cincinnati Velocipede Club have given a series of races', and that, 'It is amusing to notice how rapidly this fresh idea has germinated, budded, and bloomed, and is actually bearing fruit in the way of active action. There are trials and competitions on the Common and in other convenient locations... It is certainly the source of innocent amusement, and promotes muscular development'.[34] Once again, recreation and athletic concerns were emphasized.

Velocipede entertainment and sport permeated as far as California, isolated geographically from the East Coast and from Europe, but connected culturally through the constant incoming stream of immigrants since the 1849 Gold Rush. The railway link to the west coast from St. Louis, Missouri was not completed until May 1869, so that imported velocipedes had at first to come laboriously overland or round the Horn on cargo ships. The quick rise to popularity of velocipeding in San Francisco attests to the attractions of the new sport and the influence of the media in popularizing new ideas, particularly where handsome profits could be made in entertainment. In January 1869, by which date a San Francisco manufacturer, Palmer, Knox and Co., was already making a 'greatly improved' velocipede, the *San Francisco Morning Chronicle* printed a front-page article entitled: 'Velocipedes – The Greatest Mania of the Age', which spoke of 'the restless desire of the Parisians' which had created 'the wonder of the age, the velocipede'.[35] The high-blown language, 'mania of the

age', 'wonder of the age', suggests an aspect of popular culture, of modernity, which was promoted, briefly bloomed, and could be expected to fade just as quickly.

After late 1869, there appears to have been a lull in the popularity of the bicycle and optimistic forecasts for an expansion of the sport in the United States were not fulfilled. Karl Kron wrote in the mid-1880s of the 'wildly impetuous and frenziedly hopeful beginnings', and the 'sudden and ignominious ending' of the velocipede movement. 'The American carriage-makers all dropped the veloce in a hurry, with a feeling of contempt for their own folly in having interrupted their proper business in behalf of such a deceptive toy', he wrote, 'But the less excitable Englishmen kept pegging away at it, both on the road and in the machine shop, until the modern bicycle was evolved. Velocipeding never entirely ceased in that country'.[36] But exactly how to explain the apparent decline of the young bicycle industry and sport in the United States remains the subject of some speculation.

French and American bicycle racing began earlier than the English developments. British accounts reported the more developed state of things abroad, even as its own velocipede 'craze' was getting under way. The international nature of this early velocipede industry and sport raises interesting questions about the transmission of a new sport and sporting equipment from country to country in the late 1860s, and highlights the role of the press in the dissemination of ideas. Particularly interesting is the wide geographical range, and the speedy communication, of this dissemination in the case of early bicycle racing.[37]

The pattern of transmission appears to have been that the velocipede spread initially from France to the East Coast of the United States while Britain was slow, at first, in taking it up. In America, the fad spread quickly from the East Coast to the mid-West and as far as California, a remarkable fact considering the distances involved, even though railways were being expanded rapidly.[38] Meanwhile, a little later, both manufacturing expertise and the popularity of racing appears to have been disseminated from France and the United States back to England, where they were enthusiastically embraced. The French sport, technologically and organizationally more advanced than the British sport by 1868-69, suffered an interruption from the Franco-Prussian War of 1870-71, while in the United States the industry was beset by patent disputes and the brief flurry of velocipede

racing as an indoor entertainment appears to have been lacking in a social or club support which might have enabled its further development in the early 1870s, and the bicycle declined in popularity. Further research is needed to ascertain exactly what occurred during the period between 1869 and 1878, when the high-wheel bicycle was reintroduced from England, and bicycle racing became an established part of American sport culture (see Chapter 4).

It seems accurate, therefore, to assert that the widespread enthusiasm in France and America for the new bicycling 'craze' had a significant impact on the British and certainly helped both to ensure its speedy assimilation in Britain and the rapid development of machines and facilities. But how can this delay in the manufacturing industry and the beginnings of the sport be explained? Millward describes the earlier enthusiasm shown in England for three- and four-wheeled human-powered light carriages, such as those made by Willard Sawyer, and those plentifully illustrated in journals such as *The English Mechanic*, *The Engineer* and *Mechanic's Magazine*, and suggests that in spite of this earlier interest, for the new two-wheeled velocipede, 'a home market was slow to manifest itself to potential manufacturers'. Millward further points to the suspicion in England of fashionable French 'crazes', and suggests the possibility that 'the full significance of the new velocipede was overlooked'.[39] These are certainly valid and relevant speculations.

These issues – a crux in the early history of the cycling industry and the sport of cycling - are certainly worthy of further research. Millward asserts that 'with the American and French industries' virtual disappearance, the British industry was ideally situated to assert itself and became the main supplier to the world's cycle markets for the next quarter of a century'.[40] But this explanation begs a large historical question. What factors created the enthusiasm for the novel bicycle in England, which evidently took up the slack created by the adverse development conditions in France and America? Were they merely economic? Could the general enthusiasm for sport in England also have played a determining role?

Millward recognizes the role of well-publicized long-distance rides in England in stimulating interest in cycling: 'In Britain a stimulus to demand for machines owed something to the reporting of long-distance rides in the popular press....The significance of these rides should not be underestimated. In an age where the coach and the train were the

main measures of speed, the times of bicycles over longer distances aroused interest in their long-term utility'.[41] He also allows that, 'Some notable differences existed in the British attitudes to the bicycle from the time of its introduction compared with those of the French and Americans....in Britain the bicycle clearly had appeal with athletes and those in pursuit of health-giving exercise'.[42] He also suggests that 'the British industry....managed to survive....in a much reduced market in which a smaller number of firms catered....to one of the emerging cycling clubs or associations'. He also recognizes that 'the British enthusiasm was channelled into club activity from early on', and that 'it is probable that the formation of such clubs not only helped to keep interest in cycling alive but also the demands of club members and sporting cyclists would have formed a major influence on demand'.[43] Social factors, in other words, do impinge on and affect economic supply and demand.

But Millward does not speculate in further detail on the wider role of sport and sporting culture in creating a favourable climate and demand for the introduction of the bicycle, except to recognize that, 'the strong association of the bicycle with cycle sport and competition may have helped more than any other factor (author's emphasis) to serve as a catalyst for rapid product development'.[44] Economic history can offer certain specific, factual explanations, but cannot account reliably for shifts in social taste and fashion, for deeper cultural and social trends, and for enthusiasms and 'fads' or 'crazes'.

As mentioned earlier, this crux in British cycling history is certainly worthy of further investigation. From the perspective of the history of the sport, documentation of the arrival in London of a French velocipede in 1869 will serve as an illuminating test case, which is explored in the next section.

4. Charles Spencer's London gymnasium and the spread of the bicycle

A memoir of one of the earliest appearances of the bicycle in England gives evidence of links between the importation of French bicycles into England, manufacturing activity in the English Midlands, the sale of athletic supplies to the consumer and the pursuit of physical fitness as a leisure activity.

In this account, published in 1875, John Mayall Jr., the son of a well-known London photographer, described how in the winter of 1868-69 he went to Charles Spencer's gymnasium in the City of London, 'to look at some monster hollow dumb-bells that had just been made for a 'professional' to make a *sensation* with at a Music hall,' when a box containing a French velocipede brought from Paris by Rowley Turner was unpacked. This was evidently the beginning of involvement with the bicycle for Mayall and Spencer, although Turner, the agent in Paris for the Coventry Sewing Machine Company, had already been exposed to the velocipede craze. Rowley Turner had seen the French velocipede at the 1867 Paris Exhibition, and had already 'put capital into the velocipede'. He was involved commercially in a riding school in Paris and thought that he might be the agent in England for manufacturing velocipedes for the expanding French market.[45]

This was not the first appearance of the bicycle in England, but was certainly a highly significant event for the sport and the industry. Rowley Turner took this velocipede on to Coventry, to the Coventry Machinists' Company factory, where the earliest English bicycle manufacturing would occur during a period of economic slump for the sewing machine industry.[46] The connection thus established between velocipedes and sewing machines was not an accidental one, for the precise machining of small metal parts was required in both products.

Charles Spencer was an ex-champion gymnast and an entrepreneur who manufactured and sold sporting goods. The bicycle was thus introduced into an athletic context, for Spencer's gymnasium was a centre of physical fitness and gymnastic endeavour in London and velocipeding was at first very much an acrobatic activity, concerned with the skill of balance, taking place mostly indoors (see Fig. 2. 4). Indeed, Mayall specifically recollected in this 1875 memoir that 'the energy with which I went into velocipeding in its early days was essentially a part of my gymnastic tastes'. With his business partner Snoxell, Spencer

began to market the velocipede. In mid-February 1869, the *English Mechanic*, an important scientific and manufacturing journal, carried an advertisement publicizing the company as 'Velocipede and Gymnastic Apparatus Manufacturers', which had 'introduced the best Paris Model of the New Two-Wheel Velocipede, and having made several important improvements thereon, are now prepared to execute orders to any extent'.[47] (see Fig. 2. 5) The men who were involved in this indoor athletic and gymnastic innovation in London also took the bicycle out onto the road. They practiced riding in Regents Park, London and in February 1869 they rode to Brighton. 'They had a preliminary run around Trafalgar Square, and then started off at the rate of eight miles an hour on roads which proved to be generally good, but against a very strong wind all the way'. This event was intended to advertise and promote Spencer's business and the sale of velocipedes and was reported in The Times, which hailed it as an 'Extraordinary Velocipede Feat', and other newspapers.[48] But it was also had the result of proving that the machine could be used to travel a longer distance, that it had utilitarian potential.

By 1870, Spencer's business was no longer associated with Snoxell, and his catalogue advertized him as 'Manufacturer of Gymnastic Apparatus, Velocipedes, and all Athletic and British Sport Requirements'. He was also 'Contractor for fitting up all the Military Gymnasia to Her Majesty's Government for Home and Foreign Stations'. The catalogue included extensive gymnastic and weight-lifting products, as well as fencing, football, cricket, hockey and croquet supplies. He also supplied velocipedes 'of first class manufacture only', one model 'guaranteed for long journeys and hard wear', another 'for ordinary use and racing' for. The catalogue also advertized his two books, *The Modern Gymnast* and *The Bicycle: Its Use and Action.*[49] The events described here were the start of a long involvement with the bicycle for Spencer, as rider, journalist and publisher. In 1873, Spencer and three companions rode from London to John o'Groats, the northern-most tip of Scotland, a pioneering long-distance ride. And Spencer's *Bicycle Road Book*, giving details of mileages and road conditions throughout Britain, went through many editions in the 1880s and was the prototype for the many route books published for cyclists in the 1890s.[50]

Although it was especially significant in early bicycle manufacturing history because of the connection between Rowley Turner, Charles Spencer and the Coventry Machinists' Company in Coventry, Spencer's gymnasium was just one of many sources of the spread of

the new consumer fad and the new sporting recreation. It was in the interests of commerce that the bicycle be publicized, and that clubs be formed. Another company, the 'French Velocipede Co.', owned by A. Davis, who called himself 'Agent and Manufacturer' in the first commercial advertisement for bicycles published in England, was 'prepared to give information to amateurs and inventors, clubs, schools, regiments, gymnasiums, etc... Any gentlemen desirous to form Clubs in London or the country may have assistance in their primary organization from the Co., who will act as secretary, and find offices, etc, where necessary'.[51]

Nevertheless, the early distribution of the new velocipede in England remains difficult to pinpoint with precision because it diffused gradually in various locations. It seems likely that there were very few velocipedes available in England before the Mayall-Spencer-Turner introduction into London in the winter of 1868-69 described here, although there *were* isolated cases of French and American velocipedes arriving. Recent research indicates that the beginning of the importation of the Pickering velocipede from the United States into Liverpool should be dated to early in 1869, accounting for the rapid development of the sport there.[52] Other evidence supports an early 1869 date for the beginning of intense commercial activity in selling bicycles in England and the beginnings of the sport. An article in *The Times* (19 Nov. 1868) stated:

> Anybody who has visited Paris within the last few months cannot have failed to notice the large number of velocipedes going to and fro... The cost of the best velocipedes in France is about £12, but they will probably be manufactured at a much lower price in England if they come into extensive use as is not unlikely, considering that they afford opportunities for vigourous exercise, in addition to the facility with which long journeys may be made on them.

Another later *Times* article (from 1 Feb. 1869) asked, 'How long before the velocipedestrian mania attacks young England?... From our neighbours across the Channel the furore migrated to our brethren across the Atlantic, passing us over... Our turn may come yet'. Yet another article, from January 1869, in an industrial trade journal, gave the following chronological perspective:

> The mere fact that we have not yet experienced the furore that has accompanied the introduction of the iron horse into France, constitutes no evidence that it will not be equally popular in this country... It is to be borne in mind that up to the present time the English public here has not been tempted by any supply of the two-wheeled vehicles, French and American requirements fully occupying their several manufacturers; but we already hear of measures being taken to reproduce in this country, under arrangements with the several patentees, the best

> descriptions of this machine... We may take it, therefore, for granted, that the velocipede so strongly recommended by the practice of our neighbours, and the praise of which is wafted to us across the Atlantic, is destined not only to come largely into use in this country, but to be a permanent "institution".[53]

Later in February, the same publication commented: 'Since our last issue new evidences have been presented that although England has been slow to follow the movement in France and the United States, a general demand is springing up, so much so, indeed, that our velocipede manufacturers experience already the greatest difficulty in supplying orders. We hear of Sheffield and Birmingham houses being engaged to fulfil the orders of London manufactuers, whilst velocipedes are being daily imported from France'.[54]

If the late 1868 or early 1869 arrival of the French velocipede at Spencer's gymnasium in London was one of the most important single events in the continuum of the introduction of the bicycle into England, then the development of the sport was extremely fast, driven by a commercial impetus. There was also the impetus of 'fad' or 'fashion'. *The Spectator* remarked that:

> It is not very difficult to understand the sudden popularity of the new exercise – riding the bicycle or two-wheeled Velocipede. Any new exercise not excessively tedious or dangerous, and involving a little expense, is pretty sure of a welcome in Western Europe and America, and this particular exercise had numerous recommendations ... There is a certainty of attracting attention and fixing it on the performer, which of itself would popularize any amusement with the French, and, perhaps, the English mind.[55]

At the beginning of April 1869, 19 riders, riding 19 different kinds of bicycles, were entered in a road race outside Liverpool (see Section 5). Some of these machines were French and American imports, some were made in Liverpool, some were perhaps home-made. With such a variety of machines featured in a race in April 1869, it is certainly reasonable to ask whether racing had occurred earlier on a more limited scale. Yet there is no primary documentation for racing in 1868, either at the Old Welsh Harp, Hendon, or elsewhere.[56]

5. Bicycle competition as athletic novelty and public spectacle

The British public could read accounts of velocipede racing in France as early as 1867. *The Sport* reported 'the mania for velocipedes' in Paris, where aristocrats were among those who raced, some of whom 'have become so skilful as to go 24 kilometres (15 miles) an hour without the least fatigue.... These gentlemen are about to form a velocipede club, to be devoted to the new sport'.[57] By late 1868, *The Mechanic* reported that Parisian velocipede races, generally held on a 'fete day', were 'rather exciting affairs':

> The racing-ground is all marked out with flags, and there is certain to be a large cluster of banners flying at the starting place, near to which, in some reserved enclosure, scores of velocipedists are exercising their docile steeds. A certain number of them wear jockey caps and jackets of various coloured silks, and all appear to have their legs encased in high leather boots. The moment of starting arrives, and the competitors are duly drawn up abreast...The fair sex mount on chairs and wave their little hands and flourish their pocket handkerchiefs, and laugh and almost scream with delight as at the grounding of the starter's flag their several favourites dart off, working their legs up and down...After the lapse of a few minutes, the crowd opens to allow of the passage of the victor, who drenched in perspiration...passes the winning post amidst the cheers and laughter of the crowd, who enjoy the sport more than they would the finest horse-race; and as soon as he has dismounted proceeds to dip his sun-burnt beak into a foaming glass of Strasburg beer.[58]

This early account of French racing suggests an already well-developed sport, taking place in an atmosphere of cultural festivity. Racing on the novel velocipede was clearly excitingly 'modern', a sport made possible by a machine created in a progressive, industrial, technological society, and the many journalistic accounts of the earliest bicycle competitions in Britain contain frequent expressions of surprise, emphasizing the novelty of the new sport. The fact that the machine could be balanced and ridden was at first seen as somewhat astonishing. Nevertheless, the settings in which competitions and displays took place tended to be traditional and familiar. The new 'two-wheeled velocipede' was reported in a variety of entertainment contexts and promoters appear to have experimented to see what format would be most likely to attract a crowd and make money. There was clearly a strong 'show-business' element at work and velocipede competitions took their place among the many commercial entertainments available. Events were also staged by more 'respectable' amateur social and sporting gatherings and velocipede clubs. Participation demanded ownership of, or at least access to, the expensive new machine and rental arrangements for the general public and cooperative credit schemes for club members facilitated access for the

less well-off. The sport of velocipeding, or as it soon came to be known, of bicycling, took a little time to evolve within this more general context of commercial entertainment activities. And of course some riders preferred just to ride on city streets, away from any competitive or commercial context (see Fig. 2. 6).

But a successful commercial sporting formula was not predictably or easily created, and at first an amateur sport structure for velocipeding simply did not exist. A famous London sporting journal was at first sceptical of the new sport: 'The large hall at Islington seems governed by magic influence in its changes of attraction', *The Field* commented sarcastically on 19 June 1869:

> fat cattle, monster balls, popular concerts and horse shows have followed in rapid succession, and now a 'bicycle race' is the object of public interest; indeed we are not sure that it is any longer the 'Agricultural Hall' as the enterprising manager has named it anew the 'Velocipede Cirque'...There is no doubt that the spectacle called a race was got up with a sole view to profit, and in all probability, so far as that was concerned, it answered excellently well...but whether such an exhibition will prove a permanent source of profit we will not venture to predict.

On that occasion, *The Field* was disappointed with the poor quality of the racing in Islington, North London: 'There is no doubt that as yet good riders are too scarce to make such contests interesting...We have certainly seen many better workers of the bicycle on the road than the majority of those who competed for the silver cup'.[59] At this race, the cup offered was 'said to be worth £20'. Twenty-three riders were each charged a 10 shilling entry fee, and spectators paid 1 shilling. This was a good deal of money. Even though the promoter in Islington had spent £500 on installing a floor and stands, the event was still profitable. Perhaps the betting, which *The Field* regretted, helped to fill his pockets. But it was an uncertain business. Together with the risk of loss went the possibility of fraud. The value of a cup could easily be inflated, the results could be fixed, prizes left unpaid.

Nevertheless, the new sport arrived quite suddenly, and was capable of attracting and fascinating large crowds. Promoters were willing to take risks in the circumstances and were quick to capitalize on the new sensation. Well publicized outdoor races and indoor displays were significant in creating a surge of popular interest in the new machine, as was the volume of press coverage which both reported and promoted the new sport. Many people saw the machine for the first time because they paid to see it. But to be successful, such events demanded skilled riders and a recognizable entertainment formula, and the promoters

of the 'Velocipede Derbys' at the famous Crystal Palace at Sydenham, South London were able to experiment and refine their events. 'The Crystal Palace Company, ever on the alert for novelties, were not likely to let the velocipede mania subside without duly utilizing it', commented *The Field* on 29 May 1869:

> The announcement of a velocipede race was sure to draw many hundreds of that faithful British public who, day after day, from year's end to year's end, go everywhere to see anything. They may be disappointed, but their faith remains unshaken... Accordingly, young and old went down to the Palace on Thursday to enjoy this latest sensation. We wish we could add that they did enjoy it, but the weather was dreadful, and the contests were neither exciting nor well conducted.[60]

The Crystal Palace promoters quickly learned the lesson of successful promotion, however, and staged many interesting and important races at the ideally located South London venue through the summer of 1869.

Crowds did not only assemble in an indoor arena or around a track, although that was the easiest way for promoters to guarantee themselves a box-office fee. Road racing was a different, more strenuously athletic kind of test, which introduced another significant component of the sport. In April 1869, a 'Great Bicycle Race' was held on the road between Chester and Liverpool, a distance of 13 miles. The road was 'laid with macadam, but some portions of it were complained of as detrimental to bicycle travelling, owing to numbers of loose stones being scattered on the surface'. The *Liverpool Mercury* carried a long report of the race, noting that 'the excitement caused by this singular race was something marvellous':

> A considerable gathering of spectators was expected, but scarcely anyone imagined that there would have been such an enormous crowd of persons assembled to see this novel contest. The competitors were announced to start from Chester about half past two o'clock, but long before that time thousands of people, rich and poor, thronged the Chester-road for miles, and up to four o'clock the thoroughfare from Birkenhead was dense with pedestrians. An immense number of well-dressed persons crossed the river from Liverpool and the Rock Ferry steamers alone, between one and four o'clock, carried over to Cheshire upwards of 3000 passengers. Besides pedestrians, there were vehicles of all sorts and sizes - bicycles, velocipedes, carriages, cars, gigs, spring carts, donkey carts, etc. At some points from Rock Ferry to Bromborough the road was almost blocked up, and farmers and others who were returning home from Birkenhead had great difficulty in making a passage through the crowds of people. In many parts the hedges were also lined with spectators...at all the villages on the route through which the bicycles passed there was a general turn-out of the inhabitants.[61]

The spectators were so dense, in fact, that they obstructed the competitors, who 'had

difficulty in winding their way through the crowd'.[62] A good race could hardly be held under such conditions, and other road users had just cause to complain about the obstruction of their right of way, and of the unwanted disturbance of rural harmony by city-dwellers, an issue that continued to be a problem for organizers of events and riders racing on public roads through the 1880s and 1890s, and would in fact be a decisive factor in the future direction of the sport.

Liverpool was an early hotbed of velocipede competition, because soon after the road race, the Liverpool Velocipede Club was obliged to stage an extra evening performance of its 'Bicycle Tournament and Assault at Arms' at its Gymnasium because 'it was found utterly impossible to accommodate the whole of the people who applied for tickets for the first and the committee of the club was anxious to meet this popular demand'. (see Fig. 2. 7). The Gymnasium programme included members of the club 'Tilting at the Ring, Throwing the Javelin and demonstrating general proficiency in the various modes of managing the Bicycle'. Just as it had been earlier at Spencer's gymnasium, the velocipede was found here in a gymnastic context, and the 'Tournament' was a revamping of current gymnastic displays to capitalize on the entertainment potential of the new fad. In this curious example of a profit-making show-business event organized by a newly constituted club, the modernity of the bicycle and the new acquired skill of the riders were set in an anachronistic and artificial context of mediaeval 'jousting' and 'tilting', though it was also noted that it had practical potential as 'a safe and rapid means of locomotion'.[63] The potential of the velocipede as a tool for speed and modern sport was not yet able to be realized, and sport could only be promoted by reference to long-dead cultural traditions. The *Liverpool Weekly Courier* carried a long appreciation of the 'Tournament':

> The public, who have been accustomed lately to see this latest novelty in locomotion under the unskilful guidance of venturous youth wobbling about the streets in an apparently unmanageable manner, in peril of being run down by the cabs and other vehicles, would scarcely conceive the absolute control under which the machine is brought by successful practice. Though this forms no part of the curriculum of physical education received at the Gymnasium, the bicycle has found there a patronage and encouragement sufficiently liberal to have enabled a large number of its admirers to attain a remarkable degree of perfection in its management, so as to place beyond doubt the fact that it may be made a safe and rapid means of locomotion. The skill of the riders and the efficiency of the various kinds of these machines which have been introduced in rapid succession since they were brought, still recently, before the attention of the public, could not be more thoroughly demonstrated than by such tests as those to which they were

> put in the Tournament on Saturday... The Gymnasium was thronged with eager spectators, the majority of whom were ladies, to whom the novelty of the joust afforded great diversion.[64]

In Liverpool, the 'Bicycle Tournament', staged by men, was graced with the presence of many 'ladies' whose presence validated it as a respectable social occasion, and the crowd-pleasing potential of bicycle entertainment was also evident in London. For the already mentioned 'Velocipede Derby' at the Crystal Palace in May 1869, a formula which was repeated at frequent intervals throughout the summer, 'a large number of visitors was induced to go down to Sydenham with a view to witnessing the properties of a machine which has lately engaged so much public attention'.[65] At the Agricultural Hall, Islington, where 'Grand Bicycle Races' were held for several weeks in June and July, opening night attracted 'about 1500 persons', and on a subsequent Saturday night, 'there was a much larger assemblage of persons present than on any past occasion', allowing a reduction of the admission charge.[66]

Crowds of people continued to attend bicycle racing at popular venues in English cities as the sport expanded into open-air tracks and the initial craze appears to have solidified into a sporting habit. On a Saturday afternoon in April 1870, three thousand people were reported at Aston Cross Grounds, Birmingham for 'the championship of the Midlands...The large space fronting the green, the great gallery, as well as the trees, were literally crammed, the green being reserved for the ladies, of whom a fair sprinkling were present'.[67] One thousand people were reported at Vauxhall Gardens, Wolverhampton on Monday, 6 June 1870, to see 'William Turner's All-England bicycle contest for amateurs who have never won any prize'.[68] In August 1870, to watch races at Molineux Grounds, Wolverhampton between international calibre professional riders, John Keen, E. Shelton, James Moore, J.T. Johnson and others, 'nearly 2000 persons paid for admission on Saturday, and another 2000 on Monday'.[69] Barely a year after the sport had begun, an attendance of 2000 people was commonly reported at tracks in the cycling centres of England when well-known riders were competing, and there was soon a small group of 'champions' who could be marketed as stars in the important racing cities, Birmingham, Sheffield, Liverpool, London and especially Wolverhampton (see below, Section 7, 'An elite emerges').

6. Links between manufacture and sport

While there was no unifying institution which was working to promote the bicycle in these geographically widely scattered early exhibitions and racing events in England, the factor that linked them was that they tended to take place in those areas where the manufacturing and marketing of bicycles was most active, that is, in and around London, Wolverhampton, Manchester, Birmingham, Liverpool and Sheffield. Reporting racing at the Molineux Grounds, Wolverhampton in June 1873, the *Wolverhampton Chronicle* suggested that: 'Bicycle riding seems to have localized itself in Wolverhampton as an amusement no doubt owing, in a great measure, to the favourable nature of these grounds, but aided by the district being the principal seat of the manufacture of the two-wheelers'.[70]

Especially in the larger cities, competitive events gave promoters and manufacturers an opportunity to mount exhibitions of machines as an additional attraction and source of income, a further indication that the sport was, from its very beginnings, used as an advertising vehicle for the bicycle industry. Such exhibitions took place in London at the Crystal Palace and at the Agricultural Hall, Islington. But even in a rural location, racing was linked with an exhibition of the very latest technical developments. At Studley Pleasure Grounds, Yorkshire, 'within the shade of that famous and most beautiful of all monastic ruins, Fountains Abbey', as part of its '11th annual exhibition of plants, flowers and vegetables', the Ripon Horticultural and Floral Society organized a velocipede exhibition which historian H.H. Griffin wrote 'brought together the finest display of cycles ever seen up to that date', held at a moment 'which was very prolific in new ideas'.[71]

Telling evidence of this connection between the sport and the industry in its earliest period is provided by the Wolverhampton Velocipede Club's *Rules* from 1869. This Club came into existence to buy velocipedes and make them available for the use of members at the Club's 'practice room'. The rules included the provisions that 'when the members are efficient in the use of the machines, excursions into the country will be arranged by the Committee', and that 'all races between other Clubs, and meetings, etc., are to be first submitted to the Club for their approval, and the Committee shall decide on the terms of every such Race and meeting'. Most significantly, the *Rules* carried an advertisement for 'Forder and Traves, Manufacturers to the Wolverhampton Velocipede Club', a mid-Victorian model of the kind

of sponsorship relationship for the provision of equipment which still exists throughout the sports world today, and is integral to the structure of modern bicycle racing.[72] (see Fig. 2. 8).

A probably slightly earlier account from the *Wolverhampton Chronicle* suggests that this Club was originally conceived as the Wolverhampton and Staffordshire Velocipede Company or Association, formed 'for the purpose of promoting velocipeding in the town and neighbourhood', whereby members would buy shares and be enabled to buy velocipedes 'by paying £10 in monthly instalments...They would buy velocipedes, rent practice grounds, teach velocipeding and lend velocipedes to members'. Alderman Bantock attended a Saturday evening meeting at the Agricultural Hall and 'recommended the use of the velocipede as a means of pleasant relaxation and healthful enjoyment'. At this meeting, Messrs. Forder and Traves demonstrated 'the ease, rapidity and security of the bicycle', and subsequently 'entered into an arrangement by virtue of which the new company will be appointed the sole agents for the sale of velocipedes in this town'.[73]

Even at this early stage of development of the sport, a technological and economic logic mediated the relationship between riders and makers, between the industry and the sport, and made it likely that riders would become makers and vice versa. An ordinary customer might ride a velocipede occasionally, tolerating deficiencies. But serious riders were more demanding and were acutely aware of discomfort, inefficiency, bad design, heavy weight, harsh suspension, or any other technical problems or difficulties. The key concern for racers was speed, but speed achieved through a combination of efficiency, comfort and ease. The addition of a rubber cushion or tyre to prevent slippage of the early metal-ringed wheels was one example of technological improvement. The skill of the rider and the kind of surface ridden upon were also important. All these aspects were debated constantly within racing and manufacturing circles and tested in competition. Racers became the most critical and demanding of consumers, and gave the most valuable feedback to makers.[74]

The Londoner John Keen, who participated in many professional championships at various distances between 1870 and 1880, winning many of them, was the pre-eminent example of an outstanding 'champion' who was also a distinguished maker, widely credited with having played an important role in advancing early bicycle design and technology (for further discussion of Keen, see chapter 3, Section 7). Amateurs and professionals alike coveted a

Keen machine for the state-of-the-art technical edge it gave them. In November 1871, a writer to *The Field* reported 'the greater efficiency of Keen's 'Spider' bicycle, the superiority of the "rigid wheel". the lightness, durability and rigidness...No other maker has brought the bicycle to such luxurious excellence as he has'. Another report in the same paper, in May 1872, commented that the Keen Brothers' 'Spider' bicycle 'has come to be extensively used...on account of the prompt manner in which certain well-tested improvements have been adopted'.

The building of a strong, light wheel was a crucial design element in this early period, and Keen's wheels were among the best in the business, making it possible for the size of the wheel to increase to as much as 60 inches.[75] A catalogue for the Keen bicycle from 1874 claimed that 'the practical experience of its maker has enabled him, after much study and perseverance, to produce a machine which for durability, lightness and speed, cannot be rivalled'. 'Patent Anti-friction Bearings', and other improvements in frame and wheels constituted the 'great superiority' of Keen's machines. There was 'as great a contrast in riding on a well constructed bicycle and on an inferior one, as there is between riding in a light spring carriage and in a cart without springs'.[76]

John Keen's significant early role was recognized in 1884, when a committee made up of prominent cycling personalities, including the rider Ion Keith-Falconer and editors George Lacy Hiller and Harry Etherington, was formed to collect money for a 'testimonial' to him, to prove to him 'that his life and doings have not gone unnoticed and unrewarded'. In a letter circulated to *Wheeling* and *The Cyclist,* these luminaries called Keen 'the pioneer of our sport' and attested that 'beyond the manufacture of machines, the credit of first proving their use also falls to John Keen...Not only did he once carry everything before him upon the racing path, but down to the present day he is undoubtedly the best and prettiest road rider we have'.[77] Such a statement gives powerful support to a central assertion of this dissertation, that competitive cycling as a sport was a crucial factor in the technological development of the early bicycle industry.

In the design of early bicycles, speed was greatly affected by 'gear', defined by the size of the pedalled front wheel of the bicycle and thus the distance covered with each pedal rotation. Attempts were made to 'gear up' this wheel mechanically, but the easiest way to

cover more ground with each rotation of the pedals was to enlarge the drive-wheel, resulting in a slight advantage for a taller rider, with longer legs, over his shorter rival, which could, however, be compensated for with a quicker pedalling technique. By about 1875, the high-wheel bicycle had emerged and would dominate bicycle design for the next ten years, continuing the strong athletic and acrobatic tendencies inherent in the early velocipede displays.

Throughout the 1870s and into the first half of the 1880s, the high-wheel, or 'ordinary', bicycle was the machine upon which athletic prowess was demonstrated on both road and track, whether it involved speed over short distances or endurance over longer distances. Many riders proud of their skill on the high bicycle were at first scornful of the much lower, chain-driven 'safety' bicycle when it was first introduced in 1884-5, but nevertheless, the high-wheel bicycle was quickly outmoded and for competitive purposes was more or less abandoned by 1890.

7. Varieties of competitive activity

It is clear from the many accounts that early bicycle competition took various forms, and some of the different kinds of racing in this pioneering period are briefly defined, described and examined below.

The French velocipede which arrived at Charles Spencer's gymnasium in London in January 1869 may well have been one of the earliest occurences of indoor riding in England. The rainy and cold climate tended to encourage this, and the crowded and dangerous state of the city streets, and the economic logic of renting a machine to try it out, were also factors. The velocipede rider in public did not have an easy time on rough cobbles, amid hectic horse and carriage traffic, where he might also be the object of ridicule. Demonstration riding thus led to indoor tournaments and racing, events which were in part advertizing and in part entertainment, where an entrance fee could be charged and machines displayed, rented and sold. In late April 1869, for example, the Liverpool Velocipede Club promoted its 'bicycle tournament, an entertainment of a most novel and completely modern character', according to the *Liverpool Mercury*. 'Of course that which created the greatest interest and caused the most amusement was the exhibition of skill in the management of the bicycle under the most difficult circumstances, such as tilting, throwing the javelin and broadsword attacks'.[78] *The Field* reported 'a curious display' which took place at the Velocipede Riding School run by Snoxell and Spencer in London. A young French expert, 17 year-old Henri Pascaud, was invited and pitted against John Mayall and others. 'The leading English amateurs present displayed much excellence in the new art...But Mr. Pascaud stands alone. The feats he accomplishes have never been approached in this country, and it was amusing to remark the utter amazement of the velocipede teachers and pupils'.[79]

These small-scale beginnings eventually led to public performances by experts in locations where the public could also rent velocipedes, such as the Agricultural Hall, Islington, London, where races were held from June onwards. 'The arena, where the horses have been in the habit of displaying themselves, is boarded over as evenly as the floor of a dancing saloon', reported *The Field*: 'At each corner of the inclosure a huge tub of flowers is placed, about six yards from the barricading, and the course was nine times round the arena between these tubs and the outside barricade'. An improvised, indoor track tended to be slow and confining, however, and entertainment aspects, slow, trick and 'fancy' riding, were

frequently as important as racing, as described earlier at the Liverpool 'Tournament'. A reporter from *The Field* was disappointed: 'A contest that partakes so much of the "show" element is not likely to be attractive to the muscular athlete who goes plodding down lanes and unfrequented streets', he wrote, 'at least half the velocipedists who competed on Saturday were mere scramblers on their bicycles, and could not even sit them when going a perfectly straight course; and it was this want of proficiency that rendered the contests less interesting than they might otherwise have been'.[80] However, the teething troubles of such events did not prevent the crowds from flocking to them. The price of a ticket in Islington was reduced from one shilling to sixpence on Saturdays, and the *North London News* reported that there was 'no diminution in the rage for velocipedestrianism, if one may judge by the daily increasing patronage bestowed upon that excellent arena for practice, the Agricultural Hall'. 1200 people paid admission the following Saturday.[81]

Place-to-place rides on the road created a good deal of attention in the press. Although they were not usually races as such, they had a strong athletic element and demonstrated that a strong velocipede rider could rival a horse or the coach. In February 1869, as described earlier, Charles Spencer, John Mayall and Rowley Turner stage-managed a 60 mile ride to Brighton, arranging to have a reporter from *The Times* accompany them in a horse-drawn carriage. As a publicity stunt, the ride was evidently successful, for it was widely reported in the press and credited with popularizing the velocipede.[82] Journalist H.H. Griffin wrote later that 'to these three riders fairly belongs the honour of introducing and popularizing, by proving its practical utility, the use of the bicycle in this country'.[83] At the end of March, two members of the Liverpool Velocipede Club rode from Liverpool to London in four days. 'This is stated to be the longest bicycle tour yet made in this country, and the riders are of the opinion that they could have accomplished the distance in much less time', reported the *Liverpool Mercury*. But such pioneers encountered the surprised and sometimes hostile reactions of the rural public, for:

> their bicycles caused no little astonishment on the way, and...at some of the villages, the boys clustered round the machines, and when they could, caught hold of them and ran behind till they were tired out. Many inquiries were made as to the name of 'them queer horses', some calling them 'whirligigs', 'menageries' and 'valaparaisos'. Between Wolverhampton and Birmingham attempts were made to upset the riders by throwing stones.[84]

Strong, adventurous riders were prepared to take on the challenges of empty roads and

unpredictable conditions, however, and newspapers reported the longer place-to-place rides. In August, 1869, a Mr. Klamrath rode from Edinburgh to London in 5 days,[85] while in October, Edwin Goddard, an employee of Soper's Engineering Works, Vauxhall, London, rode 60 miles from London to Newbury 'on a bicycle of his own make...Goddard's physical powers are good, and he completed the journey without the slightest inconvenience to himself'.[86]

In June 1873, Charles Spencer, with three other members of the Middlesex Bicycle Club, George Hunt, William Wood and Charles Leaver, rode from London to John o'Groats, the most northerly point of Scotland, covering 800 miles in fourteen days during a ride sponsored by Thomas Sparrow, the London agent for the Coventry Machinists' Company. It was, thought Spencer himself, 'a really important exemplification of the practical purposes to which a bicycle might be put'.[87] The *Daily Telegraph* thought that:

> a more extraordinary journey, prepared under more extraordinary conditions, has been seldom recorded. A distance of 800 miles has been covered in 14 days, at a rate of 60 miles a day. To say that the work would tire a horse is a feeble description of it. The strongest horse would break down under such a journey...As an example of what a bicycle enables a man to do, the bare fact of a journey so made is full of interest.[88]

The journey dramatically demonstrated, for the first time, that it was possible for a man to go from one end of the country to the other on a bicycle, a feat of both athletic and utilitarian significance.

These early long-distance place-to-place rides, although not competitions, tested the athletic ability of those who undertook them and established time standards which would be attacked by later record-breakers. They laid the foundations of a style of racing which would become more and more important in the sport later in the 19th century. Place-to-place record rides between prominent cities, or over easily identifiable distances (100 miles, for example), were to become one of the most visible and publicized aspects of bicycle racing in England and France in the 1890s, providing crucial publicity opportunities for the bicycle and tyre makers who sponsored them.

Velocipedes were also raced on public roads, usually where smoother, well maintained, stretches could be found around large cities like London and Liverpool. Both *The Field* and *The Daily News* reported a very early two mile race in Dulwich, South London in January

1869, 'in which four gentlemen travelled over 2 miles of ground for a sweepstake of £20', won by a Mr. Waloski.[89] The Liverpool road race which has already been described was held in April 1869, on a macadamed road, 'perhaps a thoroughfare better adapted for the purpose could not have been fixed upon in this locality, as it is tolerably level and straight the whole length'. There were 19 entries, though only 12 started, and they were handicapped according to the size of their driving wheels, those with bigger wheels starting later since the bigger wheel was considered to give them an advantage. The winner, Henry Eaton, a member of the Liverpool Velocipede Club, rode a 'Miss Julia' machine and covered the distance of 13 miles in 1 hour 27 minutes 'under very unfavourable circumstances - a strong head wind and a crowded road. When Eaton reached the winning post he appeared to be greatly exhausted, and was carried from his bicycle into a garden...where he was supplied with a little brandy, which soon rallied him. He was enthusiastically cheered by the spectators'.[90]

The 'Miss Julia' machine which was victorious in this race was gendered as female, an interesting example of men imputing femininity to an inanimate object. Newspaper reports of the race included a starting list of riders, probably the earliest documented start-card in British bicycle racing, which identified the makers or names of the bicycles ridden.[91] (see Fig. 2. 9). The *Liverpool Weekly Courier* provided information about the origin of some of the bicycles involved. 'Several of the bicycles were manufactured by Messrs Brown, of Liverpool', it said, 'but there were several of French make, of which the second in the race was one'. Henry Eaton won 'a handsome silver bicycle' for his afternoon's work, 'the gift of Mr. W. H. Brown, bicycle manufacturer, Sir Thomas's Buildings'.[92] Once again, a manufacturer was involved in the sponsorship of a race by providing a substantial prize, the unmistakable implication of the newspaper report being that the Liverpool-produced bicycle was in competition with the imported French model.

A bicycle race could also be held in almost any good-sized field, or in the grounds of a tavern. This was where outdoor track racing began, and such an event was frequently promoted by a tavern owner as a business proposition. One such may have been Jack Warner, who held the licence of the Old Welsh Harp Inn, in rural Hendon on the outskirts of north London, where he provided skating, swimming, boxing and wrestling matches, hunting, shooting and fishing for a London clientele. Warner is claimed to have organized

the earliest bicycle race in England at his inn. Primary documentation of an event is lacking, but one source claimed that the race took place on Whit Monday, 1 June 1868, and that it was won by Arthur Markham.[93]

More reliably documented are the activities of another tavern owner and promoter, O.E. McGregor[94], the proprietor of the Molineux Arms and Gardens in Wolverhampton, who started promoting bicycle races at his own establishment, probably in 1870, after seeing the success of the first Wolverhampton races organized by manufacturers Forder and Traves at the Vauxhall Gardens. McGregor was responsible for building his inn into probably the most important venue in the country in the early 1870s, turning Wolverhampton into England's bicycle racing Mecca (see Fig. 2. 10). Reviewing the racing season of 1870, the *Wolverhampton Chronicle* praised highly the bicycle contests which had taken place at the Molineux Grounds during the year, 'both as regards the number of visitors and the quality of the riding. They have not been confined to Wolverhampton and the district, but have been open to All-England, and have, therefore, brought together some of the best riders in the kingdom'. Prizes were good, a first prize of £15 being offered by the 'Sun Bicycle Association' (perhaps organized or owned by O.E. McGregor himself) at the final races of the season. 'In the evening, about fifty of the members and friends of the Association sat down to an excellent dinner provided by Mr. McGregor, the proprietor of the grounds'. Perhaps this generosity was one of the secrets of McGregor's business success.[95]

Racing was also promoted as a component part of larger, not specifically sporting, social events. The 1869 Crystal Palace 'Velocipede Derbys' were a prominent showcase for British makers and for the young sport, held at a famous, centrally located, international exhibition site which attracted large audiences to many different kinds of cultural events. Bicycle races began in May and continued throughout the summer and French professionals were brought over to challenge the home-grown amateurs. Late in May, Monsieur Biot 'was easily recognized by his white cords and hot boots', reported the *Sydenham Times*, and easily beat his opponents. It was 'a day to be remembered in the annals of the bicycle, notwithstanding the drenching showers'.[96] French expertise was a great advantage: 'It was very plain that Biot is much superior to any of the other competitors', reported *The Field*, 'and, so far as we could see, his advantage was principally owing to his position on his bicycle. He sat well back, and thrust the cranks forward instead of sitting over them and treading them down, as

many of the English competitors did'. But *The Field* was critical of the organization of the races and the sharp turning point of the course, which in one heat caused all the competitors 'to come to grief together'.[97]

The Crystal Palace's role in publicizing the velocipede during the 'craze' of the summer of 1869 culminated in the autumn with a month of almost continuous racing and the promotion of the 'International Velocipede and Loco-machine Exhibition'. The speculative and commercial nature of this exhibition was expressed in a publicity advertisement where it was stated that the purpose of the Exhibition was 'to hold conferences having for their object to examine the possible application of velocipedes to practical business purposes and to discuss their scientific construction'.[98] Entertainment was mixed with exhibitions and theoretical and 'scientific' meetings. Dr. Thomas Clarke, of Cheshire, read a paper to the Conference entitled 'Scientific principles which should guide in the construction of velocipedes'.[99] The Exhibition attracted 200 machines, representing more than seventy companies, and was certainly the scene of a ferment of commercial, technical and social exchanges. Advertisements, run in many daily papers, tout:

> a great Velocipede Contest and Competition which will take place daily, forming an afternoon's amusement of the most popular character. These exciting and interesting Velocipede displays, in which all the latest improvements in bicycles are exhibited, must be seen to be appreciated. They have interested those who have already seen them to an unusual degree.

Once again, continental riders were brought in, including 'Mons. Moret and Mons. Michaux, of Paris and Mons. J. Johnson, the Belgian champion'. There were races nearly every day in the 'Velocipede Circus', and a show business atmosphere prevailed, the bicycling events being intermixed with opera and the sensational Blondin on his tightrope.[100]

At the Ripon Horticultural and Floral Society's Fête at Studley Pleasure Grounds, which has already been mentioned, bicycle racing was incorporated into a traditional community festival. 'Cheap trips were run from Leeds, Halifax, Bradford, Manchester and other places', and on the grounds there were 'fruits from the hot house of the Earl, the conservatory of the squire, the greenhouse of the amateur and the garden of the cottager. Every available space was occupied with good plants, flowers, fruits or vegetables....and attendance during the afternoon was of a highly select and fashionable character'. And surprisingly for this rural location, 'the south side of the field was occupied by a numerous array of bicycles and

tricycles of various kinds of workmanship, which were to be judged by Mr. Dunnington, a joiner, and Mr. Mountain, coach builder and coach proprietor'. The 'novelty of the velocipede races', run around the lake, took place on Saturday, near Fountains Abbey. The Abbey green was crowded with spectators, who were in general disappointed because as with many such early outdoor races, there were organizational difficulties, particularly the hill on the course: 'The race in the case of the bicycle was not with the strongest man, but the man who was an expert in mounting his machine after ascending the hill; if he could do this quickly he was soon far ahead of his opponent'. The first prize was a silver cup, or £10 in money.[101]

The momentary popularity, the athletic novelty, of the new velocipede tempted many organizers of sporting events to feature it, and it was in the context of other athletic events that 'bicycle races' were accepted as a novel addition to a varied repertoire of sport.[102] In May 1869, for example, Nottingham Football Club's 'Athletic Sports' at Trent Bridge Ground included a 'Velocipede or Bi-cycle Race' contested by six riders; in October 1869 Richmond Cricket Club's 'Athletic Sports' at the Old Deer Park, Richmond included a 'Half Mile Bicycle Race' also contested by six riders, one of whom was 'J. Keen' whose club was given as 'Surbiton Amateur'. The same club's April 1870 'Athletic Sports' included an 'Open' 1 mile 'Bicycle Race' contested in two heats with a final. In July 1870 Bradford Cricket Club included a 1 mile 'Bicycle Race' in its 'Athletic Festival' and a week later the 'Knutsford Annual Athletic Festival' included a 'Velocipede Race'.[103] In a further example, in September 1869 the Licensed Victuallers Asylum sponsored a 'Grand Gala Fête, Bicycle and other Races, as well as a Cricket match' at Lord's Cricket Ground.[104] The early amateur bicycle championships, held under the umbrella of the Amateur Athletic Club from 1871 to 1874, were similarly included in existing athletic events, usually at the same time that 'pedestrian' (that is running and walking) events were held. The differing needs of the bicyclists, however, their increasing specialization, the expansion of the sport and the need to include many different categories of bicycling events, soon made it essential that separate championship events be promoted, which will be described in the following section.

8. An elite emerges: match racing and championships

Match racing was the most sophisticated form of early bicycle racing, where pure athletic skills - speed, strength, experience and tactical finesse - were in demand in a race between only a few experienced competitors. An elite group of international-calibre riders emerged, who competed against each other at the highest level. At first, these top-level riders were all British or French and included James Moore, Hippolyte Moret, Camille Thuillet, André Castera, John Keen, David Stanton, J.T. Johnson, J. Palmer, T. Shelton, Rowley Turner, Fred Wood, George Waller and A. Forder.[105]

The most important races between leading champions quickly became *de facto* national and world 'championships' and were advertised and reported as such, and from 1870-71 onwards professional and amateur 'world championship' honours were contested between members of this elite group, usually in London or Wolverhampton.[106] Traditional wagers between contestants, managed by a promoter such as Wolverhampton's McGregor, with the stakes usually held by an impartial outside body, usually a sporting newspaper such as *Bell's Life, Sporting Life* or *The Field*, were the basis for most professional challenges and 'championships' from 1870 onwards.[107] The 1871 'professional championship' was held at Aston Cross Grounds, Birmingham. The prize was again £30 in cash, 'for which half a dozen of the best performers in the kingdom contended, the conditions of the competition giving the winner the title of champion of England'. The winner was J.T. Johnson over J. Palmer, with James Moore third.[108] And, through a working relationship created between the southern clubs and the Amateur Athletic Club, amateur bicycle 'championships' were held under A.A.C. jurisdiction from 1871 until the formation of the Bicycle Union in 1878-79, although there was an overlap in both 1878 and 1879, when both organizations held bicycle 'championships'.

There is evidence of a substantial growth of the competitive sport in the contemporary press accounts, although the reports of huge crowds at events should be treated with some scepticism. In June 1870, the *Wolverhampton Chronicle* reported that 'upwards of 1,000 people' were at the Vauxhall Gardens, Wolverhampton, for the 'All-England amateur bicycle contest', where despite the event's announced national aspirations, most of the riders were local. In August 1870, the *Chronicle* reported 'champion bicycle contests', including 'the All-comers Champion Cup race of one mile' for a £30 cup and a 'first-class amateur

race' for a £5 silver cup and 'a handsome wine flask'. There was a prize for 'the wearer of the neatest costume', which was divided between Shelton and Turner, Shelton being 'attired in a rich mazarine blue jacket, with white sash', and Turner 'an emerald green jacket, and white breeches'. The 'championship' on this occasion, contested in a number of heats, was won by the Parisian James Moore, who rode a state of the art 43" French 'Spider' bicycle made by Eugene Meyer, beating England's John Keen. McGregor's two-day promotion was claimed to have attracted 2000 spectators on Saturday and the same number the following Monday.[109]

Further investigation of this August 1870 racing emphasizes the crucial technological importance of these early 'championship' races in the evolution of the high-wheel bicycle. They were the scenario for a demonstration both of state-of-the-art manufacture and bicycling technique. James Moore, who won the championship race, later wrote, 'I myself won the Paris championship on a tension wheel of Meyer's make in 1870, and raced at Molineux Park, Wolverhampton, in the early summer of 1870. I was riding a 43" Meyer tension-wheel bicycle and used toe-pedals, whilst my opponents were yet pedalling from the instep on Phantom 36" wheels'.

On 21 Sept. 1870, the *Wolverhampton Chronicle* reported that at a race between progressive builder John Keen and a rider called Wallace, from Aberdeen, 'the latter, whose machine, though of fine build, was somewhat antiquated for these days of 'phantom' and 'spider' wheels, for a long time refused to strip, averring that he had no chance; at length, however, he came on the course'.[110] That wheel size was a crucial factor in competition between 1869 and 1871 is underlined by the fact that wheel dimensions were frequently listed in newspaper reports and were made the basis for handicapping riders. A letter to the *English Mechanic*, 23 Dec. 1870, stated, 'The machine of the present day is a very different affair from the old clumsy articles which were in vogue two years ago. We thought then that we were doing well when we covered a mile in 7 minutes and a 36" driving wheel was the maximum size. Now the time for a mile run on a course is 3+ minutes, and the driving wheels are from 48-50" in diameter. What has enabled us to obtain such good results is the introduction of the "spider" wheel'.[111]

At this point, many bicycle races were already being specified as for either amateur or professional, although an 'all-comers' race was open to both classes. Professionals were those who earned their livings as athletes, or worked in the industry, and those to whom the 'mechanic, artisan and labourer clause', as defined by the Amateur Athletic Club, would apply. Amateurs were all those who could not obviously be defined as professionals. The 'mechanic, artisan and labourer clause' was an essentially class-oriented measure, designed to exclude working and lower class competitors from amateur competition. Muscular 'mechanics and artisans' were considered to have a physical advantage over the softer-living 'gentlemen', and were in fact excluded from the amateur sport because the 'better class' of athletes did not want to have to rub shoulders with their social inferiors, or risk being beaten by them.

The circumstances surrounding the first official amateur championship, promoted by the Amateur Athletic Club at Lillie Bridge Grounds, Fulham, London on 12 August 1871, throw into vivid perspective the practical results of the imposition of the 'mechanic and artisan clause' in competition, and provide evidence of the striking social and class divisions within the early sport. The championship race was a 4 mile event, and according to historian H.H. Griffin: 'Out of about twenty entries, seventeen were ruled out, and protests were lodged against two of the three starters, and it was almost a walk-over for H.P. Whiting, a public-school man'.[112] It was hardly surprising, therefore, that contemporary chronicler Nahum Salomon was able to report that 'Mr. Whiting, though opposed by one or two other competitors, had not the slightest difficulty in winning'. The result might have been very different had Whiting confronted the best of the tough Midlands professionals that year, although the fact that he went on to win three further amateur championships, from 1873 to 1875, shows that Whiting was not an inferior rider.[113]

It was predictable, too, that those 'professional' bicyclists excluded from this event may well have decided in the future not to have entered Amateur Athletic Club events, and to have preferred to see themselves as professionals. Thus this 1871 championship exclusion may well have been significant in influencing the pattern of the future direction of the sport, and emphasized the divisive social and class distinctions between amateur and professional riders which would in the future have such a profound impact on the structure and organization of competitive cycling.

9. Summary and conclusions

Racing and recreational riding, amid the flurry of manufacturing activity, were the most significant components of the novel activity surrounding the emergence of the bicycle, with practical utility as an additional and initially somewhat secondary possibility for the energetic. The earliest racing was frequently professional, involving cash prizes, although some races were described as being exclusively for amateurs.

The use of the complex, expensive, new machine in the young sport mediated a functional technological, economic, athletic and social relationship between competitors, promoters and manufacturers. The earliest bicycle racing in the 1868-1871 period was from its beginning a testing ground for the design and manufacture of machines, as it would continue to be in the later development of the sport in the 1880s and 1890s.[114] Between 1868 and about 1875, racing – the need for more speed - was a crucial factor in the increase in size of the front wheel and the emergence of the high bicycle, and in technical developments such as the development of light tubing, ball bearings, tangent-spoked wheels and other improvements.

The early history of 'velocipede' racing was well documented in the press; it was a novelty and attracted media attention. By early in 1869, a velocipede 'craze' was developing and formal competition began as commercial interests were willing to speculate in the new sport. Thus, the early sport had a strong commercial and entrepreneurial component. The Wolverhampton Velocipede Club, for example, already had a sponsorship arrangement with makers Forder and Traves in 1869, and Forder, a professional rider, was a member of the Club. Riders were often in effect 'sponsored' by a maker who was interested in advertising his machine to the public and thus demonstrating its superiority, a commercial relationship which typified the sport of cycling from its very beginning.[115]

Competitors were frequently actual makers or employees of a manufacturer, that is 'mechanics', who exactly fulfilled the gentleman amateur's conception of professionalism. When an amateur won, that victory was also a *de facto* advertisement for the machine he rode, and in the early days of the sport amateur victories were often advertised in the press. As the sport developed, the proponents of amateurism sought increasingly to distance themselves from this commercialism inherent in the expanding bicycle industry.

Early bicycle racing took various forms. It was adaptable and flourished both indoors and outdoors as an entertainment for paying spectators and in self-motivated tests of speed and endurance on the road. Early bicycle racing was similar in its promotion and organization to other contemporary sports, such as athletics, gymnastics, pedestrianism or boxing. Running and walking races and feats of strength and endurance belonged traditionally at county agricultural fairs held in the summer months, and bicycle racing on a grass or cinder track fitted easily into this setting. In the winter months, long distance pedestrianism and displays of strength and skill were presented indoors, and here too the novel bicycle could be presented on a relatively easily prepared track.

A promoter was invariably involved in this early racing, usually a tavern or gymnasium owner, because there were as yet few clubs or specialized institutions. O.E. McGregor, for example, presided over activities at the well-known Molineux Grounds in Wolverhampton. The promoting of one personality or 'champion' against another quickly became the best method of advertising and choreographing the contests.

Within a class-structured society, the need for a distinction between amateur and professional riders was expressed, a dichotomy which was to be an ongoing issue within the sport. The beginnings of the exclusively amateur sport can be found in events promoted by amateur athletic clubs, which began to include 'fashionable' bicycle races in their programs. Some events which were given the name 'tournament' or 'velocipede circus' were not intended primarily to demonstrate speed in the cramped locations but other entertainment aspects of the velocipede - slow riding, for instance, trick riding, jousting and dramatic sketches. These indoor competitions were, however, the earliest, embryonic velodrome races.

The speed of bicycle riders in the early period was relatively slow, particularly on the road, and was judged by comparison to walking or horse-riding: except for rare macadamed surfaces on the outskirts of large cities, road and track surfaces were bad. On the flat, even in short-distance races, speeds were quite slow and mechanical breakdowns and accidents were frequent.

Contemporary commentators appear to have been most impressed by long distance place-to-place rides, where stamina over rough roads was the most admired quality, and elapsed times could most easily be compared to other ways of covering the distance. As bicycle technology improved, however, speeds increased, reaching a sustained 20 mph on a good track by the early 1880s, although roads speeds were of course much slower.[116]

The earliest bicycle racing, the evidence convincingly suggests, was stimulated by the need of makers and agents to publicize their machines, and built on an already existing enthusiasm for sport of many different kinds during a period of heightened speculative commercial activity.

Notes to Chapter Two

[1] In Holland, the first bicycle clubs were given names which expressed this mood of modernity. In Deventer a club founded 22 Oct. 1871 was called the Velocipede Club 'Immer Weiter' ('Immer Weiter' could be translated as 'On and On', or 'Always Further'); The Hague had a club called 'Celeritas' (or 'Speed'), while Brummen (near Deventer) had a club called 'Voorwaarts' ('Forwards') and Apeldoorn one called 'Vitesse' ('Speed'). See Theo Stevens, "The Elitist Character of Early Dutch Cycling", *Proceedings – 12th International Cycling History Conference.*

[2] Charles Spencer, op.cit., p.68.

[3] Alfred Howard, *The Bicycle for 1874: A Record of Bicycling for the Year.*

[4] Nahum Salamon, op.cit.

[5] *Daily News*, 23 August 1876. The distinction made here between 'popular' and 'fashionable' should be noted and examined. A 'popular' pastime was one which would appeal to the masses, to the working classes; if it became 'fashionable', it had gained acceptance further up the social scale, among the middle classes.

[6] Alfred Howard, *The Bicycle for 1876: A Record of Bicycling for the Past Year.*

[7] The most complete general account of the beginnings of the bicycle industry in Britain is Andrew Millward, "The Genesis of the British Cycle Industry, 1867-1872," *Proceedings of the 1st International Conference of Cycling History.* Another short account is Nick Clayton, "The Introduction of the Boneshaker into England," in Charles Spencer, *Bicycles and Tricycles: Past and Present* (reprinted by Cycling Classics, Oakland, California, 1996).

[8] About fifteen informational booklets on the earliest bicycles were printed in England. Some were in effect manufacturers' catalogues. Titles include: 'Velox', *Velocipedes, Bicycles and Tricycles, How to make and how to use them, with a sketch of their history, invention and progress*; 'An Experienced Velocipedist', *The Velocipede, its history, and practical hints how to use it*; 'A Working Mechanic', *The Modern Velocipede: Its History and Construction*; J. Firth-Bottomley, *The Velocipede, its past, present and its future.*

[9] The term 'velocipede' was most commonly used in the earliest period, although 'bicycle' was used from quite early in 1869. Through the early 1870s, 'bicycle' was used more and more frequently, while 'velocipede' usually indicated the older style, out-of-

date, machines, and came to have a pejorative, unfashionable, connotation. See Glossary for further examples.

[10] For an account of the beginnings of the sport in France, see Keizo Kobayashi, *Histoire du Vélocipède de Drais à Michaux, 1817-1870*, Part IV, 'Les Courses de Velocipedes', pp.237-308. Kobayashi's interpretation is limited, however, by its failure to appreciate that the sport had its origins in popular entertainment. In categorizing his account of the early sport exclusively into 'road' and 'track' sections, he makes the mistake of seeing 1867-69 through the eyes of the later, 'classic', development of bicycle racing, and neglects the important popular entertainment aspects in France. The very early sport in the United States, beginning in 1868, which also had its origins in popular entertainment, has been explored in Norman Dunham, "The Bicycle Era in American History" (unpublished Ph.D. thesis, Harvard University, 1956).

[11] Were these costume competitions, with a prize awarded for the best-dressed competitor, in effect 'fashion shows', to make the new sport more appealing, more respectable, or to mimic the fashionable French events? Reports of the races make frequent mention of the colour and individual styles of riders' costumes. Bright costumes, of course, also helped to distinguish one competitor from another.

[12] See J.A. Mangan, *Athleticism in the Victorian and Edwardian Public Schools* (Cass, London, 2000) and Peter Bailey, *Leisure and Class in Victorian England: Rational Recreation and the Contest for Control, 1830-1885* (London, 1978). Bailey writes (p.124), 'One of the more remarkable features of the expanding world of mid-Victorian leisure was the innovation of organized and codified athletic sports – a broad category of activities which comprised primarily the athletics of track and field events, as the term is understood today, together with a reconstructed version of football, and the previously reformed game of cricket'.

[13] It should be pointed out that the 19th century term 'pedestrianism' refers both to running and walking.

[14] The increase of leisure time included the invention of the 'weekend' as a time for leisure rather than work. As will be described later, spectators appear to have been drawn from various class levels, depending on the organizational context and geographical location of an event. Newspaper reports frequently made mention of the 'respectability' of crowds and the presence of women.

[15] *Wolverhampton Chronicle*, 4 June 1873.

[16] Derek Hudson, *Munby, Man of Two Worlds* (Sphere Books, London, 1974), p.271.

[17] See Roger Street, *The Pedestrian Hobby-Horse at the Dawn of Cycling*. 'The Pedestrian's Accelerator' was illustrated in *Imperial Magazine*, April 1819, with the comment that 'the principle upon which this simple machine is constructed, seems to have been taken from the art of skaiting'.

[18] Andrew Ritchie, *King of the Road*, Chap.2, 'Amateur Mechanics', has extensive discussion of the period 1820-60. The role and place of Kirkpatrick McMillan in the 1840s is problematic and controversial. Can he, in fact, justifiably be called the 'inventor' of the bicycle? The tendency of current examinations of the historical role of McMillan is to minimize his importance and to question the reliability of the documentary evidence and surviving machines. Recent accounts of McMillan include, N.G. Clayton, "The First Bicycle," *The Boneshaker* 113, (Spring 1987) and Nicholas Oddy, "Kirkpatrick McMillan, The inventor of the pedal cycle or the invention of cycle history," *Proceedings of the 1st International Conference of Cycling History*. Another early rear-driven velocipede by Alexandre Lefebvre, in the museum at San Jose, California, can be dated to 1843, and is of a similar design and conception to the McMillan-type velocipedes; see Jacques Graber, "The Lefebvre Bicycle," *The Wheelmen* #58, May 2001 and Andrew Ritchie, "The Velocipede of Alexandre Lefebvre and problems of historical interpretation," *The Wheelmen* #59, Nov. 2001.

[19] The role of Pierre Lallement, who played a significant role in the transmission of velocipede ideas and design from France to the United States, should be mentioned briefly here (see David Herlihy, "Lallement vs. Michaux: Who Truly Invented the Bicycle," *The Wheelmen*, #42, May 1993). Lallement later returned to Paris, where he began a company called Compagnie Vélocipédienne in April 1869, but he was not significant as a Parisian maker and was not making in 1868 (see Kobayashi, op. cit.).

[20] It will be argued that this relationship between competition, bicycle design and manufacture continued be be a crucial factor throughout the thirty year period under discussion. An identical competitive testing ground for new technology and new ideas can still be seen in the professional bicycle racing arena, typified by the annual Tour de France, and is characteristic of the emergence of new technology in all modern sports.

[21] See Note 7.

[22] Keizo Kobayashi, *Histoire du Vélocipède de Drais à Michaux, 1817-1870 - Mythes et Réalités*, Part Four, 'Les Courses de Vélocipèdes, 1867-1870'.

[23] *Orchestra* quoted in *Scientific American*, 1 May 1869. On 8 December 1867, about one hundred 'touristes vélocipédistes' raced from Paris to Versailles, the fastest covering the 17 km in about an hour (Kobayashi, op. cit., *Le Petit Journal*, 10 Dec. 1867). In May 1868, on the Feast of Pentecost, races were held at Saint-Cloud, where the Paris-domiciled Englishman, James Moore, won a gold medal (Kobayashi, op. cit., *Le Petit Journal*, 2 June 1868). Races were not confined to Paris, however, and were held for example in Cannes and Bordeaux. On 21 May 1868, Ascension Day, amateur races were held on the horse-racing track at La Réole (Bordeaux), organized by the 'fête' committee with 'a work of art' offered as first prize; velocipede racing was described as 'si nouveau et si attrayant' ('so new and so exciting'.) (Kobayashi, op. cit., *L'Union de la Réole*, 3 May 1868). Contemporary illustrations of these events show fashionably-dressed crowds of spectators, and a well-organized race structure, with uniformed riders and judges at the finishing line. The connection between velocipede racing and horse-racing was illustrated by the holding of velocipede racing just before the horse-racing at the Hippodrome de Paris, and by the introduction of obstacles into some races (a kind of steeple-chase) which were held on horse-racing tracks, as well as the adoption of brightly-coloured dress for velocipedists based on a jockey's uniform. Fancy-dress races were held, and races for masked contestants; serious sport was intimately connected with entertainment and novelty (Kobayashi, op. cit., p.261).

According to Kobayashi, the earliest French velocipede club was the Véloce Club de Valence, founded 12 March 1868, followed by the Véloce Club de Paris, in existence by 15 May 1868, at which time it already had sixty members (Kobayashi op. cit., p.243). The Véloce Club de Paris was housed at the Pré-Catalan park, where a special track and grandstand were erected for its races. The Pré-Catalan was 'made available by the City of Paris to promoters of fêtes and entertainments who hoped to attract large crowds there'. The director of the Pré-Catalan, Monsieur de Saint-Félix, alert to novelties to attract spectators, included velocipede races on at least ten occasions in 1868 and 1869 (Kobayashi op. cit., *L'Univers Illustré*, 6 June 1868 and *Le Vélocipède Illustré*, 24 March 1870). Throughout France, velocipede races were already closely associated with

community and religious festivals, a fact which helps to explain the still deeply rooted presence of bicycle racing in French society today.

[24] According to Christopher Thompson, "The Third Republic on Wheels," (Ph.D. thesis, New York University, pp.136), the earliest French clubs were the Véloce Club de Paris and the Véloce Club de Toulouse, both formed in 1868. The Véloce Club Rouennais, the Véloce Club Rennais and the Thann Cycle Club were added in 1869. See also C. Petiton, *Histoire du Véloce-Club Rouennais: Son origine, son but, ses présidents, ses courses, ses travaux* (Cagniard, Rouen, 1896). The Union Vélocipèdique de France was not formed until 1881. The racing and club activity were extensively reported in the leading journal of velocipeding, *Le Vélocipède Illustrée*, first published in Paris in April 1869, and this substantial weekly publication appears to have been the means by which the sport coordinated and organized itself nationally, though it did not usually promote racing, except for the Paris-Rouen road race. The statutes (or membership regulations) of the Véloce Club de Valence stipulated that 'all discussions of a political or religious nature are specifically forbidden'. Members of the clubs were in general young men in their twenties, and a typical club had 20 or 30 members, although that of Carcassonne listed 199 founder members. As well as promoting racing, the clubs also organized outings, usually on Sundays, where the wearing of a uniform was encouraged (Kobayashi, op. cit., pp.244-45).

[25] In racing, the distinction was recognized and debated between amateurs and 'professeurs' of velocipedes and velocipede makers, who were excluded from amateur events, but a 'Grand Prix' event was open to all categories of competitors, riding any size of wheel (Kobayashi, op. cit., p.263). Most track races were short-distance, between 2 and 4 kilometres, and the fastest speeds over these short courses were about 27 km/h. Time trials were occasionally held.

[26] Kobayashi, op. cit., pp. 267-69, 'Les courses de dames'. 'Miss America', it seems, was the professional name adopted by the wife or girl-friend of R.B. Turner, working in Paris, responsible for taking the first French velocipedes to Coventry. In Bordeaux, on 1 November 1868, 3,000 people watched 'Mlle Julie' beat 'Mlle Louise' in a hotly contested race, and the crowd invaded the track to get a closer look at the 'filles de l'air' ('open-air girls') (Kobayashi, op. cit., *Le Bordelais*, 8 Nov. 1868). The women's racing was evidently a genuinely athletic contest, and the women velocipedists, like the men,

sometimes crashed. The racing was undoubtedly risqué and had the attraction of an unconventional, if not entirely respectable, new departure. At Carpentras, on 8 August 1869, for example, it was reported that: 'for the first time women were seen taking part in these races and suffering in a kind of exercise which demands more lung-power and leg-power than grace'. (Kobayashi, op. cit., p.268). Prizes for the women's races were generous and the few female competitors were much sought after for the popular, crowded race meetings, which often introduced the sport to the general public for the first time, and were a potent demonstration of 'modern' ideas.

[27] *Le Vélocipède Illustré*, 30 Sept. 1869. The race is described in detail in Kobayashi, op. cit., pp. 292-308. 120 contestants were sent on their way by Lesclide amid crowds of spectators. In terrible weather conditions, the race was won by James Moore, who covered the 123 km in 10h 40m (a speed of 11.53 km/h), followed fifteen minutes later by André Castera. Moore rode a bicycle built by Jules-Pierre Suriray, incorporating wheels with ball-bearing hubs and rubber tyres attached to the rims. Suriray subsequently advertised himself in *Le Vélocipède Illustré* as a maker of 'vélocipèdes de vitesse' ('racing velocipedes'), mentioning specifically Moore's victory in Paris-Rouen (*Le Vélocipède Illustré*, 21 Nov. 1869). Thirty-four competitors finished the race, including 'Miss America', who arrived in Rouen at 6 a.m. the following day ('Course de Fonds de Paris à Rouen', *Le Vélocipède Illustré* #52, 11 Nov. 1869). The novel Paris-Rouen race was the stimulus for further road races through 1869 and 1870, until the Franco-Prussian War disrupted sporting activity in the north-east.

[28] *The Field*, 10 Aug. 1867.

[29] *The Times*, 1 Feb. 1869.

[30] A comprehensive account of velocipede developments, including the young sport, can be found in Norman L. Dunham, "The Bicycle Era in American History" (Ph. D. thesis, Harvard University, 1956); see Chapter 3, 'The Parisian velocipede reaches America', Chapter 4, 'The velocipede craze of 1869', and Chapter 5, 'The decline of the velocipede'.

[31] *New York Times*, 22 Aug. 1867.

[32] *New York Times*, 25 Nov. 1868.

[33] *Harper's Weekly*, 19 Dec. 1868; *Scientific American*, 19 Jan. 1869, both cited by Millward in "The Genesis of the British Cycle Industry".

[34] *Scientific American*, 6 Feb. 1869 and 20 Feb. 1869. Show business was frequently as much in evidence as athletic competition. In New York, at the Apollo Hall, 'the tournament opened by the entrance upon the floor of twenty-five of the most expert young riders in the country, whose advent called forth immense applause, renewed as the graceful evolutions of the performers excited and delighted the admiring assembly. The affair was very select, and was attended by a large and fashionable concourse of ladies and gentlemen'. (*Scientific American*, 24 April 1869). Riding-schools for beginners and 'exercise halls' were the initial venues for the sport, but unfortunately some of the velocipede halls became 'the resort of roughs who monopolize the floors'. (*New York Times*, 28 July 1869).

In April 1869, races were 'inaugurated at the Jersey City Velocipededrome' and there was 'a grand race between two contestants there for a gold medal. Fred Hanlon, the noted gymnast, has challenged any velocipedist in the United States to race him for a thousand dollars and the championship of the country, ...The contest, when it does come off, will be an exciting one, and will attract thousands of spectators'. (*New York Times*, 4 April 1869). In May 1869, there was a 'Grand Velocipede Race' between A.P. Messinger, 'the long-distance rider' and W.E. Harding, 'the champion three-mile runner and noted pedestrian', at the Empire City Rink, New York; however, 'little interest was manifested in the contest, not over a hundred people being present'. (*New York Times*, 16 and 20 May 1869). In June, members of the American Velocipede Club, the American Bicycle Club, the Ivanhoe Velocipede Club and the Brooklyn Velocipede Club gathered to watch 'a championship match' between Frank Swift and James Boyle at the Capitoline Ground (*New York Times*, 26 June 1869). The poor state of courses often stood in the way of successful races, however. At the Union Course, Long Island in April 1869, 'the great drawback to the success of the race was the condition of the track, the sandy dust on the main portion of it lying several inches thick, thus making the track hard for horses and still harder for the bicycle'. (*Scientific American*, 29 May 1869). Consequently, there was discussion in the press of creating 'a velocipede race course' in every large city, and of the necessity of separating velocipede racing from the trotting courses, where races were frequently held: 'Let us have no more races on trotting courses. Velocipeding is now in respectable hands, and has a reputable status as a gentlemanly sport and exercise'. (*New York Sun*, date unknown, quoted in *Scientific American*, 15 May 1869).

Gymnasts, runners, pedestrians, horsemen and oarsmen were among those who tried their hands at velocipede racing. Women, too, performed on velocipedes, but those who appeared at the Empire Rink in April 1869 did not please women spectators, for they were 'two rough-faced women in flesh-colored tights nearly to their hips', and 'lady spectators by dozens left in disgust', a display 'which neither reflected credit on the management, nor added to the rink as a popular resort for the respectable class of velocipedists'. (*New York Times*, 14 April 1869). When, however, 'the popular lady velocipedists, Miss Katie Kavanagh, Miss Libbie Howard and Mlle Lottie' appeared in July at the Crosby Street Velocipede Academy, there were no complaints of impropriety (*New York Times*, 28 July 1869). Similarly, the skater Carrie Moore, the daughter of a Massachusetts Deputy Sheriff, took up velocipeding and became 'undoubtedly the best lady velocipedist in the country, having acquired all the difficult movements done by our male experts', and travelled widely on the East Coast giving theatrical performances (*National Chronicle, Journal of American Sports and Amusements*, Boston, Mass., 27 March 1869). *Scientific American* reported that women exercised in gymnasiums 'wearing the dress commonly used by them in calisthenic exercises', and thought that there was 'no valid objection why ladies should not adopt a special dress for this sport, and enjoy it in the open air. (*Scientific American*, 20 March 1869). There were doubts, however, about the staying power of the velocipede both for sport and transportation: 'As a practical conveyance, the velocipede has proved itself of little value, while as a source of amusement or exercise its use cannot be general'. (*New York Times*, 28 July 1869).

[35] *San Francisco Morning Chronicle*, 28 Jan. 1869. In an advertisement from the same date, Palmer and Knox state 'Parties having purchased previous to December 1st ult., will please return and exchange for our Improved Machines', indicating that manufacturing was already well under way late in 1868. By March 1869, a 'Grand Velocipede Tournament', with twenty performers, was held at the Mechanics' Pavilion in San Francisco (*San Francisco Chronicle*, 21 March 1869). Ten thousand people could be seated in the Pavilion, and the sport was highly organized: 'Some of the races will be against time, and as there are some skilful performers whose time will be worthy of publishing, the greatest precautions should be taken to have all the conditions complied with – that is, a plainly marked out ring, which the velocipedists shall not cross; the ring

to be carefully measured, and the number of feet contained in it stated to the audience. The mile can be made pretty close to five minutes by several of the performers'. (*Daily Alta California*, 20 March 1869). Later, the Pavilion was the scene of a performance by 'the daring young gymnast, Paul Martinetti', who 'will make the transit of the entire length of the Great Pavilion, supported only on an Elevated Wire, and mounted on his Aerial Bicycle... the Most Astonishing and Daring Feat ever witnessed in modern times'. (*San Francisco Chronicle*, 14 May 1869). Indoor entertainments like this spread up the west coast to Portland, Oregon and Seattle, but the sport does not seem to have become an outdoor or road sport, and after a momentary burst of activity, it was gone for a decade (see Frank Cameron, "The Pacific Coast Velocipede," *The Wheelmen*, Nov. 1987).

[36] Karl Kron, *Ten Thousand Miles on a Bicycle*, Chapter XXVII, 'Boneshaker Days', p.402. In 1875, Harding and Messinger (who was then described as 'the champion long-distance rider of America') were still racing against each other. They contested a 26-hour race, which the *New York Times* referred to as 'a velocipede championship', at the American Institute in New York. Messinger rode a 46" wheel and Harding a 41", still very small wheels for the date, suggesting that they were not in touch with the latest technical developments in England, where use of a much larger wheel was by then routine in competition (*New York Times*, 18 and 19 Dec. 1875). But the fact that the same two riders were still competing against each other across a time gap of six years suggests continuity in the sport, perhaps limited to certain urban localities. This is confirmed by a report in *Bicycle Journal* in 1877, which spoke of McClellan, the American champion, 'who has figured in bicycle contests for the last 6 years'. (*Bicycle Journal*, 5 Jan. 1877).

[37] *The Times*, 1 Dec. 1869, in a report from Sydney, Australia, notes – 'The velocipede is gaining ground here. They are not so commonly met with as at Melbourne, but I observe that races are got up at the Albert Cricket Ground'. Thus, by the end of 1869, the new sport had become a global phenomenon.

[38] The transcontinental railroad was completed at Promontary Point, Utah on 10 May 1869, and it is likely that up until that time, a heavy, luxury item like a velocipede would have been sent to California from Paris or the East Coast around the Horn. It is not impossible, though, that they would have been sent by railway, bridging the gap by

waggon. The difficulty of such transportation was an obvious stimulus to local makers in San Francisco to copy from imported models.

[39] Millward, "Genesis of the British Cycle Industry, 1867-72", p.61.

[40] Millward, op. cit., p. 65.

[41] Millward, op. cit., p. 65.

[42] Millward, op. cit., p. 68.

[43] Millward, op. cit., p.68.

[44] Millward, op. cit., p.65.

[45] Millward, op. cit., p.64. Millward claims that 'Rowley Turner, Charles Spencer and James Moore were actively involved in racing on the continent'. Certainly Moore, and probably Turner, are documented as competitors in the November 1869 Paris-Rouen race mentioned in Section 2, but evidence of Spencer's participation in this race has not been found by this researcher. The French race was also considerably later than the Mayall incident in Spencer's gymnasium, which was dated to 'the winter of 1868-69'. Similarly, Millward claims that 'French riders, often on the latest French machines, were competing in British events from 1868 onwards, providing further opportunities for British designers to shorten their learning curves'. But Millward does not offer documentary evidence of these British 1868 races.

[46] Mayall's account is entitled "Recollections of the first days of the bicycle," and was published in *Ixion*, Vol.1, #1 (Jan. 1875). Accounts differ as to the exact date of this event, which is only of importance here in that it affects evaluation of the precise date when the earliest bicycle racing in England would be likely to be documented. Mayall dates it to 'the early part of January 1869'. Historian Bartleet, on the other hand, wrote that the machine was 'brought to England by Rowley Turner in November 1868'. Bartleet emphasized that this was not the first bicycle to arrive in England: 'There is no doubt that a few bicycles were purchased by English visitors to the Exhibition, who brought them home and used them in England'.: see H.W. Bartleet, *Bartleet's Bicycle Book*. The Exhibition referred to was the 1867 Paris Exhibition, when visitors saw velocipedes made by French maker Michaux on the streets (Michaux applied for space at the Exhibition, but there is no evidence of acceptance) and where Rowley Turner also showed sewing machines made by the Coventry Machinists Company, for whom he acted as Paris agent. *Coventry Herald and Free Press*, 27 Nov.1868, reported, 'The

sewing machine company...have just received a novel order for a number of velocipedes from Paris, where these locomotives have lately been all the rage, and it is expected will soon be in general use in London'. *Coventry Standard*, 1 April 1869, contains the first known advertisement for the Coventry Machinists Company's bicycles. Andrew Millward, "The Genesis of the British Cycle Industry 1867-72," *Proceedings of the First International Conference of Cycling History*, gives several instances of commercial manufacture of velocipedes by small makers and tentative importation of French and American velocipedes into England in 1868, though these are documented in secondary and therefore not thoroughly reliable sources. The period is problematic.

[47] *English Mechanic*, 19 Feb. 1869.

[48] *The Times*, 19 Feb. 1869.

[49] The catalogue, dated 1870, is in the Lorne Shields collection in Toronto, Canada.

[50] Spencer's publications include *The Modern Gymnast* (1866); *The Bicycle: Its Use and Action* (1870); *The Modern Bicycle* (1876); *Bicycles and Tricycles Past and Present* (1883); *The Bicycle Road Book* (various editions from 1880 on).

[51] *English Mechanic*, 12 Feb. 1869.

[52] In "The Genesis of the British Cycle Industry, 1867-72" (see Note 1), Andrew Millward gives several cases of manufacturing in 1868, but sources quoted are mostly secondary. In "The Introduction of the Boneshaker into England" (*The Boneshaker* #141, Summer 1996), Nick Clayton argues against 1868 as the earliest date for the arrival of French and American bicycles in England, and therefore also against the existence of racing pre-1869. The question of the alleged 1868 arrival of Pickering velocipedes in Liverpool is discussed and rejected by David Herlihy in "The Pickering Export Controversy: its Resolution and Some Pertinent Lessons" (*The Wheelmen*, November 1995). Herlihy's revision of the often-claimed 1868 date hinges on his assertion that a testimonial from John Shepherd, 'Velocipede Instructor at the Liverpool Gymnasium, and to the Liverpool Velocipede Club' which was published in an advertising flyer for 'Pickering's American Velocipede' issued by Liverpool agent Samuel and Peace and dated 'March 10th, 1868' must have been wrongly dated. 1869 is a more plausible date, based on other documentary evidence. An article from *The Velocipedist* (March 1869) said, 'The shipment of velocipedes from this country to England has commenced...'. Another article from *The Albion* (U.S.), 3 April 1869 stated, 'The introduction of the

velocipede into Liverpool, though only of a recent date, is rapidly developing itself, and a very exciting eight mile race, for a prize of a silver cup, lately came off, the competitors being members of the Liverpool Velocipede Club'. Herlihy has thus concluded that Pickering velocipedes were not available until the autumn of 1868, and therefore could not have been available in England until the spring of 1869.

[53] 'Velocipedes', *The Ironmonger*, 30 Jan. 1869.

[54] *The Ironmonger*, 27 Feb. 1869.

[55] *The Spectator*, 22 May 1869.

[56] See Notes 46 and 93.

[57] *The Field*, 10 Aug. 1867, quoting from *The Sport* (date unknown).

[58] *The Mechanic*, 12 Dec. 1868, quoting from *London Society* (date unknown).

[59] *The Field*, 19 June 1869.

[60] *The Field*, 29 May 1869.

[61] *Liverpool Mercury*, 5 April 1869.

[62] *Liverpool Weekly Courier*, 10 April 1869.

[63] *Liverpool Mercury*, 24 and 26 April 1869.

[64] *Liverpool Weekly Courier*, 1 May 1869.

[65] *The Times*, 28 May 1869.

[66] *North London News*, 19 June and 3 July 1869.

[67] *Birmingham Daily Post*, 4 April 1869.

[68] *Wolverhampton Chronicle*, 8 June 1870.

[69] *Wolverhampton Chronicle*, 10 Aug. 1870.

[70] *Wolverhampton Chronicle*, 4 June 1873. Millward, op. cit., gives a table which supports this assertion, showing 9 manufacturers in Birmingham, 4 in Glasgow, 4 in Liverpool, 35 in London and suburbs, 4 in Manchester and 5 in Wolverhampton from 1868-1872.

[71] *Ripon Gazette*, 1 July 1869; H.H.Griffin, *Cycles and Cycling*, p.35.

[72] Wolverhampton Velocipede Club *Rules*; Lorne Shields collection, Toronto, Canada. This pamphlet is not dated, but from further reference to the Club, can safely be dated to 1869.

[73] *Wolverhampton Chronicle*, 21 April 1869.

[74] Abundant evidence of the quest of makers for a strong, light and fast machine can be found in makers' advertisements from the mid-1870s. W.J.Boden of London claimed his machines 'are made as light as possible, consistent with durability'; John Keen, Surrey, 'Champion Bicyclist', advertised 'the most perfect machine of the day. For Speed, Durability, and Neatness of Design, it has no equal'; John Dedicoat, Coventry, advertised that his bicycles had 'Lightness, Strength, and Freedom from more than absolutely necessary Friction' (quoted from advertisements in *Ixion*, Jan-May 1875).

[75] *The Field*, 18 November 1871 and 4 May 1872, quoted in Les Bowerman, "John Keen - The Life of a Cycling Pioneer," *Proceedings of the 4th International Cycle History Conference*, Boston, 1993.

[76] 'Keen's Bicycle', catalogue from 1874 in Science Museum Library. In a methodological and interpretational sense, such claims made in promotional or advertizing material have as a matter of course to be treated with a certain amount of scepticism. Promotional material will always claim the superiority of the products advertised over rival products. In this case, Keen's own claims were supported by testimony from the other sources, and by the use of his machines in competition.

[77] *Wheeling*, 17 Dec. 1884 and *The Cyclist*, 24 Dec. 1884. The testimonial committee included Keith-Falconer (Cambridge University B. C.), Robert Todd (Secretary of the N.C.U.), Lacy Hillier (editor - *The Cyclist*), E.R. Shipton (Secretary of the C.T.C.) and Harry Etherington (editor - *Wheeling*).

[78] *Liverpool Mercury*, 26 April 1869.

[79] *The Field*, 8 May 1869.

[80] *The Field*, 19 June 1869.

[81] *North London News and Finsbury Gazette*, 19 June, 26 June and 3 July 1869. Indoor events on a better-organized scale later became a mainstay of winter bicycle racing, and occurred throughout the 1870s. Wooden tracks were purpose-built and the turns slightly banked. The longer the race, the greater the amount of cash which could be collected at the box-office. Indoor cycling endurance events, the forerunners of later six-day racing, were sensational and were modelled on long-distance pedestrian races. The earliest English outdoor six-day cycling races were promoted in 1876 in Wolverhampton and Walsall, near Birmingham, and attracted large crowds. French champion Camille Thuillet (at the Molineux Grounds, Wolverhampton, in front of 10,000 spectators) and

Frank White (at the Arboretum, Walsall) each rode alone for six days to establish records in September before they came together to compete against each other in October in the presence of 'an immense assemblage of spectators'. (*Athletic News*, Manchester, 30 Sept. and 21 Oct. 1876).

[82] *The Times*, 19 Feb. 1869; according to an account by Rowley Turner published in *Bartleet's Bicycle Book* (Edward Burrow, London, 1931), this *Times* report was syndicated to and used by more than 300 local newspapers.

[83] H.H. Griffin, *Cycles and Cycling* (1903 edition), p.30.

[84] *Liverpool Mercury*, 30 March 1869.

[85] *Wolverhampton Chronicle*, 4 Aug. 1869.

[86] *The Times*, 12 Oct. 1869.

[87] Charles Spencer, *Bicycles and Tricycles.*

[88] *Daily Telegraph*, exact date unknown, quoted in N.Salamon, *Bicycling: Its Rise and Development*, p.14.

[89] *The Field*, 30 Jan. 1869 and *Daily News*, 28 Jan. 1869; the reporting of this event provides evidence that other velocipedes may already have arrived in England before the January 1869 events at Spencer's gymnasium. The race may have been a promotion intended to publicize the novel velocipedes just arriving in England.

[90] *Liverpool Mercury*, 5 April 1869.

[91] *Liverpool Mercury*, 5 April 1869. This is the earliest documented 'start-list' in English bicycle racing.

[92] *Liverpool Weekly Courier*, 10 April 1869. The intriguing 'start list' for the race published in the newspaper is as follows:

RIDER	COLOUR OF CAP	NAME OF BICYCLE
George Ball	Blue and pink	Knight of the Garter
A.L. Lane	White, with blue stars	Firefly
J.Moes Bennett	Red and blue	Knight Templar
W.E. Potter	Violet	Centaur
G.M. Jones	Pink	Mandarin
R.W. Leyland	Yellow and black	Pegasus
W. Long	Green	Hermit

J.S. de Wolfe, jun.	Magenta	Maccaroni
W.H. de Wolfe	Blue, with white stripe	Gladiateur
George Scott	Chocolate	Parisian
H. Brown	White and blue	Doctor
William Hope	Red	Aurora
L. Notara	Black	Comet
Henry W. Eaton	Light blue	Miss Julia
C. Haddon	Red and white	Mensikoff
A.S. Pearson	White	Britannia
J.C. Cannon	Dark blue	Jupiter
F.A. Macdona		Chester
G.H. Wilson	Light blue	Eclipse

Many details of this race were interesting and significant: 'the winning point was indicated by two flags placed on each side of the road'; 'no passing on the footwalk was permitted'; 'riders, if they chose, might dismount at the foot of a hill and trundle their machines along by hand instead of treadling by foot, but they were not to be assisted when they dismounted or remounted'. Recognition was made that a larger wheel gave a speed advantage because the riders were 'handicapped according to the diameter of the wheels of their bicycles. The strictest rules were enforced. Bicycles with wheels 37" in diameter and under were to start together; half-a-minute was to be allowed for every inch of wheel above 37 inches diameter up to 40 inches; and beyond that diameter a quarter of a minute was to be allowed for every inch'.

[93] See H.W. Bartleet, "Half a Century of Speed," *Cycling*, 27 Feb. 1919. The claim is repeated in H.W. Bartleet, *Bartleet's Bicycle Book*: 'This exhibit was purchased from Mr. Arthur Markham, who for many years carried on a cycle business at 345 Edgware Road, London, and who claimed to have won the first bicycle race ever held in England; this was run in a field near the Welsh Harp, Hendon, on Whit Monday, 1868 (before R.B. Turner came to England), the prize being a silver cup presented by a Mr. Warner, landlord of the Welsh Harp Hotel'. A Hendon local history (unfortunately untitled when xeroxes were sent) provides further corroborating information about the Welsh Harp: 'Its leisure potential was enthusiastically exploited by Jack Warner, who held the licence for

39 years from 1859. They provided a huge range of entertainments, including skating, swimming, boxing and wrestling matches, hunting, shooting and fishing, a concert hall, a menagerie and a skittle saloon.....In 1870 the enormous Bank Holiday crowds persuaded the Midland Railway to open Welsh Harp station'. The suggestion that it is not impossible for English racing to be occurring in mid-1868 is reinforced by a report in the *Cambridge Independent* as early as May 1868 describing the popularity of velocipedes in that city, where 'there is talk of establishing a velocipede club'. (*Cambridge Independent* - exact date unknown, quoted in *Messager des Théatres*, Paris, 25 May 1868). However, no primary documentation of 1868 racing has been found.

[94] I have been unable to discover a Christian name for 'O.E. McGregor'.

[95] *Wolverhampton Chronicle*, 30 Nov. 1869.

[96] *Sydenham Times*, 1 June 1869.

[97] *The Field*, 29 May 1869.

[98] *English Mechanic*, 6 Aug. 1869.

[99] According to *English Mechanic*, 1 April 1870, which published a summary of it, the paper was subsequently published, but I have been unable to locate it.

[100] *Morning Advertiser*, 27 Sept. 1869.

[101] *Ripon Gazette*, 1 July 1869.

[102] These events may well have been more widespread than has been recognized and cannot be accurately charted without a close examination of 'Athletic Sports' meetings nationwide.

[103] Programmes of these events are illustrated in Anne Pallant, *A Sporting Century, 1863-1963* (self-published in 1997).

[104] *Morning Advertiser*, 27 Sept. 1869.

[105] There is no space here to give many details of the careers of these riders, which are all well documented. Some sources are: 'Camille Thuillet, the French champion', *Bicycle Journal*, 1 September 1876; 'Cycling Celebrities. John Keen', *The Wheel World*, June, 1885; Nick Clayton, "The cycling career of James Moore," *The Boneshaker* 125, Spring 1991; Les Bowerman, "John Keen - The Life of a Cycling Pioneer," *Proceedings of the 4th International Cycle History Conference*, Boston, 1993.

[106] See Appendix I, 'Professional world sprint championships'. See also Andrew Ritchie, "Professional World Championships, 1870-92," *The Boneshaker* #142, Winter 1996. The

word 'championship' is in quotation marks here to draw attention to the need to distinguish its early, less formally structured usage from current understanding of the word. The precise identification of early 'world championships' is problematic since there was no governing body to give official status to events, and 'championship' status was certainly conferred as an advertising tool. Realistically, however, only the best available riders could be featured in a 'championship'. 'Championship contests' were often reported in the press and in cases where several 'championships' were contested in one year, it appears to have been agreed in newspaper reports that the 'world championship' designation be awarded to the race with the largest, most international and highest-calibre field competing. Championship level events and the more important races were usually held at one of the following prominent locations:

Star Grounds, Fulham, London
Lillie Bridge Grounds, Fulham, London
Tufnell Park, Holloway, London
Queen of England Grounds, Hammersmith, London
Aston Cross Grounds, Birmingham
Queen's Grounds, Sheffield
Bramhall Lane, Sheffield
Molineux Grounds, Wolverhampton
Vauxhall Gardens, Wolverhampton
Melbourne Grounds, Northampton
Powderhall Gardens, Edinburgh, Scotland

[107] Typical examples of wagering can be found in *Bell's Life* for 24 Sept. 1870, under the title 'Velocipedism': 'A Challenge to Velocipedists - Mr.W. Jackson of Pimlico, London, who has just arrived from Paris, is anxious to test the capabilities of his velocipedes, and will run his tricycle against any other three or four-wheeler of the same weight from London to Brighton, for £20 or £40 a side', and 'Howard v. Johnson - The whole of the money, £50, for this interesting bicycle match of 12 miles has been staked with Mr. Whenman, the Bricklayers' Arms, Tonbridge Street, Euston Square, and the match takes place at the Star Grounds, Fulham, on Monday next. Both men are very fit, and a good race is anticipated'.

[108] *Birmingham Daily Post*, 30 May 1871.

[109] *Wolverhampton Chronicle*, 8 June 1870 and 10 Aug. 1870. See also Nick Clayton, "Who Invented the Penny-Farthing?", *Proceedings of the 7th International Cycle History Conference*, Buffalo 1996.

[110] The 'Phantom' and the 'spider' wheel were both emerging, new wheel systems making increasing use of metal spokes. See Nick Clayton, "Who Invented the Penny-Farthing?," op.cit. Moore's letter was written to F.T. Bidlake in 1931 and is quoted in *The Boneshaker*, 1958, #14, p.7. Moore's championship rides are also discussed in H.O. Duncan, *The World on Wheels*, p.293.

[111] *English Mechanic*, 23 Dec. 1870.

[112] H.H. Griffin, "Cycling under Three Heads. 2. The Sport", *Baily's Magazine*, June 1892.

[113] Nahum Salamon, *Bicycling, Its Rise and Development, A Text Book for Riders* (2nd edition 1876), reprinted by David and Charles, 1970.

[114] For discussion of the inter-relationship of sport, entertainment and manufacturing in the American context, see Stephen Hardy, "Entrepreneurs, Organization and the Sport Marketplace: subjects in search of historians", *Journal of Sport History*, Vol. 13, 1986.

[115] I have not been able to do extensive research on the earliest sports which made use of professional athletes to advertise sport equipment, accessories and paraphernalia, but conclude that cycling was one of the earliest examples of such selling of equipment through the medium of competition.

[116] After several unsuccessful attempts in 1880 on the much-coveted record of 20 miles in an hour, Herbert Liddell Cortis achieved it in 1882. On 27 July 1882, he rode 20 miles in 59m 31.8s at Crystal Palace; six days later, 2 August 1882, he set a new record in Surbiton, Surrey, of 59m 20.2s.

Chapter Three

Expansion of bicycling in Britain: professionalism, amateurism and social class in the 1870s

1. Outline: the rapid growth of a modern technological sport

In contrast to the common contemporary conception of the 'penny-farthing' bicycle as quaint, bicycle racing in the high-wheel period (which lasted about fifteen years, from about 1874 to the later 1880s) was in reality a highly technological, modern, competitive sport, on the cutting edge of athletic activity (see Fig. 3. 1). It was also dangerous on both road and track for serious racing cyclists and for those who rode for exercise and pleasure. There are many accounts of accidents on the racing track, and nasty 'headers' on the unpredictable roads of the period. Cycling was at first seen as eccentric, but energetic young men from various class backgrounds welcomed the possibility it gave for exercise and adventure. As a special interest group, they formed themselves into clubs – to a large extent class-specific - to organize rides, races and social events, quickly giving an organized social structure to their new-found enthusiasm. Racing and recreational riding were rooted in a club structure which will be examined as this chapter proceeds.

As has already been stressed, bicycle riding and racing had the attraction of novelty both to participants and spectators. Soon after the sport was established in 1869, large crowds were reported at races in London and the Midlands. As the sport grew, a number of 'stars' emerged, such as John Keen and David Stanton, mentioned earlier, who were able to attract these crowds. The early sport was promoted as a profit-making business and there was an energetic professional scene; Wolverhampton, Sheffield and London were the most important centres because of the proximity of bicycle makers in those cities. All this was made clear earlier. However, amateur championships were also held as early as 1871 under the auspices of the Amateur Athletic Club, where the exclusionary 'mechanic, artisan or labourer clause' was applied, and the growth of the amateur sport received fresh impetus from its acceptance into the thriving athletic milieu at Oxford and Cambridge universities from 1873 on.[1] The polarization of professional and amateur racing cyclists was accelerated in the mid-1870s, the result of ongoing tension in society about the role of sport. As cycling grew in public popularity, the need for national institutions became apparent, and both the Bicycle Union (for racing and club cyclists) and the Bicycle Touring Club (for touring and recreational cyclists) were created in 1878 to promote these two differing aspects of cycling. Systematic regulations for bicycle racing were laid down, and annual championships created at a variety of distances.

An energetic specialist press emerged to cater to competitive and recreational cyclists, to promote the bicycle manufacturing industry and to act as an advertising channel for its products. *The Bicyclist*, a monthly first published in London at the end of 1875, was the first British periodical devoted exclusively to cycling. *Bicycling News*, first published in January 1876, was the first weekly newspaper devoted to the sport, followed soon after by *The Bicycle Journal*, edited by Alfred Howard, advertised in *The Bicycle for 1877* as 'the largest and most influential publication wholly devoted to bicycling' (see Fig. 3. 2). Both *Bicycling News* and *Bicycle Journal* were published on Fridays, timed to advertise weekend club rides, and carried reports of club life, events and races, as well as several pages of advertising. They also commented on the sport's relationship with the general public and reported on the movement to institutionalize the sport at a national level.

This was the beginning of a period of rapid growth for the cycling press which continued through the 1880s and 1890s. 'No sport can compare with cycling in the variety and completeness of the records kept, and... this fact undoubtedly accounts for the vitality which it possesses and the enthusiasm it creates', wrote George Lacy Hillier in 1889. In 1896, at the peak of the bicycle 'boom', journalist Harry Griffin wrote that 'cycling, the world over, is by far the most richly endowed of any sport whatsoever by newspapers'.[2]

At the end of 1874, Nahum Salamon, agent for the Coventry Machinists' Company in London, published his *Bicycling: Its Rise and Development*, which contained one of the earliest published histories of the sport. He wrote that 'during the last three years the Bicycle movement has rapidly advanced in public favour...The newspapers have fully recognized the importance of the movement, and duly record the achievements of its votaries. Ten thousand persons have assembled at one time to witness a Bicycle contest...The records of matches and feats are sufficiently full to furnish material for a history of Bicycling'.[3]

Salamon was right; the growth of the sport was meticulously documented. A good deal of attention was given to long bicycle rides in the press, for endurance rides were particularly dramatic in showing the novel capabilities of both riders and machines, redefining the speed and distance an athlete could achieve under his own muscular

power. Individual riders tackled many place-to-place rides over difficult roads. In June 1873, for example, Charles Spencer and three other cyclists from the Middlesex Bicycle Club rode about 700 miles from London to John o'Groats in 15 days, and in March 1874 William Cann and Henry Wilson raced between Sheffield and Plymouth for a wager of £50, a contest reported in both the *Sheffield Daily Telegraph* and the *Western Morning News* (Plymouth), the offices of which the riders had arranged as their arrival point, suggesting that the newspaper was using the ride for publicity purposes.[4] Racing on the track also grew dramatically.

The organized professional sport expanded quickly. On Boxing Day, 1875, in the middle of winter, at the Molineux Grounds in Wolverhampton, which had become the Mecca of English bicycle racing under the enterprising management of proprietor O.E. McGregor, a huge crowd gathered to watch 'championship' races between leading professionals Fred Cooper, James Moore, John Keen and David Stanton, although invited French star Camille Thuillet had been prevented from crossing the Channel by bad weather. 'The fact that bicycling is an extremely popular sport in Wolverhampton has been frequently shown...but it was scarcely to be expected, however, at this season of the year, that nearly 18,000 spectators should gather together to see four bicyclists run, but the quality of the four made up for their deficiency in quantity', reported the *Wolverhampton Chronicle*. The essential rules of sport promotion had been well understood - stars draw crowds, crowds help to create stars. The people at the Grounds 'covered the green hill like a swarm of locusts', and the entrance gates were 'a veritable pass of fear. The crush could not have been greater on the occasion of a Drury Lane pantomine first night and many ladies were quite afraid to encounter such a very unloving 'squeeze' as they would have been subjected to'.[5] *The Bicyclist* thought that 'the monster attendance of between 15,000 and 16,000 people' was 'a great proof of the immensely increasing popularity of bicycling'. The event was 'one of the largest gatherings ever known in this district to witness an athletic performance of any description'.[6]

A year later, the same Christmas event still drew a large crowd, even though 'the weather was unfavourable in the extreme, as there was both frost and snow to keep the bicyclists company'. *The Bicycle Journal* reported, however, that 'the people of Wolverhampton are too fond of this particular sport to be frightened away by bad weather, and

accordingly, considering the circumstances, there was a large number of spectators - between two and three thousand'. The course was 'heavy-going' and 'the sport was not up to the Wolverhampton level'. The weather was so bad, in fact, that the heats could not be completed on the 26th of December, and the organizers announced that the second day's admission would be free, 'and placarded the town to that effect, a solid fact, which speaks volumes of their desire to stand well with the public'. Champion John Keen, 'the old 'un', was once again victorious in the final race, winning 'amidst a burst of cheering'.[7]

Whereas five years earlier, velocipede sport had been a rudimentary, heavily show-business-oriented entertainment, by the mid-1870s bicycle racing presented a much more developed character. Bicycles had enormously improved, manufactured by a young, rapidly expanding industry based in London and the Midlands, a club and competitive structure supported the enthusiasm of young men for their new sport, and promoters made a profitable business of racing where they could (see Figs. 3. 3 and 3. 4). By 1883, Charles Spencer expressed surprise at the 'excellence, elegance and usefulness' attained by the bicycle. He had not forseen, he wrote, 'how universally popular would become an exercise which was at first regarded simply as a professional sport, and not likely to be taken up by the general public'.[8]

In the 1870s, cycling underwent an industrial and athletic expansion and transformation which had a national impact. By the end of the decade, it had become a prominent sporting, social and economic institution with its own amateur governing bodies, a large network of amateur clubs, a large and routinized racing calendar, significant specialized industrial activity and its own specialized press.

Outline of Chapter 3

Section 2 (**Technological innovation and club growth within cycling**) documents the crucial role that competitive cycling and its closely associated recreational aspects had in the technological development and improvement of the bicycle. Strength, lightness, speed and reliability were all essential demands. These exigencies of competitive sport spread outwards to recreation and the small number of utility riders. Along with these

design and manufacturing improvements was the rapid development of cycling clubs, constituting a growing number of consumers of bicycles.

Section 3 (**Amateurism and professionalism in the 1870s**) further differentiates between amateur and professional competition, suggesting the two categories were related to a considerable extent to geographical location and class factors.

Section 4 (**Cycling at Oxford and Cambridge Universities**) examines the substantial growth of the amateur sport at the two old universities and the influence this exerted on the sport. Aristocratic student, Keith-Falconer, became a leading amateur rider, and Gerard Cobb, President of the Cambridge University club, gained national prominence as President of the Bicycle Union.

Section 5 (**'Muscular Christianity' and the racing career of Ion Keith-Falconer**) describes the short racing career of a man who, it is suggested, epitomized the characteristics of the gentleman amateur athlete and the qualities of 'muscular Christianity'.

Section 6 (**'Gentlemen, not players': the establishment of the Bicycle Union, 1877-78**)
charts the formation of the first national governing of amateur cycling in England, and the creation of the first formal national championships. As well as addressing competitive issues and the definition of amateurism, the Union proposed to define the legal rights of cyclists on the roads. It is suggested that the Bicycle Union to an extent defined a new kind of athletic liberalism – a novel social grouping - because of cycling's particular nature as a sport and recreation.

Section 7 (**John Keen, professional champion and manufacturer**) investigates the career of professional champion and bicycle maker John Keen, as a counterbalance to the examination of prototypical amateur Keith-Falconer in Section 5.

Section 8 (**Sport as recreation: the establishment of the Bicycle Touring club, 1878**)

further explains the distinctions that were made between competitive sport and recreational sport which resulted in 1878 in the creation of the Bicycle Touring Club - a second governing body of organized cycling in England.

Section 9 (**Public recognition achieved by the late 1870s**) asserts that by 1878 the foundation of these two national organizations, and the extended commentary about cycling as a sport and recreation in the national press, constituted a conspicuous commercial and cultural movement in Britain. Gerard Cobb, the President of the Bicycle Union, played a significant role in winning over public opinion in favour of the bicycle.

2. Technological innovation and club growth within cycling

It would be a mistake to suggest that a smooth evolution occurred in the period between the diverse competitive and entertainment activities described in Chapter 2 and the more developed mid-1870s stage of the sport discussed here. On the contrary, the fledgling sport grew fitfully as the bicycle itself underwent its technologically experimental and geographically scattered development. Charles Spencer, from his well-connected vantage point in the athletic goods and bicycle business in London, remembered that the velocipede 'craze' of 1869 was followed by a slump: 'Great was the disappointment of those who had anticipated making a harvest out of the pastime. Quite suddenly the game came to an end, and hundreds of machines were thrown on the hands of their makers, who up to this time had found it impossible to turn them out quickly enough'.[9]

However, Spencer continued in a revealing passage, an inner circle of dedicated enthusiasts, 'a few faithful devotees', remained, 'who liked the exercise for its own, and not for fashion's sake; and for these sober and sedate persons it was worth the while of the best manufacturers to continue the business. Accordingly, some of them turned their attention seriously to the capabilities of the machine for improvement'. And it was these technical improvements, asserts Spencer, which 'attracted the more serious attention of active and athletic men'.

The improvement of the bicycle and the growth of the sport were thus propelled forward by the collaboration and cooperation between riders and makers, who together constituted 'a few faithful devotees'. Significantly, amid references to 'exercise' and 'active and athletic men', Spencer does not mention practical utility as a primary priority in these comments, giving support to the suggestion that utility - the development of the bicycle for practical transportation - was not initially the dominating impulse behind early cycling. (see Fig. 3. 5)

George Lacy Hillier, winner of four amateur championships in 1881, journalist, editor and historian, cycling bureaucrat and outspoken proponent of amateurism, corroborated Spencer's view. 'There is no doubt that cycling owes much of its success to the racing man', Hillier wrote in his authoritative Badminton *Cycling* volume, first published in

1887; 'He is in fact largely responsible for its phenomenal development: a development which is far in advance of any parallel growth of a sport in this country'.

Racing cyclists, Hillier continued:

> very soon decided that it was necessary to demand from the manufacturers an improved vehicle... The result of considerable labour was a vehicle which was then considered a marvel of lightness and strength. The existence of a demand very soon created a supply. The makers vied with each other in their attempts to meet the requirements of their customers, and in due course produced the thirty-five pound machine of 1879...Once having discovered the advantages derivable from a saving in the weight of a machine, the racing men incessantly clamoured for further reduction and obtained it.

Hillier was emphatic in recognizing the outward flow of technological expertise from the small racing community to the general consumer:

> We venture to credit the comparatively small section of racing men with being the 'original cause' of the rapid improvement which has been made in both classes of velocipedes [that is bicycles *and* tricycles – AR]. Possibly the manufacturers would tell us that the racing men gave them more trouble, and were more difficult to please, than any other section of their customers, and doubtless this would be quite true; but it is particularly this fact which has brought about a desire on the part of the manufacturers to meet these particular gentlemen, and in that endeavour they have vastly improved the machines they manufacture, not only for the small class of racing men, but for the much larger body of general riders.[10]

The nature of the technical improvements involved an increase in the size of the front wheel made possible by a suspension system and tangent spokes, the making of a light, hollow back-bone, the universal adoption of ball-bearings for front and rear wheels and more effective rims and rubber tyres. Leading early manufacturers were John Keen, Thomas Sparrow, the Coventry Machinists' Co., Haynes and Jefferis and Thomas Humber. Experience in sport was almost a prerequisite for manufacturing expertise. In a catalogue from about 1879 in which he described himself as 'The First Champion Bicyclist', small manufacturer Arthur Markham wrote: 'My experience both as a Rider, and a Trainer of Bicycle Riders, has given me that knowledge of the Bicycle, so much required in a manufacturer, having myself won upwards of 20 matches... and having trained D. Stanton in his successful matches against Keen...'.[11]

Advertisements for bicycles being developed and marketed by the mid-1870s illustrated this quest for technological improvement, phrased in the hyperbole of advertizing. The

concerns of the makers were with lightness, speed, reliability and strength, which can all be seen as athletic priorities, but which had to be combined in a practical, marketable sense. At the high end of the market, 'champion Bicyclist' John Keen offered in 1877 his 'Eclipse' bicycle which 'still retains its position as the BEST BICYCLE FOR ALL PURPOSES. Being made of the BEST MATERIAL, combined with superior workmanship and the great practical experience of the maker...these Machines have accomplished all the FASTEST TIMES at all distances, also the LONGEST JOURNEYS ever ridden. For Speed, Durability, Safety and Elegance they cannot be equalled. Testimonials from all the best riders in the world' [capitals as in original text – AR] (see Fig. 2. 6). Stephen Simpson, Mansfield, advertised his 'Defiance' bicycle as offering 'Strength, Lightness, Elegance, Durability' and claimed it as 'the STRONGEST, LIGHTEST and most serviceable roadster of the day'. His roadster weighed 34 lb and a racing model was reduced to 28 lb. W.G.Lewis of Romford, Essex, offered 'The Suspension Bicycle', with 'Patent Rigid Wheels and Anti-friction Roller Bearings - The Best Rigid Wheel ever invented', while the Surrey Machinists' Company in south-east London offered 'The Invincible' bicycle, 'constructed with our Patent Parallel and Anti-friction Roller-bearings, Double Lever Brake, Improved Leg Rest, Steel V Rims, Light Steel Back bone, Indestructible Red India-Rubber Tires, and the Latest Improvements'. Thomas Sparrow, a maker with a showroom on Piccadilly in the heart of London, claimed his bicycles as 'the strongest, best and lightest of their day, every improvement is adapted as soon as produced'. Hydes and Wigfull, of Sheffield, advertised the 'Stanley Racer' bicycle, which 'is admitted to be the lightest, swiftest, and strongest Machine in the market, and is in great demand for racing purposes...The riders of this very elegant and handsome Machine have taken Prizes at all the principal contests during the past year'.[12]

Amid the rush of geographically dispersed manufacturing activity, technological improvements and the energetic creation of new sporting institutions in the mid-1870s, it is hard to discern the dominance of one trend over another. The new sport and the young industry, to make the point again, were fused into a symbiotic relationship, and new social and commercial institutions were rapidly emerging. The attentions of both riders and makers was directed at mechanical excellence, strength, lightness, speed and up-to-

date technology, and the bicycle was on the cutting edge of small-scale industrial production for the athletic consumer.

An example of collaboration between rider and maker was that between ex-professional Frederick Cooper and Thomas Humber of Nottingham, while John Keen, as a maker, had an ongoing relationship with many of the leading riders. In March 1877, maker W.H.J. Grout, then producing the 'Tension' bicycle in north London, wrote to *The Bicycle Journal* suggesting a union of makers and riders: 'I wish to state as an unattached bicycle maker, that I am willing to join and assist in the formation of a master bicycle maker's club, considering that all bicycle riders should be united, thereby keeping the sport under due self-control'.[13] (see Fig. 3. 7)

As these design and manufacturing improvements made the bicycle lighter, faster, more practical and effective, there was also a rapid development of cycling's social institutions. Small, community-based clubs were organized first, during the initial velocipede 'rage'. The Liverpool Velocipede Club appears to have sprung into existence by January 1869, and was 'making arrangement for a tournament on bicycles to be held in the Gymnasium'.[14] By April 1869, the Wolverhampton Velocipede Club was organized, buying velocipedes and hiring an instructor 'who shall have power to prevent any member from using the new machines, whom he does not think can ride sufficiently well to be entrusted with the charge of a new one'.[15] A correspondent complained to the *English Mechanic* in September, 1869 that there was as yet no 'veloce club' in London. It was time, he said, that 'the young men of London made a step forward, the world is in advance of us'. Three weeks later, another correspondent replied that, indeed, there was 'a veloce club' in Hackney, London called the St. Katherine Club, and had no doubt that there were 'several clubs on foot in the suburbs'. He urged 'a more extended endeavour to bring the importance of veloce clubs more prominently before the public, for the cultivation of an exercise as healthy as it is pleasurable'.[16]

In London, the Surrey Bicycle Club (formed in Kennington, London), the Pickwick (Stoke Newington, London), the Middlesex (Kensington, London) and the Amateur Bicycle Club (London) were all in existence by 1870. The Amateur Bicycle Club took its members from the staff of the Middlesex Hospital, the Skating Club and the London

Rowing Club and was described as 'a club in which gentlemen may seek their recreation and enjoyment'.[17] By 1873, according to Charles Spencer, there were seven bicycle clubs in London and twenty-two outside. Perhaps these clubs might be said to have been created by the 'few faithful devotees, who liked the exercise for its own, and not for fashion's sake', identified above by Charles Spencer. The formation of these London clubs appears to have reinforced the distinction between the amateur and the professional sport, between the more heavily professional Midlands and North and the increasingly amateur South. The distinction was based largely along class lines, the majority of the leading professionals were working-class, while amateurs were more likely to be from the middle- or upper-classes.

In 1874, the first combined 'meet' of many clubs took place at Hampton Court, Surrey, demonstrating the organizational capacities of the bicycle movement. 50 riders participated, but only a year later, there were nearly 500.[18] By 1874, *The Field, the Country Gentleman's Newspaper,* a sporting paper which catered to an upper-class and upper-middle-class readership, was regularly publishing a bicycling 'Fixtures' list which advertised at least five club runs in the greater London area every Saturday. In 1877, Alfred Howard's *The Bicycle for 1877* listed 23 clubs in London and more than 100 in the rest of Britain, while his review of the 1876 racing season occupied more than sixty pages of results, with racing beginning in early January and continuing until 30th December.[19] The results of this energetic club formation for the sport were recognized. Reviewing the season of 1876, Alfred Howard wrote:

> The year that has just passed away leaves our pastime in a flourishing, but above all, in a progressive condition. Its roots, imbued with their native soundness, have taken firm hold on the soil, and grow stronger daily, while above a young but vigorous tree is sending branches out in all directions, that derive fresh sustenance from the air around, and thus react upon their parent stem.[20]

There is also evidence in the press at this time of the widespread awareness of the spreading influence and impact of the new sport and recreation, and its advantage of useful, practical transportation, at least for the energetic. At a debate held in March 1877 at the headquarters of the influential Stanley Bicycle Club in Camden Town, north London on the subject 'Bicycling, and public objections thereto', a Mr. Sargent spoke of:

> young men who were not long in seeing that they had within their reach a means of healthful recreation just suited to their requirements, and, what is always an additional recommendation in the eyes of Englishmen, containing a considerable element of utility. The result is that bicycling has become a most popular sport, a new industry has been created, a large number of clubs have sprung up, the sport was found to be a healthful and agreeable escape from the many temptations to which young men of large cities are often subjected in their leisure hours, newspapers have been started in the interests of bicycling, and it is in great measure owing to the able manner in which they have been conducted that we are indebted for the position we as bicyclists now enjoy. Amateur riders on the road have performed feats which put all other modes of travelling into the shade; the distance from London to York in 22½ hours, a journey which used to occupy three days in the times of fast coaching, and required the services of about eighty horses.[21]

Such a passage confirms the assertion that has already been made here, that cycling was from its earliest days characterized by three interlinked and overlapping modes, competitive sport, recreation and utility. In addition, the sport was also seen here as having a moral dimension, 'a healthful and agreeable escape from the many temptations to which young men of large cities are oftern subjected in their leisure hours'.

3. Amateurism and professionalism in the 1870s

The Wolverhampton, Sheffield and Leicester areas, as previously noted, were prominent as centres of professional bicycle racing in the 1870s. The combination of energetic promoters like Molineux's McGregor, prepared to put time, energy and money into creating good tracks, and local makers also interested in promoting the new sport, was the basis for its expansion. It is probable that the existing, working-class athletic culture, with its enthusiasm for pedestrianism, football and pugilism, ensured an enthusiastic reception for the new sport. But the huge crowds reported at the Christmas Wolverhampton races in 1875 suggest that it was a new, modern, well-promoted sport which attracted the crowds, rather than a traditional format or older habits of attendance. Further detailed research needs to be done in each geographical area to chart the precise nature of this new professionalism in bicycle racing. Amateur events took place, as has been previously described, in the context of other, established athletic club events, or as cycling grew in events promoted by cycling clubs.[22]

In *The Bicycle for 1874*, Alfred Howard published a list of races held in Britain during 1874 which he called 'an authentic record of the bicycling of the year'.[23] Included in the list is a total of 92 racing events of various kinds which can be used as an indication of amateur and professional tendencies, and also provides a valuable account of the structure, organization and geographical location of races. The table below shows the results of an analysis of these races reported by Howard, categorized under varied headings:

Amateur track meetings	46
(in context of another athletic event	- 36)
(exclusively cycling events	- 10)
Professional track meetings	16
Amateur road races	12
Professional track 'matches'	10
Professional road races	3
Mixed professional and amateur track meetings	2
Professional time trial on road	1
Professional time trial on track	1

Professional bicycle versus horse	1
Total	92

[Table showing occurrence of different categories of races, listed in order of frequency, from Howard, *The Bicycle for 1874*]

It should be noted that the table refers only to the number of particular categories of events and should not be taken as an indication of the size of an event or the number of competitors. An amateur track meeting, for instance, held in the context of another athletic event, might consist of just one bicycle race, whereas a professional meeting sometimes lasted for two days, and involved several different categories of event, some of which had dozens of heats. Of the 92 events listed, there were 26 professional track meetings and 'matches' and 46 amateur track meetings. The professional track events consisted of 16 full-scale meetings and 10 'matches' of various distances between individuals, while the amateur track meetings consisted of 10 specifically cycling meetings (promoted, for example, by the Dark Blue Bicycle Club, of Oxford University or the Surrey Bicycle Club) and 36 where bicycle racing took place in the context of other athletic activity (organized by the Halifax Amateur Athletic Society, for example, the North of Ireland Cricket Club Sports or the Eccles Gymnastic and Athletic Festival). There were only two meetings where both professional and amateur events occurred in the same programme, a strong indication of the stratified nature of the sport at this early date.

Professional 'matches' were races between usually well-known 'champions' at a specific distance, with a wager held by a respected, independent referee.[24] At Molineux Grounds, Wolverhampton, for example, on 4 May 1874, James Moore and John Keen were matched over 1 mile, for £25 a side, with 'Mr. J. Vandy, of Bell's Life' as the referee. Similarly, on 30 Nov. 1874, Keen met David Stanton at the same venue for a 50-mile match, for £25 a side, with 'Messrs. J. Vandy and W.H. Leverell as Judges and Timekeepers'. Professional meetings usually consisted of short-distance races, frequently of 1 or 2 miles, often run as handicaps, with a series of heats leading to a second and third round and thence to a final. These heats were frequently run off over a two-day period. On 6/7 April 1874, for example, at the Molineux Grounds, Wolverhampton, in a

race described as a 'One Mile Handicap. Professional', 45 riders contested 16 heats in the first round, 7 heats were run in the second round, 2 in the third, producing 4 riders to compete in the final, which was won by a Wolverhampton rider, J.T. Williams. At the same meeting, a race described as a 'One Mile Championship. Open to the World' was run with only 3 riders, the well-known professional champions James Moore, John Keen and E. Shelton being the only contestants.

Howard shows the place of origin of the riders in many cases, and provides ample evidence of the preponderance of local, probably working-class, Midlands riders in these early professional events. At the 6/7 April event mentioned above, for instance, of the 45 riders listed as having started in the 1-mile handicap event, 17 were from Wolverhampton, 17 from Birmingham, 3 from Newcastle, and the remainder from Derby, Gateshead and Surbiton (London). At a meeting held at Bramhall Lane, Sheffield on 25 and 27 April, of 33 riders who competed in the 19 heats of the first round, 14 were from Sheffield, 7 from Wolverhampton, 7 from Birmingham and the remainder from Nottingham and nearby Mansfield. The vast majority of the professional meetings and matches in 1874 took place either in Wolverhampton (Molineux Grounds) or Sheffield (Bramhall Lane Cricket Ground, Queen's Ground or Newhall Grounds), but professional events also took place in Newcastle (Fenham Park Grounds), Derby (Arboretum), Portsmouth and in London (Lillie Bridge Grounds, Fulham and Star Grounds, Fulham). Anomalies occurred on three occasions, when amateur clubs sponsored professional events: on 25 July, the Derbyshire Athletic Club sponsored a professional event at the Arboretum, Derby; on 23 Sept. the Mansfield Bicycle Club included a professional event in its meeting at Rawson's Cricket Ground, while St. George's Bicycle Club sponsored a mixed professional and amateur event in London at Lillie Bridge, Fulham.

In compiling his 'authentic record of the bicycling of the year', Howard showed a keen awareness of the difference between amateur and professional status and warned his readers not to confuse the two. Amateurs, he wrote, should 'take care not to compete in open races, and never to run for money, or knowingly against a professional. 'Open' races are described in various ways; for instance, 'Open to all comers', 'Open to all England', or 'Open to the world'. 'It cannot be too well known that such are professional races', wrote Howard, 'although the prize may not be in money; and that if any amateur

compete, he is disqualified, and virtually becomes a professional'. Where Howard described an event as a 'championship race', it is usually an indication that the race is for the highest calibre, 'champion', riders only, probably by invitation, rather than referring to a 'championship' according to the current, annual-event definition of the word. In 1876, in another edition of his annual, the number of racing events recorded by Howard had increased from 92 to 317, and he commented that: 'The races have swollen out much beyond our expectations, therefore space compels us to curtail accounts of them'. The number of clubs listed had increased from 33 to more than 130, indicating the extraordinarily rapid expansion of the amateur sport. Indeed, Howard confirmed the fact that there had been 'a much greater increase of amateur than of professional riders'.[25]

4. Cycling at Oxford and Cambridge Universities

The popularity of bicycling and of bicycle racing at Oxford and Cambridge universities in the mid-1870s marked a significant stage in cycling's social penetration and in the emergence and growth of the amateur sport. In Cambridge, the Cambridge University Bicycle Club had about 120 members by 'October Term' 1876 and 242 by the end of 1877.[26] The energetic membership funded the building of a small racing track in the city, one of the earliest purpose-built cycling tracks constructed anywhere (see Fig. 3. 8). At its opening, *Bell's Life* commented that 'amongst the many interesting spots at Cambridge on which the muscular Christians of the University may exercise their powers, there are none which promise to be more popular than the new bicycle ground'.[27] The more prominent of the Club's members went on to play a significant role in cycling at a national level. Cambridge undergraduate Ion Keith-Falconer (1857-87) was widely praised as one of the best amateur riders of his time, and Gerard Cobb (1857-1904), the Club's young President, was an influential political advocate for cycling at a moment when local and central government legislation threatened to repress and limit it. Cobb also became the President of the Bicycle Union, the first national governing body of British cycling.

In June 1874, *The Field, the Country Gentleman's Newspaper* reported that 'at Oxford a bicycle club has existed longer than at the sister University, for at Cambridge it was not until the end of last term that a club was established. During the present term bicycling has been indulged in as an amusement to a considerable extent at both Universities, "meets" occurring once at least in each week, when some fifteen or twenty have taken a run of twenty or thirty miles together'.[28] Writing in 1883, Charles Spencer gave further information on the acceptance of cycling at the two oldest Universities, with their strong new interest in athletic sports, on class distinctions and on the process by which 'the bicycle' gained in social prestige:

> The practice extended to the Universities, where it became popular, but to the word "velocipede" there seemed to be attached a soupçon of vulgarity little to the taste of the Oxford or Cambridge undergraduate. To indulge in a sport which had become ridiculous by its popularity with the "hoi polloi", to take up with a toy just discarded by the outside vulgar, was not to be thought of.

Technical advances, however, and the growing prominence of 'the bicycle' in the press, had changed its social profile and the word 'velocipede' had disappeared from currency:

'The machine had undergone a change in appearance, and had become altogether superior to the low "velocipede" of the past'.[29] The bicycle, in other words, had become acceptable as worthy of athletic endeavour and acceptance and was thus lifted from a heavily proletarian context to inclusion among respectable, bourgeois sports.

The Dark Blue Bicycle Club (Oxford University) was formed in 1873 and the Cambridge University Bicycle Club in 1874; inter-Varsity matches were held from 1874 onwards. At the beginning of May 1874, 'a challenge was sent to Oxford and immediately accepted', and a race over the 85 miles of road between Oxford and Cambridge agreed to, with each University fielding three competitors.[30] According to Nahum Salamon, the 1874 road race between the two famous universities was 'one of the most celebrated amateur matches that has ever yet been ridden'.[31] *The Field* spoke of 'a somewhat novel proceeding, a bicycle race between members of Oxford and Cambridge Universities':

> By some persons the art of bicycling may be thought to have degenerated, but thanks to the recent vast improvements which have been made in machines, this mode of locomotion appears to be fast gaining popularity, as to a certain extent evidenced by the race in question....At Oxford only a few persons were present to witness the start, but at Cambridge the greatest enthusiasm prevailed, for nearly the whole town turned out at 5 o'clock to witness the finish. The road from Trumpington to Cambridge, a distance of two miles, was lined with people the whole way, most of them on foot, but some on horseback - some in cabs and traps of all descriptions, and not a few on locally-built bicycles, which contrasted very unfavourably with the splendid machines used by the competitors. In fact, there must have been at least five thousand persons present at the close of the match.

The race was won by Cambridge, with E. St John Mildmay of Trinity College first, and the Hon. J.W. Plunkett, also of Trinity College, second. The winners were 'loudly cheered by the numerous spectators present, Mr Mildmay being carried to his rooms by some enthusiastic artisan class'. The 85 miles were covered in 8h 5m, 'a very tolerable time considering the bad state of the roads and the adverse north-easter which blew all the way'. The report in *The Field* emphasized the novelty of bicycle racing at this date; some people in the crowd were still on home-made bicycles which were old-fashioned compared to the sophistication of the 'splendid' racing machines ridden by the affluent competitors, the result of recent technical improvements.[32]

In May 1874, the Hon. Ion Keith-Falconer, an aristocratic member of the Cambridge University Bicycle Club whose amateur career will be examined in Section 5 of this chapter, rode from Bournemouth to Hitchin, a distance of 135 miles, and sent a report of the ride to *The Field.* On a bicycle made by Thomas Sparrow of Knightsbridge, London ('these machines are very strong, and especially adapted for long distances'), Keith-Falconer covered the 135 miles in 19¼ hours (about 16 hours riding time, 'excluding stoppages'), for an average speed of just under 9 mph. The road was good in general, although at Holmesly in the New Forest, 'it became so excessively sandy and loose that every now and then I was obliged to dismount and walk'. Keith-Falconer had to contend with the summer heat and reported that he 'should have got sunstroke if I had not worn one of Tress and Co.'s pith and felt solar hats, which I strongly recommend to bicycle riders for summer use'. Modern commercial endorsement of consumer products by athletes was already suggested here.[33] Writer and editor George Lacy Hillier, a strong proponent of amateurism, remembered the report of this ride as 'one of the earliest extended notices which was given to our sport', and had 'little doubt that Mr. Keith-Falconer's name had much to do with popularizing cycle riding. It is a matter of curiosity and interest to note how often this particular ride...is referred to in contemporary papers as a very fine performance, and as giving great assistance to the sport, illustrating emphatically the manner in which one good name, such as his, assists the development of a sport'.[34]

Keith-Falconer's ride was undoubtedly long and difficult. Like other long road rides recorded in the press, it was an isolated ride, an individual achievement, significant in demonstrating that a long distance could be covered in a day by a strong, determined rider on the challenging, unpredictable roads of the period.[35] Because he was well-connected socially and had 'a good name', Keith-Falconer's ride was successfully publicized and it is evident that in bourgeois society it lent credibility and respectability to cycling, as did the activities of the University clubs in general. Lacy Hillier's comments, however, should be seen as applicable mostly to the growth of interest in the amateur sport in the South. It is unlikely that Keith-Falconer's 'good name' had much impact on the professional riders of London, Wolverhampton, Sheffield and Birmingham, or on the working-class crowds who watched them race, participants and

spectators whose activities were also 'popularizing cycle riding', though in a different social context.

Cambridge University Bicycle Club *Rules and Bye-laws* from 'October Term, 1876' filled a 20-page booklet and are a good illustration of the processes of codification and bureaucratization of amateur cycling, new 'traditions' were created in the new sport *within* a bastion of cultural tradition and privilege. The very existence of the 'rule book' was evidence of the absence of traditions. Members of the club, taking part in club races, for example, 'are required to wear the Club Race-cap, or the straw hat with Club ribbon, as uniform, and are requested to do so when taking part in races elsewhere'. A code of behaviour and signals was recommended for Club rides on the road, when 'bugling is too elaborate a method of signalling to be recommended, and on the public road is unnecessarily obtrusive'. It was necessary to pay attention to the 'rules and courtesies of the road', especially in dealing with horses, as the bad behaviour of some bicyclists had 'caused great annoyance to the public, and created prejudice against bicycling very difficult to eradicate'.[36]

Upper-class and upper-middle-class cyclists, a new presence on the roads in the public arena of sport, had an obligation to uphold respectable standards of behaviour, and not conduct themselves in a way which would bring disrepute on their clubs. The "unattached", those who were not members of any club, of course had no such obligation to uphold such conventional standards of behaviour.

5. 'Muscular Christianity': the amateur cycling career of Keith-Falconer

The outstanding amateur racing career of Ion Keith-Falconer (1857-87), rooted in the Cambridge University Bicycle Club, offers an outstanding illustration of class distinction in the early sport between the 'gentleman amateur' and the professional cyclist (see Fig. 3. 9). But the separation of amateur from professional in cycling was not effected easily or cleanly, and stratification was less rigid than is sometimes suggested. Cycling appears to have been an exception among the more established sports such as running ('athletics'), rowing, cricket or boxing in questioning existing notions of the necessity of amateur exclusivity during the 1870s, and was seen as something of a trouble-maker. The influential Gerard Cobb, President of the Cambridge University club and of the Bicycle Union, as will be described in detail a little later, argued for a more liberal interpretation of the distinction between amateur and professional competitors than was allowed by the Amateur Athletic Club, which sought to exclude all 'mechanics, artisans and labourers' from the amateur ranks.

An aristocratic Cambridge University student when he started his serious cycling in 1874 at the age of 17, the Honourable Ion Grant Neville Keith-Falconer was the son of the 9th Earl of Kintore, born into a noble Scottish family. His high social status was in marked contrast to that of the working-class athletes and bicycle industry 'mechanics' who crowded the rough tracks of London, Wolverhampton and Sheffield in the 1870s, from among whose ranks leading professionals, such as John Keen, David Stanton, E. Shelton, Fred Cooper, Richard Howell, Fred Wood and Tom Battensby, emerged. Keith-Falconer, 'a very tall man, well put together, with broad shoulders, and extremely powerful lower extremities',[37] rode and raced the high-wheel bicycle for eight years from 1874, when he went to Cambridge as an undergraduate, until 1882, when he broke the record for a ride from Land's End to John o'Groats in 13 days and contested two national championships, winning the 50-mile championship and beating the record by nearly 7 minutes. He competed in Oxford versus Cambridge matches between 1874 and 1878, contested Bicycle Union amateur championships between 1876 and 1882 and established several long-distance road records.[38] Breaking with strict amateur segregation, he contested several high-profile matches with leading professional John Keen, for which the special permission of the Bicycle Union was required. He was President of the Cambridge

University Bicycle Club, President of the London Bicycle Club from 1877 to 1886 and participated in the formation of the Bicycle Union in 1878.[39]

Retiring suddenly and completely from his athletic career, Keith-Falconer, an Arabic scholar, linguist and fervent Christian, became a missionary in Aden in 1883 and died there in 1887 from a tropical fever at the age of thirty. His sudden, premature death was mourned by the cycling community. In 1888, his theology tutor, the Rev. Robert Sinker, Librarian of Trinity College, Cambridge, published a biographical account, *Memorials of the Hon. Ion Keith-Falconer*, which documented a privileged life rooted in classical scholarship and religion and deeply imbued with the ideologies of amateur athleticism and muscular Christianity. According to Sinker, cycling was the only sport in which Keith-Falconer 'habitually indulged', a 'secondary interest which served him for relaxation of mind and body'. A letter given to Sinker by E.E. Bowen, one of Keith-Falconer's school teachers at Harrow School, provided a telling vignette of his achievements and attitudes:

> I saw him often when he was in Cambridge, and was happy enough to retain his friendship 'til the last. His bicycling feats were one subject of common interest between us. Bicycles were just coming into fashion when he went to the University; he was an enthusiast in the use of them, and an admirable performer; and when he appeared in riding costume in Harrow, with his tall figure mounted on the enormous machine that he rode, it was a sight to see.
>
> He kept up the amusement for many years: for two or more he was certainly the best bicyclist in England, and his delight in success only shewed in more than common relief the charming modesty with which he carried his honours. He had a real delight in feats of strength and endurance for their own sake. He seemed to have found the same quality in one of the professional bicyclists with whom he became acquainted; and again and again he would tell me how John Keen was a man whose soul was above prizes - a man to be made a friend of.[40]

The Keith-Falconer described by his teacher Bowen is a prototypical 'gentleman amateur' and 'muscular Christian'. He participates in an 'amusement' rather than a sport, he 'carries his honours with charming modesty' and he 'delights in feats of strength and endurance for their own sake'. He does not only *demonstrate* these admirable qualities, but as a morally pure amateur, he is seen as having *imposed* these values on his rival John Keen, a highly successful professional athlete, who is patronized by Bowen as 'a man whose soul was above prizes', in effect minimizing his status as a working professional. The account is heavily laden with class assumptions. It is suggested that

Keith-Falconer believed that a professional and an amateur *would* not, indeed *should* not, share common attitudes towards the value of 'feats of strength and endurance', but that Keith-Falconer made a magnanimous exception in Keen's case. Keen, a professional maker and rider, was certainly interested in cash prizes, depending on them for his livelihood. But from Keith-Falconer's assumed viewpoint, Keen 'was a man whose soul was above prizes' and therefore someone he was willing to race against and whose friendship he was not ashamed to cultivate. This revealing biographical detail gives a glimpse of the reality of the cultural distinction between 'amateur' and 'professional' in sport at the time. In this description of the personality of Keith-Falconer we see idealized and enshrined the character and attributes of the gentleman amateur athlete.[41]

Keith-Falconer's athletic ability was considerable, and he was widely praised. Lacy Hillier suggested a conflict between Keith-Falconer's athletic and academic commitments, calling him an 'unreliable' rider, affected by 'want of judgement':

> Keith-Falconer, despite his splendid record, was an unreliable rider. Just when he was fittest and most expected to score, he either declined the contest or gave up; thus, after training for several weeks in 1883 for the 50 miles Championship, he left the track for Brighton on the morning of the race and did not compete. On the memorable occasion when, after many efforts to bring them together, he at length met the late H.L. Cortis, that redoubtable rider ran him off his legs at seven miles, to the intense disgust of the Cantab's friends. Keith-Falconer was a very effective rider on the path. His style was excellent, though perhaps too upright for latter-day ideas. He sat close up to the head of his machine, and being a tall man (over six feet) he looked remarkably well, and rode with skill, his win in the Fifty Miles Championship of 1882 being accomplished by good judgement and with consummate ease.[42]

In another account, Lacy Hillier suggested some of Keith-Falconer's limitations at the time: 'When he went down at Surbiton before Cortis in their 10-mile match, he was beaten as much by want of judgement as anything else...He was so much superior to his contemporaries at the Universities that he had very little opportunity of developing that 'head' or judgement in cycle racing which would have enabled him, when pitted against men who were as good as himself, to use his immense physical powers to their best advantage'.[43] Later Hillier discussed the question of strength and height, what physical attributes were necessary to be a cycling champion, in his *Amateur Cycling*, an 1893 publication:

> Now, in the old days of ordinary racing, a man had to possess many qualifications before he was a champion. He not only had to possess the

> necessary qualifications other than physical, but he had also to possess certain physical developments, as for example: height, and a long reach, so as to ride with ease a big wheel, and thus secure an advantage over the smaller men, who could not bestride a wheel of such diameter. Nearly all the notable champions of the past, from Keith-Falconer and Cortis, onward, were big men - the two or three exceptions simply proving the rule.Thus it came about that cycling produced several champions whose merits were unquestionable, men who gave away long starts, and then won handsomely; and the public loved to see them ride, and cheered them to the echo, and cycle racing took the public fancy and became a very popular branch of athletic sport.[44]

A tall man did indeed have a longer reach, making it possible for him to ride a larger wheel, and therefore to be geared slightly higher. But Hillier's comments were also subtly class-biased. A smaller man could indeed be a champion, as John Keen demonstrated, and exceptions *disprove* the rule Hillier was attempting to make. What he lost in leg-length (or lower 'gear' in technical terms - AR), a rider could make up for with a quicker peddling technique and other athletic qualities, such as strength, staying power, suppleness and tactical skill.[45] As a socially biased observer and historian, Hillier favoured amateur champions such as Keith-Falconer and H.L. Cortis (whose father was a doctor) over the working-class and lower-middle-class professionals, whose athletic abilities he appeared unwilling or unable to evaluate fairly. Hillier rarely praised professional riders in print or recognized their achievements objectively.

6. Gentlemen, not players: the establishment of the Bicycle Union, 1877-78

Of these two contrasting groups which occupied the social poles of the new sport, the proletarian professionals in Wolverhampton and Sheffield, and the 'gentlemen' and upper-middle-class amateurs of London, Oxford and Cambridge, it was not surprisingly the latter who spearheaded the drive to organize and institutionalize the quickly expanding sport at a national level, and to separate it from the control of the Amateur Athletic Club. Lacy Hillier later described the sport at that moment (1876-78) as 'so wide-spread, so valuable from a health-giving and economic point of view, so distinct from all the minor branches of athletics, which have their Alpha and Omega in the competitions on the cinder path, and moreover, so easily applicable to the stern business of life' that it 'was not likely to remain for any length of time under feeble control'.[46]

Yet, in the later 1870s, who should control cycling, and who should control which aspects of cycling, was the subject of intense discussion and negotiation. Squabbles and rivalries within the cycling community needed to be resolved, but also opposition and legislative threats to the new sport from the outside, from other road-users and the police, had to be confronted and dealt with, for much of cycling took place in public, on public roads.

Amateur championships on the track - usually on cinder or grass surfaces used primarily for running - had been organized under the auspices of the Amateur Athletic Club since 1871, but were increasingly inadequate to the specialized needs of cyclists. An editorial in *The Bicycle Journal* from late 1876 complained of the continued inadequacy of the Amateur Athletic Club's bicycle championship, particularly of the small number of entries:

> The race for the amateur championship should most certainly be in the hands of the bicycle clubs, and it is an anomaly only to be found in bicycling, that such is not the case. For three years now one club or another have been holding race meetings in London, but so far, none have ventured to institute a championship...Club championships are coming into fashion, why not go a little further?[47]

The efficient organizing of racing on the track was one pressing issue. But, also, the much broader category of road riders, only some of whom were club members, had no

organization to represent their interests and rights as users of the public highways. A series of well-publicized altercations between cyclists and horse riders and horse-driven carriages, and several serious assaults on cyclists, left the riders of the high-wheel feeling vulnerable and discriminated against.[48] The bicycle did not as yet even enjoy formal legal recognition as a vehicle, and there were various central government and local legislative threats in 1878 to restrict and regulate cycling, which created a sense of urgency among cyclists and galvanized the Bicycle Union's founder members into action.[49] In all these respects, cycling had to confront issues which 'on location' sports such as cricket, running, tennis or golf, for example, did not have to contend with.

Both racing cyclists and club riders felt the need to organize to protect themselves and to give the sport its own institutional identity and independence and thus 'determined to create a governing body elected by cyclists to rule cycling'.[50] The question, negotiated in many club committee meetings from 1876 to 1878, was exactly how a national organization should oversee racing, as well as involving itself in other aspects of cycling. The sport as a whole was not easily circumscribed, like running or boxing, for example, by a defined competitive arena (though rules for track racing could relatively easily be drawn up), but involved all of the ways in which sporting and recreational cyclists interacted with society, as road racers, as travellers and tourists, as users of the roads and railways and patrons of roadside hotels and businesses.

The outcome was the creation in 1878 of two parallel but independent bodies, the Bicycle Union (later the National Cyclists Union) and the Bicycle Touring Club (later the Cyclists Touring Club). From the outset, the Bicycle Union controlled racing and involved itself with legal matters and the Bicycle Touring Club concerned itself with actual road conditions, accommodations for cyclists while travelling and the provision of maps and road signs. The establishment of the two separate bodies in the same year was thus a significant indication of the dual nature of the sport of cycling, embracing on the one hand serious racing and, on the other, touring and recreational riding. The existence of the two parallel bodies was itself controversial: 'There are not wanting cyclists who think that, had an association been formed combining the C.T.C. and N.C.U., the result would have been for the benefit of the sport', wrote Lacy Hillier in 1885, 'whilst another section cling to the belief that the healthy rivalry which existed between our two great

associations in their youthful days was the reason of their splendid development, as shown at present by the power and prestige which both undoubtedly possess'.[51]

Various preliminary meetings were held in 1876 and 1877 between members of leading London clubs. The Temple, the Wanderers, the London, the Pickwick and the Surrey Bicycle Clubs, as well as the Oxford and Cambridge University Cycling Clubs, were all actively involved. The influential Temple Bicycle Club, for example, held a public debate on 19 March 1877 at its headquarters in the City of London to discuss 'the advisability of forming a general association of bicyclists' to make decisions about championships, the definition of amateurism and the settlement of racing disputes 'on a basis acceptable to the general body of cyclists'.[52] Sub-committee followed sub-committee, resulting in a report containing a resolution to create a Union. Keith-Falconer, of the Cambridge University Cycling Club, was among those invited to attend a meeting in London, on November 17th, 1877, chaired by Gerard Cobb also of the Cambridge club, at which it was unanimously resolved: 'That a Prospectus of the Bicycle Union be published in all the bicycle journals, and a copy of it sent to the secretary of every bicycle club in the United Kingdom' (see Appendix J). Lacy Hillier suggested that this was an open, democratic process, that 'its origin was brought about at an open and honest meeting in which all who cared to be represented could take part, and thus the opinions of all who had any right to speak were obtained'. The reality appears to have been that northern clubs were, as a result of distance or disinclination, at this stage effectively excluded, as were professional riders.[53]

The Bicycle Union, Britain's first national cycling organization, was formally established at a meeting in the Guildhall Tavern, London on 16 February 1878, when its constitution was debated and approved under the chairmanship of Gerard Cobb, the young President of the Cambridge University Bicycle Club. One of the pressing priorities of the Union was to make its representatives' voices heard in Westminster, particularly with regard to the threatening provisions of an amended Highways Bill then in process of being drafted, and in July 1878, Gerard Cobb (Chairman), C.R. Hutchings (solicitor to the Bicycle Union) and Nahum Salamon (chairman of the Coventry Machinists' Company), met in Whitehall with the President of the Local Government Board, Mr. Sclater-Booth, 'to ask that the Highways Bill should be so framed as not to

make its operation toward bicycle riders oppressive, and to get the bicycle declared a carriage within the purview of the new Act'. The meeting was successful in stressing that cyclists formed 'a sufficiently large and important body to render any hasty or ill-conceived legislation with regard to them most undesirable'.[54] The economic benefits of the expanding bicycle industry were also emphasized. Salamon, speaking for the Bicycle Union, told Sclater-Booth that:

> five years ago the bicycling industry was represented by the Coventry Machinists Co. alone, making 5 bicycles a week; now there are 14 makers in Coventry, and some 120 scattered throughout different towns. The present weekly wages paid to makers of bicycles in Coventry ranged from £1,500 – 2,000. The amount of capital invested in plant and machinery may be estimated at about £1 million, and the value of bicycles throughout the country at between £600,000 and £800,000. In London there were upwards of 10,000 bicycles; in the country, 50,000.[55]

The Union's purpose was not only to look after the legal and legislative interests and rights of cyclists in a broad sense, but also 'to examine the question of racing in general, and to frame definitions and recommend rules on the subject. To arrange for annual race meetings, at which the amateur championship shall be decided'. At that moment, the Bicycle Union declared itself open to both amateur and professional riders, but in practice was to be in the future heavily biased towards amateurism, and to involve itself very little in the affairs of the professionals. Keith-Falconer was Chairman of the Racing Committee which, on 4 April 1878, made a report to the Council attempting to define precisely what 'amateur' and 'professional' meant in the new sport of cycling. It was under pressure to do so because the Bicycle Union was to promote its first Amateur Championships that year. After 'lengthened discussion', it was 'resolved that the following definition of professional and amateur should be recommended to the Council of the Union: A Professional Bicyclist is one who has ridden a Bicycle in public for money. An Amateur Bicyclist is one who has never done so, and who has never competed with a Professional Bicyclist in public (except at a meeting specially arranged by the Bicycle Union), and who has never publicly engaged in any other athletic exercise for money'.[56] Another meeting, on 11 May, elaborated slightly on this brief definition, declaring that:

> a professional bicyclist is one who has ridden a bicycle in public for money, or who has engaged, taught or assisted in bicycling or any other athletic exercise for money, and that a bicyclist who shall have competed with a professional bicyclist for a prize knowingly and without protest (except at a meeting

specially sanctioned by the Union), shall also be considered a professional bicyclist. Any person not included in the above definition shall be considered an amateur bicyclist.[57]

The definition that was finally carried at a subsequent meeting (June 13) was essentially the same, but somewhat tighter in its wording, with an explanatory coda which attempted to define the ways in which a competitor might move over the imprecise boundary between amateurism and professionalism:

1. A Professional Bicyclist is one who has ridden a bicycle in public for money, or who has engaged, taught, or assisted in bicycling or any other athletic exercise for money.
2. A Bicyclist who shall have competed with a professional bicyclist in public or for a prize, knowingly without protest (except at a Meeting specially sanctioned by the Bicycle Union), shall also be considered a professional Bicyclist.
3. Any person not included in the above definitions shall be considered an Amateur Bicyclist.

To prevent misunderstanding in reading the above, a majority of the Committee propose that the following explanations of its terms should be published with the definition:

A bicyclist forfeits his right to compete as an amateur, and thereby becomes a professional bicyclist, by:
1. Pursuing the art of riding the bicycle or any other athletic exercise as a means of gaining a livelihood.
2. Riding the bicycle or engaging in any athletic exercise for a money prize or for gate money.
3. Accepting remuneration for riding the bicycle or for engaging in any athletic exercise.
4. Accepting payment for training or coaching others for bicycle racing or for any athletic exercise.
5. Receiving payment for services personally rendered in teaching bicycle riding.
6. Competing with a professional bicyclist in public for a prize according to paragraph 2 of the definition.

Bicycle manufacturers and agents are cautioned, that to personally teach bicycle riding, as a means to effect the sale of a machine, will be taken as an infringement of clause 5.[58]

The Bicycle Union here specifically rejected use of the Amateur Athletic Club's conservative, exclusionary and socially divisive "mechanic, artisan and labourer" clause, framed in 1866 to reflect, maintain and reinforce class distinction within sport and

rigorously imposed at the first amateur cycling championships in 1871, when seventeen out of twenty competitors were excluded as 'professionals'. Rather than excluding all working-class riders from amateur status, the Bicycle Union's definition suggested, with its looser, modernized definition, that 'professionalism' ought to be assigned only to those who earned their livings in the sport as full-time competitors or teachers.

The Bicycle Union's definition was controversial and broke new ground, threatening to create a rift with other amateur athletic institutions. Two of the leading London cycling clubs, the Wanderers B.C. and the Temple B.C., initially withdrew their support of the new Union in protest. Lacy Hillier wrote that the Bicycle Union's definition, 'ignoring as it did the social qualification as regards the amateur athlete, gave rise to an immense amount of discussion, and the cyclists were threatened with ostracism by some of the older followers of sport...threats of protest being heard on all sides against the cycling division, who had thus taken this bold step in advance of the older branches of athletic sport'.[59] One editorial spoke of the Bicycle Union as 'fighting in the vanguard for a pure republic of sport'.[60] *The Referee* wrote:

> Bicyclists are standing upon their dignity, and evincing a strong determination to scorn alike the censure and the praise of athletes, using the word "athlete" according to ordinary acceptance in sporting circles. As it happens, the term "athlete" and "athletic sports" are singularly ill-chosen... The genteel young people who were so anxious... to find a term for their practices which should not be confounded with the word "pedestrianism", which was at once and forever relegated to professional use only, might have found some expression more capable of defining their exact position'.[61]

The Times, in a prominent and progressive April 1880 editorial, was:

> glad that some body of athletes or quasi-athletes has been found bold enough to incur the risk with which the bicyclists are now threatened. We only wish they had been rebellious at more points, and had disregarded absolutely the vexatious rules which most other clubs have passed on their own account or have submitted to at the dictation of the rest. The fact is that the distinction between an amateur and a professional is becoming more and more an arbitrary one.[62] (see Appendix O for full text.)

Further confirmation of the determination of the Bicycle Union to take its own line in overseeing bicycle racing was its decision to withdraw its championships from under the umbrella of the Amateur Athletic Club and to promote its own events. These developments make it clear that within the new sport of bicycle racing progressive elements were striving to express a more liberal, democratic approach to competition and

to social inclusion in sporting activities, although it was also clear that deeply-rooted class distinctions could not easily be overcome. The amateur/professional dichotomy was compulsively discussed and evaluated in the cycling press over the next twenty years, and was a constant source of tension within the sport. If the new Bicycle Union was formed to give identity and independence to the new sport, the fact was that in reality it had little relevance to the activities of the working-class professionals, whose business affairs were organized by promoters and trainers with close ties to the bicycle industry.

Alfred Howard, in an Editorial in *The Bicycling Journal* in June 1877 initially took a somewhat conservative stance in defence of the existing amateur 'law'. He was 'afraid that there is a general wrong impression as to who is an amateur, and who is not...many think that so long as they have never competed for money or against professionals they are entitled to rank as amateurs'. But, Howard pointed out, although 'it may be hard, unfair, or unjust', rules are rules: 'the "mechanic, artisan or labourer clause" is the rule, or definition, and as such must be observed. No bicyclist therefore who is a "mechanic, artisan or labourer" can claim to be an amateur, or a member of an amateur club'. But it was clear that shifting occupational and social definitions, were making such perceived social and class categories within sport questionable:

> There is - especially in London - a great wish to be an amateur, and very few care to be called professionals, and partly for this reason also we presume that many small clubs are being established, some of which admit riders who would be refused entrance into existing amateur clubs. The would-be-amateurs trust by this means to get over the line, but of course whenever the unpleasant question of vocation comes to be asked the result is disqualification. It would, we think, be by far preferable if certain classes of riders would accept their position.[63]

The opinions and activities of Gerard Cobb, President of the Cambridge University Bicycle Club and of the Bicycle Union, were influential and significant in the debate at this particular moment. As an prominent sports institution within a bastion of cultural privilege, the Cambridge club might well have taken a hard line on the question of professional athletic exclusion. Its actions between 1877 and 1879, however, show Cobb's club, under his leadership, as questioning and challenging a narrow, traditional conception of amateurism. In September 1877, the club invited H.P. Whiting, the amateur Amateur Athletic Club champion in 1871, 1873, 1874 and 1875, who had been expelled from the A.A.C. for having compromised his amateur status by competing

against professionals, to compete in an 'open' amateur race in November.[64] Alfred Howard now welcomed this new departure in *The Bicycling Journal*:

> We are informed that the committee of the Cambridge University club in electing the competitors do not profess to be guided by the definition of 'gentleman amateur'. We are glad that such is the case and we think the example set may well be followed by other clubs, and this undefinable term laid aside for good...we have all along held that the definition of an amateur is ill adapted to bicycling, and not in accordance with the spirit of the age.

The Cambridge University club, Howard went on to say, was 'a large association, and contains some of the best riders of the day', but 'they are little known beyond their own racing circle'. The London clubs, he thought, were under more pressure to rule on the amateur question since they 'compete all over the country. These are the clubs which really ought to re-arrange the amateur question, as it concerns them the most. The feeling that something ought to be done is daily getting stronger; perhaps now the C.U.B.C. has opened the ball the vexed question may soon be settled; until this happens we are sorry to say that we do not see how any amateurs can safely run against Mr. H.P. Whiting'.[65] Such expressions of opinion on the question emphasize how shifting and tentative the definition of amateurism actually was.

Gerard Cobb continued to take a provocative position within the sport. In a letter to *Bicycling News* in August 1877, he outlined his position on 'The Amateur Question' (see Appendix L). Amateurs and professionals should not be prevented from competing together and an amateur who raced against a professional for a trophy, 'to test and stimulate his strength and skill', should not forfeit his amateur status, he argued. The most convincing reason to encourage competition between amateurs and professionals was 'the development of the art' of bicycling, to stimulate the creation of 'the perfect machine and the perfect rider'.[66] There was 'something radically wrong in any rule or definition which tends to limit the scope of competition, and thereby jeopardises progress in an invention destined to be so widely and beneficially employed as the bicycle'. The current amateur rule was 'unreasonable, unusual and detrimental'.[67] The influential journal *The Field* agreed: 'bicycle racing is a new form of sport – the growth of the last few years – and its exponents must be allowed to make their own rules', and suggested only that an amateur should not race against a professional for money.[68]

The Cambridge Club and the Bicycle Union tested their convictions by promoting a series of 'amateur versus professional' races in 1878 and 1879, with the official sanction of the newly created Union, involving amateurs Keith-Falconer (Cambridge University B.C.) and H.L. Cortis (Wanderers B.C.) and professionals John Keen (London), W. Phillips (Coventry) and Fred Cooper. The first races were held in Cambridge in October 1878, when in a 5-mile event Keith-Falconer defied most expectations in beating Keen by 5 yards, in the process lowering the record for the distance from 16m 1⅘s to 15m 13 3/5s. 'No race that has yet been run has created more interest than that of Amateur versus Professional which took place at Cambridge last week', commented *Bicycling Times*, [illegible] have been impossible [illegible] greatest credit on [illegible] throughout as a [illegible] Keith-Falconer, Cortis, Keen and Cooper raced over 2 miles in Cambridge, and then in October, Cortis and Keen participated in races at three distances for a 25 guinea cup, over 20 miles in Wolverhampton and then in London at Stamford Bridge over 1 mile and 5 miles, where they 'excited an enormous amount of interest, the Stamford Bridge grounds have seldom since their opening seen such an assemblage of spectators. There must have been six or seven thousand persons present, parts of the ground being inconveniently crowded'.[70] Cortis was victorious over the long distance, but Keen won both the shorter races, to take the cup. These races once again illustrated the intention of the Bicycle Union to take its own independent line and to establish itself as a distinct entity *outside* the Amateur Athletic Club.

Tactical issues, the position on the bicycle, and especially the question of 'pacing', proved to be of crucial importance in these three 'amateur versus professional' races between Cortis and Keen, as the riders contested their experience and their competitive intelligence, not only strength and speed were at stake but their tactical finesse. In the 20-mile race at Wolverhampton, Cortis led from the start, with Keen 'quite content to be in the rear of his rival'. In the last lap, 'Keen made strenuous efforts to overtake the amateur, but it was of no avail and Cortis responded to every spurt', winning by two yards.[71] Accepting Cortis' fast pace at the front in the 1-mile race a week later in London, Keen rode

> an unvarying length in the rear, maintaining his favourite position... When the bell rang as they entered the last lap, Cortis seemed to improve the pace slightly; but Keen made no attempt to pass until they approached the final straight. As they rounded the corner he came out, judged the distance and pace to a nicety, and coming away in splendid style, won on a spurt by half a yard.[72]

As is made clear here, the tactical technique of 'pacing' was thoroughly understood and practiced in high-wheel bicycle racing, the realization that a second-placed rider gained considerable benefit in the slip-stream of his rival, and that a winner could make use of his opponent's pace until the very last moment of a race. Cortis and Keen, top-class amateur and professional athletes, were closely matched, shared identical tactical concerns and made use of this knowledge in competition. The differences between a 'scratch race' and a 'handicap' were also interlinked with the issue of 'pacing', for if riders were spaced apart at the start of a race, with the slower competitors given an advantage, then the faster, more experienced, riders had to work harder initially to make up their disadvantage and could only benefit by taking pace towards the end of the race.

In promoting these professional versus amateur races, the Bicycle Union thus came into conflict with the Amateur Athletic Club, which had seen effective control of amateur cycling wrested from it by the new organization. Approving of the independent line taken by the Union, *Bicycling Times* adopted an assertive "I told you so" attitude in commenting on:

> such an assemblage at Stamford Bridge to witness bicycle races only as has never yet been brought together in connection with athletic sport in London... Persons who were preaching about the heinousness of allowing the best professional of the year to compete with the best gentleman amateur, and the dreadful effect it would have on all bicyclists who rode under Union rules will sooner or later realize the fact that bicycling is a sport which can stand by itself'.[73]

A number of suggestions are offered here as to the significance of this tendency towards a new athletic liberalism, and the attempt to redefine or limit the amateur/professional stratification, within the sport of cycling. In spite of the contrasting social poles of the privileged Oxford, Cambridge and London clubs and the proletarian professionals, cycling appealed heavily to young, middle-class men who were perhaps less inclined as a group to respect established social distinctions within their chosen sport. They were interested, in an objective (almost scientific) sense, in developing the bicycle

technologically and in comparing the athletic merits of leading amateurs and professionals. To ride a bicycle, to join a club, to buy equipment and a uniform, disposable income was needed, and those who rode at weekends or raced were a younger generation of men unencumbered by family or agricultural ties. Club uniforms were introduced to create an image of middle-class respectability, to encourage the social acceptance of cycling - but it was clear that cyclists constituted a novel social grouping, outside the sporting respectability of, for example, the hunt or the steeple-chase, the cricket ground, the tennis court or the golf course.

Cycling on the road occurred in public space, rather than in a restricted, private environment; riders were exposed indiscriminately to other categories of road users. Recreational riders and racers both encountered the unexpected - in the towns, crowded streets crammed with horses and carts; in the country, unpredictable road conditions, a flock of sheep, a hunt party, or slow-moving horses with a coach or waggon. Out on the road, riders had to be their own mechanics and maintain their machines. The danger and the dirty road conditions meant that cycling could never be a polite sport. Cyclists braved the elements, and a social levelling was implied in this. Serious cycling on the road initiated participants into a fraternity, a shared democracy of tough, athletic activity. Clubs organized amateur activity on the road, while a professional might undertake a place-to-place road ride for a wager. But racing on the track was more formally structured and it was there that the need for a distinction between amateurs and professionals became most pressing. The distinction between amateur and professional cyclists would continue to be hotly contested territory through the 1880s and 1890s, the source of constant debate and organizational controversy.

A profound social tension thus existed within the sport from its earliest days. The tough democracy of its nature as a challenging physical activity, exemplified by the working-class professionals on the track and the uncouth 'scorchers' on the road, came up against the efforts of amateur proponents like George Lacy Hillier and the Bicycle Touring Club to point the sport upwards socially and create an image of amateur respectability. The Bicycle Union (renamed the National Cyclists' Union in 1883) was obliged to struggle with legislating relationships between competitors of different social classes and cultural backgrounds and a complex and affluent industry for the next twenty years. The Bicycle

Union was primarily a London and Home Counties organization and did not at first include Midlands and Northern clubs. In spite of the creation of local chapters to try to overcome this London-centredness, such a London-dominated national institution did not equally represent or benefit London, the Midlands and the North, and its attempt to regulate a wide variety of sporting and economic interests related to club life, bicycle racing and the industry was seen as an unwelcome bureaucratic intrusion by those who had little interest in centralized control. Lacy Hillier wrote optimistically that 'the Union then as now was so constituted as to admit professionals to membership, and thus secure a body representing not merely a section but the whole sport', but he added cryptically that the proposal to form the Union 'attracted but little attention in the provinces, where things were scarcely ripe for the new departure'.[74]

The truth was that the sport of cycling was much too diverse, geographically, from a class perspective, and because of the variety of its different kinds of interests, to be successfully represented by one single body. Hillier commented that Gerard Cobb's influence was 'recognized throughout, in the very wide and liberal lines' on which the first proposal for the Union were drawn up, but one of the Bicycle Union's most pressing tasks was 'to examine the question of bicycle racing in general, and to frame definitions and recommend rules on the subject', and it was 'soon evident that the first question which the Union would have to take in hand' was that of the amateur definition'.[75]

7. John Keen, professional champion and respected manufacturer

A biographical account of Ion Keith-Falconer, the young aristocrat whose enthusiasm for bicycle racing led him into top-level competition while he was still a student at Cambridge, has already been given, and in the interests of balance a brief description of the life and career of John Keen, his professional opponent in these races who 'ran without reward in his desire for sport' and was 'a thorough sportsman in these unusual matches', should also be included. Keen has already been mentioned in Chapter 2, section 6 (Links between manufacture and sport), where it was noted that he was widely credited with having played an important role in early racing bicycle design and technology.

Unassuming London athlete and bicycle maker, John Keen (1849-1902), has received scant historical recognition, but was a towering presence in early English bicycle racing for two decades. He gained international fame as a champion athlete and was praised as an engaging personality.[76] Keen started to race at the dawn of the sport in 1869, and was already reported in 1870 as 'a celebrity' who 'brought a large company together' when he appeared.[77]

As a racer, Keen dominated English professional championships during the 1870s, with an unrivalled record of victories in 1873, 1876, 1878 and 1879, and runner-up in 1870, 1872 and 1874. He was a huge attraction and an extraordinarily consistent performer at the regularly scheduled races in the heartlands of professionalism - Wolverhampton, Sheffield, Birmingham, Leicester and London. As a professional 'champion' working in the show business environment of early professional cycling, Keen issued challenges to other professional riders and often raced against horses and runners under varied conditions for wagers. Keen also travelled to America at least three times, where he pioneered top-level professional racing (see Chapter 4).[78]

But Keen was also widely recognized at the time as perhaps the most important and innovative maker of racing bicycles, and epitomized the interconnection between manufacture and sport which has frequently been emphasized here.

Keen rode his entire career on high-wheel bicycles of his own manufacture and provided the best machines for many of the leading amateurs and professionals. His machines were technically innovative, providing a standard by which other makers judged their products, and many of his innovations (which were not systematically patented) were subsequently incorporated into mass-produced machines on a regular basis.[79] *Bicycling Times* wrote that: "His reputation as being *the* man has enabled him to secure an immense number of patrons for his make of bicycle, known as the "Eclipse", and richly he deserves it'.[80]

But it was the range and breadth of his knowledge and experience of the sport and the industry that gained Keen the most praise. In 1877, *Bicycling News* said Keen 'has from the birth of bicycling been one of its principal stays'. It called Keen 'probably the best known bicyclist in the world...From the very first he has been a fine example of straightforward riding, admired not only by amateurs, but also by the professional world, including those whom he has vanquished, and is spoken of as uniformly pleasant and courteous to those with whom he comes in contact'.[81]

Bicycling World interviewed him in Boston in 1879 and thought he was 'unquestionably the most interesting bicycling character who has visited us from abroad'. The paper praised 'his graceful and effective style of riding, his frank and honourable deportment, which gain him friends everywhere' and found him 'a gentlemanly, practical man, who knows the art and business of bicycling in all their phases, and is ready in imparting his knowledge to others'.[82] An 1885 article called him 'perhaps the best known bicyclist, professional or amateur, in the world...the best appreciated and the most generally liked', a man who was 'in the first rank of cycling celebrities'.[83]

Keen's courtesy apparently was in contrast to the coarser standards of behaviour of some other professionals. Most of the leading amateurs of the 1870s were coached by Keen, including Cortis and Keith-Falconer, his opponents in the professional-amateur matches. His central importance in the early sport was recognized in 1884, when an appeal for funds was launched on his behalf, Keen evidently having concentrated on his racing career to the detriment of his business affairs:

Keen may be said to have given that push to cycling that has enabled it not only to creep up... but to equal, if not excel, any other of our national sports. For a man to have been the instigator of such a success is undoubtedly worthy of every recognition, particularly as the foundation of the sport has given rise to an industry finding constant occupation for thousands of skilled mechanics. Beyond the manufacture of machines, the credit of first proving their use also falls to John Keen.[84]

8. Sport as recreation: the establishment of the Bicycle Touring Club, 1878

The adventurous and pioneering mood of early high-wheel bicycling on the roads of Britain when the Bicycle Touring Club was founded in 1878, as well as its predominantly urban roots, is conveyed to perfection by James Lightwood in *The Romance of the Cyclists' Touring Club*:

> No sooner had the bicycle become recognized as a new means of progress in this country than those who possessed them experienced a longing to get away from towns and streets and explore the countryside. This joy of the open road was a new experience, giving all the charm of novelty mingled with a spice of adventure and a modicum of risk.....Roads were bad, maps indifferent good, sign-posts frequently illegible or misleading, wayside inns and country hotels were rarely prepared to receive guests.....Route-books, or road-books, such as we know them now scarcely existed then.....But those were the days of great adventure, and the first impulse of those who mastered the art of riding the bicycle was to go forth on voyages of discovery into the Great Unknown.[85]

'The Great Unknown' beckoned the majority of club and unattached riders into non-competitive, place-to-place rides, either out-and-home one day jaunts, or more extended multi-day touring rides. Initiated more in the North than in London, founded to offer support and information to riders on the road, the Bicycle Touring Club embodied ideals of community and mutual aid rather than competition, calling itself a 'league or brotherhood', suggestive of its nature as a masculinist organization. But if the Bicycle Union at first nominally left the door open to professional membership, the Bicycle Touring Club was decidedly pro-amateur.

The Bicycle Touring Club originated with the recognition that serious recreational cyclists – variously athletes, wandering-tourists, utilitarian travellers, perhaps record setters on the road – also had interests which needed to be protected and needs which had to be met. Tourists, as Lightwood recognized, needed food and accommodation and arrived dirty; they needed travel information and directions and better roads. They were the inheritors of a well demarcated, ancient road system which had been very much neglected since the 1840s, when the much faster railways had begun to lure away its travellers.

Some Bicycle Touring Club members were also members of smaller clubs, but they were much more likely to be 'unattached'. The primary reason for its creation was to cater to the many bicyclists who did not have a club in their locality, and who would benefit from joining a national club which soon had branches and representatives all over the country.

The idea of the Bicycle Touring Club was originally suggested in the pages of *Bicycling News* in 1876, and the 'league or brotherhood' of the Bicycle Touring Club was founded at the North of England Meet held at Harrogate, Yorkshire, on 5 August, 1878 by three young enthusiasts, Stanley Cotterell (Mid-Lothian Bicycle Club, Edinburgh), S.H. Ineson (Bradford Bicycle Club) and T.H. Holding (Banbury Bicycle Club). The declared aims of the organization were: 'To encourage and facilitate touring in all parts of the world. To protect its members against unprovoked assaults. To provide riding or touring companions. To secure and appoint at fixed and reduced rates hotel headquarters in all parts of the country. To enlist the co-operation of a leading wheelman, who should act as a Consul in every town, and who should render to his fellow members local information of every description' (see Appendix K.).

The head office itself moved, with different Presidents, from Edinburgh to Newcastle to Bradford, and then finally to London in 1883. By 1884, the Cyclists' Touring Club (the Bicycle Touring Club had undergone a name-change in 1882-83 to accommodate the growing number of tricyclists) advertized itself as 'the Success of the Age in the Athletic World', and could not only bask in its status as the largest bicycling organization in Britain, but claimed to be the largest athletic organization in the world, with 11,000 members, a total which had grown to more than 20,000 by 1889.[86]

This large membership, acquired within a few years, offers convincing proof of the extraordinary growth in the popularity of the sport and recreation of bicycling. However, if such a large membership would seem to indicate a social levelling, the Bicycle Touring Club in fact appears at first to have encouraged an image of social exclusivity. There was no actual competition in the Club's activities, but considerable emphasis was given to amateurism, using the word in the sense of proletarian and working-class exclusion, and indicating that a code of social decorum and gentlemanly behaviour was expected. Membership was 'strictly confined to Amateur Cyclists'. A candidate who was

already a member of 'a recognized Amateur Cycling Club' was automatically admitted. An unattached candidate needed either a reference from two other members, or 'must give reasonable and satisfactory proof of his respectability and position to any of the Representative Councillors of the Division in which he resides, or to the Chief Consul'.

Such demands for 'respectability' were a part of a larger socially cohesive amateur movement constructed within sport in general. As S.W. Pope has noted:

> Nineteenth-century amateurism was an "invented tradition". As the rallying cry of late nineteenth century institutionalized sport, amateurism represented an attempt to draw class lines against the masses and to develop a new bourgeois leisure lifestyle as a badge of middle and upper-class identity... The rising bureaucrats of the movement used the amateur ethos as a mechanism for institutionalizing their social prejudices into resilient athletic structures... Even though the notion of original purity was largely a myth of their own creation, they sold a vision of an orderly, genteel, harmonious world of sport and healthful recreation, open to all classes, but under the benevolent governance of principled, manly, middle and upper-class men like themselves.[87]

Club publicity from 1884 stated that one of the advantages of membership was that:

> It is par excellence the club for professional men. It not only includes in its roll many of the nobility and gentry in all parts of the land, it is supported by some of the highest dignitaries of the church, by members of the legal, medical, military, and naval professions, and indeed by amateur riders...who produce credentials showing that they belong to a respectable station in life.[88]

If it was at first conservative in this attempt to promote middle-class respectability, the Bicycle/Cyclists' Touring Club nevertheless appears to have quickly expanded its membership base across class distinctions and was certainly progressive in welcoming 'Ladies' as members, the first formal recognition of women's membership by a cycling organization. Although a detailed charting of the wider recreational and touring aspects of cycling is not undertaken in this account, it should be noted here that the Bicycle Touring Club encouraged the expansion of the sport of cycling outside the narrow confines of formal competition and opened recreational cycling to a wider, broader membership.[89]

9. Public recognition of bicycling achieved by 1878

Riding and racing on the road, widespread club formation at a local and national level, the organization of race meetings on the track, the rapid economic expansion of the industry and trade, the creation of a significant specialized cycling press and the growth of recreational touring, were all developments which constituted a conspicuous commercial and cultural movement in Britain. By 1877/78, a kind of critical mass of cycling activity had occurred, creating a prominent sport and pastime increasingly commented upon in the national press. Cycling on the high-wheel bicycle was recognized as a serious athletic activity and a widespread recreation, with a significant industry supporting it. From hesitant beginnings, cycling had become a permanent part of sports culture.

In an Editorial in the first issue of his new *Bicycle Journal* (18 Aug. 1876), Alfred Howard commented that bicycle racing had 'made great strides' in 1876. Athletic clubs had 'scouted the idea of introducing a bicycle race in their programmes', and had found that 'the bicycle contest created more enthusiasm and excitement than all the 100 yards, quarter, and mile races put together'. The cyclists had 'succeeded in setting the fair sex in such a flutter and fluster' that the runners had been unable 'to raise a solitary cheer'. In 1875, there had been 'between fifty and sixty athletic meetings at which bicycle contests were held'; in 1876 that number had already increased to about ninety by August, the date of writing. The number of bicycle racers in the country had 'nearly doubled' in the previous year, and the expansion had been especially noticeable in the 'northern and midland counties', where 'fresh men have come out with great abundance. Here the promoters of athletic meetings have been quicker in perceiving that a Bicycle race helps to make a good gate, and constitutes an important feature in their sports'. Howard regretted that some of the courses used were terrible, but hoped that 'with the increase of racing will come better paths and less risks to the rider'.[90] A *Daily News* editorial also from August 1876 said that the bicycle 'ought to be regarded not as a mere plaything of the hour, but as a substantial addition to the conveniences of life'.[91]

At the second annual race meeting of the West Kent Bicycle Club, held at Crystal Palace in late September 1877, where a variety of races were run off in many heats and professional John Keen gave an exhibition ride, the prizes were presented by the club's

President, Member of Parliament Robert Lowe, who addressed the assembled crowd and congratulated them for 'the very pleasant, and I will say rational manner in which we have spent the afternoon'. It had been 'a contest of very fine young men, all doing their very best, but only disposing of their own strength and energy'. Lowe had been 'from the first a very strong advocate for the bicycle...not only because I thought it would be an amusement, but because I saw in it a great many advantages. I thought it was a fine employment and exercise for young men, and would keep them out of a great deal of mischief'. Lowe asked the West Kent cyclists to behave well on the road, to be 'under the same control and self-imposed regulations as in riding a horse', since 'nothing could be more injurious to the spread of bicycling than that there should be accidents or serious cause of complaint'.

Commenting upon Lowe's speech in the *Bicycle Journal*, Alfred Howard congratulated bicycling for having a spokesman like him, 'whose word will be of greater weight with the generality of people than that of all other bicyclists put together':

> Now that Mr. Lowe has spoken on our behalf, it is satisfactory to note an improvement in public opinion towards us, and that the well-chosen remarks uttered at the Crystal Palace have attracted almost universal attention, and have been favourably commented upon in several quarters. Even those who were avowedly hostile before, and decried bicycling as a novelty dangerous and delusive, have been forced to admit its utility as well as its stability...The result is that we have a status admitted to us, which, though undefined, is none the less real and existent.[92]

The use of the word 'undefined' here to qualify cycling's status should perhaps be taken as confirmation of the sport's tendency to challenge existing social groupings. Howard again celebrated the health of the sport of bicycling in a February 1878 *Bicycle Journal* editorial. 'Bicyclists in this country may be pardoned if they congratulate themselves on the spread of their pastime', he wrote; 'Favoured, perhaps, in some measure by circumstances – as, for instance, the general excellence of our roads and the superiority of English mechanical arts and appliances – bicycling has taken firm hold on the youth of Great Britain; and we regard it as a convincing proof of the practical nature of the English character to have made such good use of the opportunity'.[93]

Gerard Cobb's work as President of the Bicycle Union was a crusade for understanding and toleration of the new sport and recognition of cycling's utility.[94] In two long letters

entitled 'Bicycling and the Public', which he sent to the *Daily News* in July 1878 and which were also published in the cycling press, Cobb countered many of the objections which had been raised against cycling and spelled out its benefits and advantages. The letters were particularly significant coming from a Fellow of Trinity College, Cambridge and the President of the cycling club of that prestigious university.

In the first letter, Cobb argued that 'it is a matter of national importance' that cycling 'should receive full and fair consideration' (see Appendix M). Cycling, he argued, was firstly 'of commercial importance'; secondly, cycling was 'of real practical and professional service' and thirdly, 'as a pastime it has strong physical, moral and intellectual recommendations'. The "three mode" aspect of cycling is once again delineated here. Cycling was 'a pursuit which enabled a certain class of young men more or less connected with the desk or counter to substitute fresh air, bracing exercise, and the sight of the country, for a City youth's usual evening programme'. The bicycle was also a practical, utilitarian benefit:

> the ease with which a bicycle can be driven, the distance it enables its riders to cover, its speed... added to its durability and comparative cheapness, render it by far the best form of road-locomotion for all to whom economy, whether of time or money, is an object. As such its use is daily extending among professional men of all classes, especially clergymen and doctors; whilst as the prices of bicycles in second-hand markets gradually get lower, working men are getting more and more to use them for their daily transit to and from work.

As 'a pastime rather than a professional necessity', bicycling was 'enormously on the increase', and one out of every five of Cobb's Cambridge students possessed a bicycle. Physically, cycling had much to recommend it, since it involved balancing and enabled the rider 'to get a thorough change of air as he passes over many different soils and local conditions of climate, in the course of his ride. It will be readily understood that to students a form of exercise which confers this benefit must be of peculiar value'. Cobb especially noted the 'nerve and pluck' required to ride the tricky, dangerous high-wheeler:

> Among the moral characteristics which have made us as a nation what we are, few have played so important a part as nerve and pluck, and it is this very need of their exercise which makes bicycling so popular with us, and has apparently prevented its taking root on the Continent. It would be nothing short of a national disaster if a pastime which tends to develop these important facets of

> character, and which is now rapidly assuming national proportions, should be placed at the mercy of repressive local legislation.[95]

In his second letter to the *Daily News*, Cobb dealt with the specific issues necessary to reassure the public that they should not feel threatened by cyclists, issues which concerned competitive, recreational and utilitarain riders. Considering that there were about 60,000 cyclists on the roads, he argued, the numbers of accidents was small and 'hardly justifies the recent outcry'. As far as timid horses were concerned, they should be treated with consideration, and they would get used to bicycles; 'in neighborhoods where bicycling made an early start, it is the greatest rarity in the world to find a horse shy at a bicycle'. The penalties against 'furious and dangerous riding' should be strictly enforced. Unfortunately, the public needed to be protected from 'the thoughtlessness, or the illbred selfishness...of a very small portion of the bicycling community'. Rules of good behaviour had been issued by the Bicycle Union, 'and their essential features are almost universally observed by 'club' men and the better classes of the 'unattached'. But unfortunately, all bicyclists are not amenable to the same regulations, nor sufficiently imbued with a proper spirit of consideration for others'. There was, therefore, a necessity to insert a clause in the Highways Bill under consideration by Parliament to 'regulate the use of bicycles on roads', but there should be uniformity in the laws which applied to cyclists. Acceptable bye-laws would demand that cyclists carry a bell or whistle to give warning of their approach, use a lamp after dark, and obey speed restrictions within town and city limits.[96]

In a conspicuous recognition of the national debate about cycling, and of the extent to which the sport and recreation had impacted upon everyday life, *The Times* published a leading article in September 1878. 'A curious question is coming on', it announced, 'The bicycle has come to the front and is fighting for existence...the bicycle has now surmounted the difficulties of construction, and adapted itself to human capabilities... Bicyclists are become a power'. *The Times* marvelled at the progress achieved by cyclists at the same time as it recognized the need for fair and unprejudiced legislative restraints. On the plus side, it recognized that the bicycle 'augments at least three-fold the locomotive power of an ordinary man. A bicyclist can perform a journey of a hundred miles in one day with less fatigue than he could walk thirty'. But on the negative side, 'the bicyclist will have to submit to the same rules as all others enjoying some

advantage over foot passengers. He will have to use bells when required...He will have to use his eyes. Above all, he will have to bear in mind that in every thoroughfare, at almost any hour of the day, there will be a large proportion of stupid people, and a not very small proportion of people a little the worse for drink'.

Gerard Cobb and the Bicycle Union had won a significant victory over public opinion. *The Times* greeted the arrival of the bicycle with an appeal for common sense and ironical reflection on the many sources of frustration on the roads. The bicycle was criticized because it was fast and quiet, but 'for all practical purposes, noise is a much greater nuisance than silence, and slowness a much greater nuisance than speed. The vehicles that make streets intolerable...are heavy vans, huge omnibuses, trademen's carts, costermongers proclaiming their wares'. Society 'used to be divided into the equestrian and the pedestrian orders', but cyclists 'have found a third rank'.[97]

10. Summary and conclusions

Collaboration between manufacturers and users:

Cycling as a sport in Britain was advanced by collaboration and cooperation - a symbiotic relationship, with influences flowing both ways - between riders (consumers) and manufacturers. The exigencies of sport rather than utility appear at this stage to have been the dominating considerations. The concerns of bicycle manufacturers and the customers/ consumers were with lightness, speed, reliability and strength, all of which can be seen as athletic requirements, though not of course irrelevant to utility.

Expansion and new institutions:

In the short space of less than ten years, bicycling had evolved in Britain from an embryonic primarily 'professional' entertainment into a formally constituted and recognized sport and recreation. Thousands of cyclists were seen on the roads of Britain, and thousands of spectators attended bicycle race meetings. Cycling had become a cultural institution. It had two national organizations and a well-defined structure of clubs, championships, record-breaking and record-keeping. It was recognized as a specialized athletic activity, with specific training priorities and needs.

Cycling was supported by an important manufacturing industry and had its own specialized weekly and monthly press. It sent lobbyists to Westminster to represent its interests, and was sufficiently conspicuous and controversial for editorials to be written about it in prominent daily newspapers such as *The Times* and the *Daily News*.

At its core were three groups of obsessively enthusiastic competitive athletes: a small group of professionals which had emerged from within the earliest entertainment context; a second, much larger, group of amateurs, both club members and unattached riders, and, third, a larger group of recreational users.

Supporting and sustaining the sport was a diverse group of manufacturers, businessmen, promoters and journalists who epitomized a new kind of middle-class entrepreneur, organizing and selling sport, recreation and mobility to the thousands of riders.[98]

Although it could and did provide useful transportation, utility was only a primary purpose for those energetic enough to master the dangerous bicycle, a mastery which involved athletic skill and experience.

Social class, amateurism and professionalism:

Within competitive cycling itself, the social and class divisions implied by the prevailing amateur/professional stratification were briefly challenged by the newly expressed liberalism from within the Cambridge University Bicycle Club and the Bicycle Union which has been explored here. The possibility of building an integrated, 'open' sport was briefly hinted at by the 'amateur versus professional' events specially sanctioned by the Bicycle Union, but a wider application of this novel approach to the organization of the new sport did not meet with general acceptance.

Amateurs increasingly separated themselves from professionals and the two classes usually had their own segregated competitive arenas. The two categories were reinforced and redefined in the 1880s rather than being amalgamated. The bicycle industry supported a strong professional class who were paid to advertize its products, and top amateurs could, if they were not extremely careful, slip into the suspect category of 'maker's amateur' by accepting equipment and expenses from a manufacturer.

But the vast majority of competitive and recreational riders were amateurs who joined one of the new clubs which sprang into existence in Britain in the later 1870s. Cycling was not a team sport *per se*, but amateur clubs, with their uniforms and group regulations, could approximate the 'team spirit' of other team-based sports like soccer or cricket.

From its beginnings cycling was a sport which was stratified along class lines, a sport within which expressions of class identity could frequently be found, but within which tendencies towards a new kind of class levelling, or sporting democracy, were also apparent, both in officially organized events such as the 'amateur versus professional' races, and in an informal 'democracy of the road', a code of conduct and mutual recognition inherent in the difficulties of mastering the bicycle and navigating the obstacles and weather conditions encountered on the road.

Notes to Chapter Three

[1] The Amateur Athletic Club (which appears often to have been called the Amateur Athletic Association) was formed in 1866 'to afford as completely as possible to all classes of Gentlemen Amateurs the means of practising and competing versus one another without being compelled to mix with professional runners' (H.F. Wilkinson, ed., *The Athletic Almanack*, 1868, quoted in Bailey, see below). It defined 'amateur' as follows: 'Any person who has never competed in an open competition, or for public money, or for admission money, or with professionals for a prize, public money or admission money, and who has never, at any period of his life, taught or assisted in the pursuit of athletic exercises as a means of livelihood, or is a mechanic, artisan or labourer.' See Peter Bailey, *Leisure and Class in Victorian England: Rational Recreation and the Contest for Control, 1830-1885* (London, 1978).

[2] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.317; H.H. Griffin, "Cycling Twenty Years Ago", *The Cycle Magazine*, April 1896.

A note on the earliest bicycling periodicals follows. *The Bicyclist*, a monthly, was first published in Herne Hill, south London, in Nov. 1875. *Bicycling News*, a weekly, was first published 14 Jan. 1876. *The Bicycle Journal*, another weekly, was first published 18 Aug. 1876, and sometime between Feb. and Aug. 1878 changed its name to *The Bicycle Journal, Swimming and General Athletic and Pedestrian Recorder*, which suggests it was having problems surviving in the competitive cycling journalism marketplace. It went out of business with its issue of 27 Nov. 1878, promising to reappear the following spring. With editorial offices near Fleet Street, *Bicycle Journal* was printed in south London and distributed in 1876 to ten outlets in London and to Birmingham, Coventry, Manchester, Newcastle, Northampton, Sheffield and Wolverhampton. From the offices of *Bicycle Journal*, editor Alfred Howard also published an annual review of the sport, a list of clubs and a road guide. *The Bicycle for 1877, A Record of Bicycling for the Past Year*, was his third annual such review. *The Bicycling Times* was first published in May 1877. *Bicycling - A Monthly Provincial Magazine and Country Club Gazette* was first published in Newcastle in Aug. 1878.

The successful growth of the cycling press was due overwhelmingly to one factor – the financial support provided by the advertisers, manufacturers who needed to sell bicycles, equipment and accessories. 'Cycling is much better situated in this respect than

other sports', commented Lacy Hillier; 'the maker of running shoes, or of swimming costumes alone, seldom spends much on advertisements, for it would take an immense sale of such articles to recoup a manufacturer for the considerable outlay which any serious amount of advertizing would necessitate'. The bicycle, however, was a high value item, much in demand. 'It thus comes about that cycling is provided with a cheap, exhaustive, and essentially readable class press, which does much to popularize the sport and binds its votaries together', concluded Hillier, who added that 'the cycling press is emphatically a practical class press'. (Badminton *Cycling*, p. 314)

[3] Nahum Salamon, *Bicycling, Its Rise and Development, A Text Book for Riders* (Preface, 2nd edition 1876). Salaman's book was a collection of various historical information and a guide book to English and Continental roads. In the Preface, Salaman wrote: 'During the existence of the wooden-wheeled velocipedes, and when in 1869-70, those vehicles showed some signs of vitality, several books appeared on the subject. When wooden-wheeled machines went out of use, these books became valueless, and now not a half-a-dozen lines in any of them would be found applicable to the Bicycle of today, and not a word in them would be of the least instruction to the Bicyclist. ... In the face of these facts, it must appear strange that there should not be in existence a single book of reference, or guidance on this subject. We have, therefore, ventured to supply the want with a brief volume, which will, we trust, be found practical, trustworthy, and instructive'. Salamon was at first London agent for sewing machines for the Coventry Machinists' Company and in 1873 joined the board of the Coventry Machinists' Company as Managing Director, with an agreement to lend the company up to £5,000. By 1880, Salamon was Chairman of the company with a 21% holding. He later parted from the company and was involved in the Bicycle and Tricycle Supply Company (see *The Bazaar, Exchange and Mart.*, 8 July 1881). I am indebted to Nick Clayton for information about Salamon.

[4] For an account of the John o'Groats ride, see G. Lacy Hillier, "A General Survey of Long-Distance Cycle Riding", *Cyclist Annual and Year Book for 1893*. For the Cann v. Wilson race between Sheffield and Plymouth, see H.W.Bartleet, "Historic Rides, The First Long Road Race", *Cycling*, 14 July 1921. Some of the more prominent long road rides recorded in the press were listed by Nahum Salamon, *Bicycling, Its Rise and Development*, 1874 and 1876 editions:

- Sept. 1872; Charles Wheaton (Surrey B.C.) rode from London to Newcastle, 274 miles in 3 days.
- 2 June 1873; Charles Leaver, Geoffrey Hunt, Charles Spencer and William Wood (Middlesex Bicycle Club) rode to John o'Groats in the north of Scotland on bicycles built by T. Sparrow, 800 miles in 14 days (also reported in *Daily Telegraph*)
- August 1873; Surrey and Middlesex Bicycle Clubs raced from London to Brighton and back; 6 members from each club.
- 13 Sept. 1873; 2 members of Pickwick B.C. rode from London to Land's End in 58 hours.
- April 1874; Cann and Wilson raced from Sheffield to Plymouth.
- May 1874; Keith-Falconer rode from Bournemouth to Hitchin, 135 miles in 19 hours (reported *The Field*, 20 June 1874)
- August 1874; race from Bath to London (106 miles) for the captaincy of the Middlesex B.C. 'Thomas Sparrow, who accompanied the race, started them and owing to the great number of people assembled, there was some difficulty in passing through the crowds'.

[5] *Wolverhampton Chronicle*, 29 Dec. 1875.

[6] *The Bicyclist*, Feb. 1876

[7] *The Bicycle Journal*, 29 Dec. 1876.

[8] Charles Spencer, *Bicycles and Tricycles*, Preface. The use of the term 'professional' here indicates a specialized, money-making performance, which an audience would pay to see, as distinct from a sport 'likely to be taken up by the general public', that is, an 'amateur' sport.

[9] Charles Spencer, op. cit., p.56.

[10] Hillier quoted from Viscount Bury and G. Lacy Hillier, Badminton *Cycling* (1889 edition), pp. 176-79.

[11] 'Price List and Descriptive Catalogue of the "Champion" Long Distance Bicycle Manufactured Only by Arthur Markham, (The First Champion Bicyclist), Bicycle Manufacturer, 345, Edgeware Road, London, W.', date about 1879 (copy courtesy Nick Clayton).

[12] All advertisements are quoted from Alfred Howard, *The Bicycle for 1877* and from *The Bicycle Journal*, 13 April 1877.

[13] *The Bicycle Journal*, 16 March 1877. An 'unattached' rider was one who was not a member of a club, either because he chose not to be, or sometimes because he did not have the social standing or connections to be eligible membership (see also 'The Unattached', *Bicycle Journal*, 9 March 1876, p.10-11). At the period, 1877, when large Meets of cyclists were held, the 'unattached' present were a problem to organize, though clubs certainly might consider them as potential new members. Grout's reference to 'keeping the sport under due self-control' appears to be a reference to discussion then currently ongoing to form a Bicycle Union, to keep cycling independent of the control of the Amateur Athletic Club, which sponsored cycling championships from 1871 to 1879. Grout's comment might also be seen as a plea for an open sport, without differentiation between riders and makers, that is between amateurs and professionals.

[14] 'We hear that a number of gentlemen, members of the Liverpool Velocipede Club, are making arrangement for a tournament on bicycles to be held in the Gymnasium. The programme is to include tilting at the ring, throwing the javelin, broadsword contests, and engagement with lances. On Saturday evening it is intended to illustrate the power of the bicycle over obstacles, in other words to ride a steeplechase' (*Stockport Advertiser*, 29 Jan. 1869). This tournament appears to have been an earlier version of those reported later, in *Liverpool Mercury*, 24 and 26 April 1869 and *Liverpool Weekly Courier*, 1 May 1869 (see Chapter 1). The very early existence of this Liverpool Velocipede Club suggests a precocious interest in the bicycle in that city. Possibly both the Club and the Tournaments are best understood as promotional endeavours to encourage riding and to sell velocipedes, rather than the social organizing of an already existing enthusiasm. The Liverpool Gymnasium, on Myrtle Street, was founded in 1864 and had a subscription membership, an annual festival, ladies' classes and 2,000 members by 1866. Just as in London, at Spencer's Gymnasium, the velocipede craze built on existing gymnastic foundations (see *Porcupine*, a Liverpool satirical weekly, 1864 – 1869). I am indebted to Nick Clayton for these citations.

[15] Wolverhampton Velocipede Club *Rules*, see Chapter 1, note 51.

[16] *English Mechanic*, 17 Sept. and 8 Oct. 1869.

[17] Quoted in Nick Clayton, 'Little and Often – The Records of the Amateur Bicycle Club', *Proceedings of the 5th International Cycle History Conference.*

[18] Charles Spencer, *Bicycles and Tricycles*, pp.62, 68 and 72-73.

[19] Alfred Howard, *The Bicycle for 1877: A Record of Bicycling for the Past Year.*

[20] *Bicycle Journal*, 5 Jan. 1877.

[21] Ibid. 9 March 1877.

[22] Discussions of professional or 'primitive' (pre-rational) sport in the 1860-70 period include Don Watson, "Popular Athletics on Victorian Tyneside", *International Journal of the History of Sport*, Dec. 1994, pp.487-494 and Chap. 6, "Rational Recreation and the New Athleticism", in Peter Bailey, *Leisure and Class in Victorian England.* Bailey makes a distinction (pp.131-133) here between 'bourgeois' and 'popular' culture, between 'the new model athletic sports of the AAC' and 'the sub rosa world of professional running and walking races', which were 'eccentric and undisciplined'. It is not easily apparent which category the burgeoning professional cycling should be defined as.

[23] Alfred Howard, *The Bicycle for 1874. A Record of Bicycling for the Year.* Howard's section on 'The Past and Present of the Bicycle' contains the following comment: 'Of all the pastimes and athletic exercises with which we are acquainted, none has so rapidly come into public favour, and retained its hold thereon so firmly, as the art of bicycle riding. ... Combining as it does the chief advantages of the various athletic sports with a useful and agreeable method of swift and easy locomotion, it may be safely trusted to hold its own against all rivals. ... Bicycle racing is now fast becoming a national sport, and it far outrivals any other with which we are familiar. ... And especially in these days of luxurious indulgence and ease, when the youth of Great Britain are declared by the intellect of the age to be deteriorating fearfully, does bicycling come to our rescue, and by its fascination, once again induce our young men to restore the physical superiority of which Englishmen have always been so justly proud'.

[24] A similar pattern of professional wagering, with the stakes held by a trusted local figure such as a well-known publican, occurred in early football in the 1840s and 1850s (see John Goulstone, "The Working-Class Origins of Modern Football", *International Journal of the History of Sport*, Vol. 17, #1, March 2000, pp.135-143).

[25] 'Preface', Alfred Howard, *The Bicycle for 1877*, op. cit.

[26] Of these approximately 120 members in 1876, more than 70 were members of Trinity College, including Gerard Cobb (President), Hon. J.W. Plunkett (Vice-President) and Hon. I.G.N. Keith-Falconer. Among the Trinity College members were three titled

aristocrats, two Professors and two Reverends. See 'Cambridge University Bicycle Club, October Term 1876, Rules and Bye-Laws', contained in Add. 7628, boxes of documentation concerning the Cambridge University Bicycle Club in Cambridge University Library collection. *Bell's Life* (10 Nov. 1877) listed 373 members since the foundation of the Club, and 242 current members, an extraordinary growth.

[27] *Bell's Life*, 26 May 1877. Accounts for the building of this track also exist in Cambridge University Lib., Add. 7628.

[28] *The Field*, 20 June 1874

[29] Spencer, op. cit., p.56.

[30] *The Field*, op. cit.

[31] H.M. Abrahams and J.B. Kerr, *Oxford v. Cambridge, A Record of Inter-University Contests from 1827-1930*; Nahum Salamon, op.cit. p.13.

[32] *The Field*, 20 June 1874.

[33] *The Field*, 9 May 1874.

[34] G. Lacy Hillier, "A General Survey of Long-Distance Cycle Riding", *Cyclist Annual and Year Book for 1893.*

[35] See Note 4 for some of the more prominent long road rides listed by Nahum Salamon, *Bicycling, Its Rise and Development*, 1874 and 1876 editions.

[36] See Cambridge University Bicycle Club 'Rules and Bye-laws', as in Note 25.

[37] G. Lacy Hillier, "A Brief and Critical Account of the One Mile Amateur Bicycle Path Record", *Cyclist Christmas Number*, 1891.

[38] The record shows that Keith-Falconer won the Amateur Athletic Club 4-mile bicycle championship in 1876, the Bicycle Union 2-mile championship in 1878 and the Bicycle Union 50-mile championship in 1882 (see Appendices A and C).

[39] Rev. Robert Sinker, *Memorials of the Hon. Ion Keith-Falconer* (1888); James Robson, *Ion Keith-Falconer of Arabia* (Hodder and Stoughton, London, 1923); E.B. Parker, "The Honourable Ion Keith-Falconer", *The Boneshaker #65*, Winter 1971; Nick Clayton, "The Hon. Ion Keith-Falconer and the Cambridge University Bicycle Club", *The Boneshaker #140*, Spring 1996. Keith-Falconer's outstanding academic attainments set him apart from the Cambridge students who indulged in sport and not much else. See J.A. Mangan, *Athleticism in the Victorian and Edwardian Public School*, Chaper 6, 'Oxbridge parents and imperialism', for accounts of Oxbridge memories, 'idle years of cricket, fives,

racquets and billiards, when work weighed lightly on the conscience and the river and games field engrossed many students'.

[40] Sinker, op. cit., p.19.

[41] All quotations from Sinker, op.cit.

[42] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p. 263.

[43] G. Lacy Hillier, "A Brief and Critical Account of the One Mile Amateur Bicycle Path Record", *Cyclist Christmas Number*, 1891.

[44] G. Lacy Hillier and W.G.H.Bramson, *Amateur Cycling* (1893), pp. 45-46.

[45] For further discussion of issues of style and technique, see Note 70.

[46] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.277.

[47] *The Bicycle Journal*, 24 Nov. 1876, an editorial probably written by Alfred Howard.

[48] One of the most publicized attacks occurred 26 August 1876, when the driver of the St Albans coach attacked a cyclist with his whip, while his guard used an iron ball on a rope to drag the cyclist and his machine to the ground. Driver and guard were prosecuted and fined. (Hillier, Badminton *Cycling*, op. cit., p.75.)

[49] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.283. Restrictive measures discussed included a requirement that bicycle riders carry and ring a bell whenever they encountered a horse on the road, a requirement that they dismount when encountering a horse and that they be completely forbidden to ride in certain locations.

[50] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.277.

[51] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.278.

[52] *The Bicycle Journal*, 16 March 1877.

[53] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.278.

[54] Gerard Cobb, letter to *The Field*, 18 Oct. 1878.

[55] *Bicycling Times*, 25 July 1878

[56] Bicycle Union Minutes, 4 April 1878.

[57] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.282.

[58] *Minutes* of the Bicycle Union are housed at Modern Records Centre, University of Warwick (Mss. 328/B/Temp). Later, an 1896 publication (F.T. Bidlake, *Cycling*, pp.109 110) referred to the organization, which had been renamed the National Cyclists' Union In 1883, as 'claiming to be the cycling parliament, or Jockey Club of the wheeling world'. By then, its declared aims, or 'avowed objects', were more broadly summarized

as follows:

1. To ensure a fair and equitable administration of justice as regards the rights of Cyclists on the Public Roads.

2. To watch and urge the action of the Road Authorities, with a view to the more efficient supervision and maintenance of the Roads throughout the United Kingdom.

3. To watch the course of any legislative proposals in Parliament, or elsewhere, affecting the interests of the Cycling Public, and to make such representations on the subject as the occasion may demand.

4. To consider the relation between Cyclists and the Railway Companies, with the view of securing, if possible, some modification of the present tariff for the carriage of Bicycles and Tricycles, and greater security in their conveyance.

5. To examine the question of Amateur and Professional Bicycle and Tricycle Racing in general, and to frame definitions and recommend rules on the subject. To arrange for Annual Race Meetings at which the Amateur and Professional Championships of Bicycling and Tricycling shall be decided.

[59] G Lacy Hillier, Badminton *Cycling* (1889 edition), p.282.

[60] "Modern Amateurism, or, Confusion Worse Confounded", *The Wheel World*, No.6 Vol.1, Oct. 1880.

[61] "The Bicycle Union and the Amateur Question", *The Referee*, 7 June 1880, quoted in *The Wheel World*, July 1880.

[62] *The Times*, 26 April 1880. There is evidence in the C.U.B.C. papers mentioned above that Cobb made efforts to gain wider acceptance in the amateur sporting world of his desire for amateur v. professional races, suggesting an attempt to introduce 'open' competition. In 1880, he attempted to organize the Cambridge University Athletic Club, the Dark Blue Bicycle Club (Oxford), the London Athletic Club and 'the majority of the leading Metropolitan Bicycle Clubs' to oppose the strict amateur/professional segregation supported by the Amateur Athletic Union. A draft resolution in Cobb's handwriting reads: 'We are of the opinion that, Inasmuch as 1) The definition of an Amateur hitherto in force at our Athletic meetings was framed before Bicycling was known as a form of athletic sport, and had therefore no express reference to it, and 2) Experience has proved that such competitions under proper restrictions do really contribute to the advance of bicycling, the fact of having taken part in such competitions

(as sanctioned by the Bicycle Union) ought not to disqualify a person who otherwise satisfies the prevailing definition of an Amateur from entering for any Bicycle Race or other Athletic contest open to Amateurs, and we hereby declare that all such entries will be received by us accordingly'.

[63] *The Bicycle Journal*, 22 June 1877.

[64] Whiting had won the Amateur Athletic Club's 1871 cycling championship after 17 'professionals' had been excluded, and had also won the A.A.A. championships in 1873, 1874 and 1875. Whiting had then gone to France and become a member of a leading French club, Velosport de Paris, and in March 1875 he had competed against 'professional' Camille Thuillet in Wolverhampton, thereby threatening his amateur status in England. The case highlighted the difference between the French and British definitions of professionalism, a disagreement which continued to dog international competition through the 1880s and 1890s. It also highlighted the contradictions and difficulties of legislating social and class differences within sport.

[65] Ibid, 7 Sept. 1877.

[66] In a significant mss. letter (Trinity College, 12 Feb. 1880) on the subject of the 'amateur versus professional' racing, Cobb wrote: 'The Council of the Union were mainly influenced in their opinion by the fact that bicycle racing does not only involve a trial of skill and strength between the competitors – as is the case with most other athletics – but also affords the greatest possible stimulus to Bicycle makers to develop and improve the machine. As the improvement of the bicycle is a matter of real practical importance to the general bicycling public, it was thought desirable to encourage the highest amount of competition possible, and that Amateurs and Professionals should be permitted to contend together in bicycling, as they have done under sanction of long custom in certain other branches of athletic pastime, such as cricket, tennis, etc.' A better statement of one of the central arguments of this dissertation could hardly be found. (Cambridge University Lib., Add. 7628).

[67] *Bicycling News*, 24 Aug. 1877. The holdings concerning the Cambridge University Bicycle Club and Gerard Cobb in Cambridge University Library (Add. 7628) offer the opportunity to explore the subject in greater detail. The documentation includes scrapbooks kept by Cobb, Minutes of the club activities, newspaper cuttings, posters and receipts from the building of the club 'path' (track).

[68] *The Field*, 18 Oct. 1879.

[69] 'Editorial Notes', *Bicycling Times*, 31 Oct. 1878. In defeating Keen, Keith-Falconer challenged current opinion that 'the professional champion was not to be touched by any of those who ride *con amore*'. The contest proved that 'when both men met they were about as nearly matched as possible'. It also proved that 'men's powers cannot be judged by their time performances, but that the only correct judgement can be arrived at by placing them alongside each other under the same circumstances as regards wind, weather and track'.

[70] *The Field*, 25 Oct. 1879. This report contained interesting comment on the contrasting style of Cortis and Keen, and on technique and style of riding at the time. 'As exhibitions of the art of riding, these two matches proved instructive to thousands of riders present, and thus served a useful purpose unthought of by the promoters. Nothing could be in greater contrast than the riding of these two accomplished bicyclists. Cortis, who is tall and of slender frame, never gets his leg straight even on his 60 in. machine, and being much given to leaning forward, his position appears cramped and painful, and by no means elegant. Keen, on the contrary, is a shorter man, with a powerful and well-knit frame, and riding a 56 in. wheel, his leg nearly straightens to the throw; no matter what is required of him he never leans forward, but sits quite erect, a slight swaying of the shoulders being the only indication of the way he concentrates the force of the whole body in an almost direct line upon the treadles. It is this economy of power which enables him to make such sudden bursts of speed, and with his perfect action, he drives his wheel with an accuracy which is universally admired. The prevalent style of riding amongst amateurs upon the path is to lean over till the back is nearly horizontal; this unsightly habit has caused numerous accidents, and the slight advantage obtained in escaping the wind must be all but counterbalanced by the compression of the lungs and consequent interference with breathing. If some riders would take Keen's riding for a pattern, we feel sure they would derive an advantage from it'.

[71] *The Field*, 18 Oct. 1879.

[72] *The Field*, 25 Oct. 1879.

[73] Editorial, 'The Union Policy', *Bicycling Times*, 23 Oct. 1879.

[74] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.281.

[75] G. Lacy Hillier, Badminton *Cycling* (1889 edition), pp280-282).

[76] Keen's life and career is documented in the following: Les Bowerman, "John Keen – The Life of a Cycling Pioneer", *Proceedings of the 4th International Cycling History Conference*, pp.89-98; "Keen's Bicycle", a catalogue from 1874 in the Science Museum Library, London; "An Interview with John Keen" (conducted in Boston), *Bicycling World*, 29 Nov. and 13 Dec. 1879; "Cycling Celebrities – John Keen", *Wheel World*, Feb. 1885 (including documentation of Keen's racing victories from 1869 – 1884); "A Chat with John Keen – Some Interesting Reminiscences", *Bicycling News*, 26 Feb. 1887. Obituaries were published in *Cycling*, 25 Jan. 1902 and *Surrey Comet*, 18 Jan. 1902.

[77] *Sporting Life*, 26 Jan. 1870. I am indebted to Les Bowerman's research for many of these references to John Keen.

[78] It is doubtful that Keen accompanied David Stanton to America in 1876, as is claimed by Michael Wells in "America and the Ordinary: In the Beginning, 1876", *The Wheelmen*, Nov. 1992. Pratt, *The American Bicycler*, 1880 edition, p. 152, does not include Keen among those who visited on that occasion.

[79] Keen's innovations included: enlarging the size of the front wheel, in effect being instrumental in the 'invention' of the high-wheel bicycle; design of the 'head' connecting the front forks to the backbone; the use of roller bearings; the use of a v-shaped rim which secured a hard rubber tyre; the screwing of spokes directly into the hub; the use of a brake on the front wheel; the use of hollow forks; the use of 'rat-trap'-style pedals and toe-clips.

[80] "Trans-Atlantic Bicycling", *Bicycling Times*, 9 Oct. 1879.

[81] *Bicycling News*, 9 Nov. 1877.

[82] *Bicycling World*, op. cit., 29 Nov. and 13 Dec. 1879.

[83] *Wheel World*, op. cit., Feb. 1885.

[84] *Wheeling*, 17 Dec. 1884 and *The Cyclist*, 24 Dec. 1884. The appeal continued: 'Unlike some fortunate people, Keen started at the bottom of the ladder, and consequently found that he had set himself a task calling for capital as well as labour. However, he kept steadily at work, preferring to go along in his own modest way rather than seek the responsibility of increasing his premises. To this reticence on the part of John Keen must be attributed the perfection machines have been brought to. Had he determined on money-making, his love for the work he had on hand would have fled; fortune might

have favoured him, but it is very questionable if the sport would have developed to its present stage of popularity'.

[85] J.T. Lightwood, *The Romance of the Cyclists' Touring Club*, p.40.

[86] G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.307.

[87] S.W. Pope, "Amateurism and American Sports Culture: The Invention of an Athletic Tradition in the United States, 1870-1900", *International Journal of the History of Sport*, Vol. 13, #3, Dec. 1996.

[88] R.E. Phillips, *Things a Cyclist Ought to Know*. The irony of the use of the term 'professional' here should be pointed out. When it was applied to middle-class business men, 'professional' indicated approval, but when used to describe working-class athletes, it became a pejorative! The word could thus be pointed upwards or downwards on the social scale, depending on its context, although in both contexts it meant people who are experienced at what they do and perform their jobs very well!

[89] Women did not ride the high-wheeler, but the growth of tricycling, particularly of tandem tricycles, made it possible for women to join men on the road, and they were courted by the C.T.C. Women were urged to wear the club uniform, 'made of an extremely neat and durable grey Cloth, which is woven in various thicknesses, and is thus suitable for Ladies' as well as Gentlemen's wear' (advertisement in Phillips, op. cit.). In an editorial entitled 'Rationalism', the Bicycle Touring Club's official *Monthly Gazette* explained in 1882 that the new grey cloth had been chosen to replace the previous 'incongruous and unserviceable green' and came out solidly in favour of 'rational' dress in allowing the participation of 'the ladies' in cycling activities: 'The solution of the difficulty in providing for our sisters, our wives, and our lady friends a uniform which shall admit of freedom of movement, and yet be indubitably free from ostentation, as well as innocent of the charge of being outré, lies, we are convinced, in the scheme advocated by the Rational Dress Society; a body whose raison d'être is essentially based upon rationalism, and with whose objects our readers are already familiar'. It was 'rationalism', also, which had helped to overcome the prejudices of those 'who looked with horror upon the spectacle - now fortunately familiar in all parts of the land - of a lady on wheels enjoying a healthful recreation, who rambles far off into the country to visit scores of lovely nooks and glades, and pore over many a page in Nature's exhaustless volume' ('Rationalism', Editorial in *Bicycle Touring Club Monthly*

Gazette and Official Record, Oct. 1882). Lacy Hillier commented that 'the ladies' costume has proved very successful, and this is an especial boon to lady novices, who in the past were often sadly at a loss to know what to wear' (G. Lacy Hillier, Badminton *Cycling* (1889 edition), p.311). Cycling's advocacy and acceptance of 'rational' dress for women who wished to pursue athletic activity was extremely progressive, but a detailed exploration of issues of women's dress and women's emancipation within the sport of cycling is outside the scope of this thesis.

The subject of uniform and appearance while cycling in public continued to be discussed within the C.T.C. In the *C.T.C. Monthly Gazette* for May 1885, one member proposed that uniforms should come in 'cloths of equal excellence but different patterns...In our large society there are all sorts and conditions of men and women; class distinctions exist and no amount of club feeling will annihilate them...I am a professional man, riding every day in a country town where everybody rides, from bricklayers to baronets'. In other words, he appears to be suggesting, the style of the uniform should correspond with the class of the wearer, though the cloth might be the same. The following month (June 1885), a witty response was published: 'It is really dreadful to think that baronets and bricklayers, when riding, cannot be distinguished from each other. Is it that the appearance and manners of the baronets resemble those of the ordinary bricklayer, or vice versa? The difficulty might be overcome, possibly, by each rider wearing a badge labelled "I am a bricklayer", or "This is a Baronet". Member 2608 might devise one for himself'.

[90] *Bicycle Journal*, 18 Aug. 1876

[91] *Daily News*, 23 Aug. 1876; quoted Hillier, p.74

[92] *Bicycle Journal*, 21 Sept. 1877

[93] *Bicycle Journal*, 8 Feb. 1878

[94] An obituary of Gerard Francis Cobb published in *The Cambridge Review*, 28 April 1904, showed the range of interests and accomplishments of this prototypical 'muscular Christian', a Fellow of Trinity College. Cobb was born into an ecclesiastical family, studied theology and classics and was a musician, organist and composer. His involvement with cycling was one of his many interests. 'In his wide philanthropy and his ceaseless and undeclared generosity', said the obituary, 'Mr. Cobb was a Christian of the highest type'. (Thanks to John Green, Cambridge, for this citation).

[95] Letter *to Daily News*, 30 July 1878, also printed in *Bicycling Times*, 1 Aug. 1878

[96] Letter to *Daily News*, 3 August 1878, also printed in *Bicycling Times*, 8 Aug. 1878

[97] *The Times*, 5 Sept. 1878.

[98] See Stephen Hardy, "Entrepreneurs, Organizations and the Sports Marketplace", *Journal of Sport History* #13, 1986. 'It is important to remember that the social history of sport does not constitute the totality of sport history... A number of important topics demand attention from perspectives that are closer to business and economic history. These topics require a shift in attention from the significance of consumption to the structures of production, from the broad sweep of social forces to the minute elements of decision-making. In general, they focus on the ways in which entrepreneurs have developed a special, perhaps singular, industry that has produced a particular part of the past'. These comments certainly apply to the sport and industry of cycling.

Chapter Four

The diffusion of bicycle racing into the United States in the late 1870s

1. Outline: American cycling inspired by the British sport in the late 1870s

If American enthusiasm for the velocipede acted as a stimulus to British enthusiasm in the late-1860s, as has already been discussed in Chapter 2, then in the late 1870s influences flowed in the opposite direction. The same conditions which led to the expansion of the British sport – technological innovation and the popularity of sport with young, urban, middle-class men, including a strong college-based component – existed in the United States, and from 1876 onwards there was a surge of interest in the high-wheel bicycle.

Culturally, New England was strongly Anglophone, sharing language and similar sporting interests with the British; and indeed, Anglo-Americans played a prominent role in the foundation of the American sport. One report spoke of 'such a fraternity as that of the wheelmen of America and England', which 'will do noble work in cementing the ties already existing in their common blood and friendship'.[1]

In reporting a speech made by English Member of Parliament, Robert Lowe, to a racing event promoted in 1878 by the West Kent Cycling Club at the Crystal Palace, London (see Chapter 2, p.117), the *American Bicycling Journal* commented that sixteen journalists had been present at these races and sent reports to their newspapers, and concluded that:

> This will show some of the still skeptical Bostonians the importance of the bicycling interest in England, and also the public interest in the new form of locomotion. We confidently expect the same interest to be exhibited in America, and that having the benefit arising from all the experiments and experience of the English and French pioneers, the progress of the movement in this country will be even more rapid than it has been with our English cousins.[2]

The confident predictions of the first American cycling newspaper were to be fulfilled. But there appears to have been a conviction in some quarters that Americans in general were backward in physical exercise compared to the British. An article in the *Boston Advertiser* commented: 'With the hindrances which our climate and modes of life present to a rounded physical development, it is no wonder that the attainment of it is less common than it should be. Unlike the Englishman, who has in the atmosphere and traditional usages of his country a continual inducement to life in the open air, the

American has to create under difficulties the needed disposition for such experience...The truth is, there is much to be done in order to educate American men and women up to that condition of physical health and vigor in which athletic exercises are undertaken with pleasure, rather than a sense of duty'. The British predisposition towards organized athletic activity was more probably more accurately located in educational and social structures than in 'climate and modes of life'[3]

Both professional and amateur sports were already firmly established in the United States, providing a fertile ground for the introduction of the new sport of bicycling, which tended to occupy a sporting context already established within running, walking and rowing competitions. International exchanges between British and American professional runners and walkers were frequently promoted in the period from 1840 to 1870.[4] The New York Athletic Club was formed in 1866, modelled on the London Athletic Club, and held its first official meet in 1868. English-style amateurism was upheld within the American collegiate and athletic club scenes. In 1872, William B. Curtis, co-founder of the New York Athletic Club, and John Watson, of the Schuylkill Navy Athletic Club of Philadelphia, published pamphlets arguing for the segregation of amateur athletes from those seeking cash prizes, following a dispute about participation in rowing competitions.

In 1878, William Curtis became the influential new editor of *Spirit of the Times*, 'The American Gentleman's Magazine', and in that capacity no longer covered professional pedestrianism. In 1879, the National Association of Amateur Athletes of America was founded, leading in 1888 to the formation of the Amateur Athletic Union. S.W. Pope writes that:

> Nineteenth century amateurism was an 'invented tradition'. As the rallying cry of late nineteenth century institutionalized sport, amateurism represented an attempt to draw class lines against the masses and to develop a new bourgeois leisure lifestyle as a badge of middle and upper-class identity. The amateur ethos was, moreover, an ideological reaction to a well-established professional sporting tradition in the United States...Between the 1870s and early 1890s amateurists honed their message about the meanings of amateurism in the media, collegiate circles and public debate, and developed organizations like the Amateur Athletic union to legitimize their message within collegiate circles and wider society'.[5]

Developments within cycling were consistent with these wider movements in American sport, in fact providing excellent illustrations of them. Cycling was introduced into the United States in the late-1860s as a primarily professional sport, but by the time of its second surge (the late-1870s) it was embraced both professionally and in the rapidly expanding amateur sport world.

Amateur cycling club formation proceeded apace in the United States from 1877 on, looking to the example of the British clubs which already existed. English promoter Harry Etherington's 1879 tour was significant in promoting professional racing in America. In an attempt to bridge the Atlantic, Etherington sought to popularize the high-wheel sport in America, to make money himself and to help to create a strong base for the British bicycle industry. Etherington, an editor, journalist and promoter of a series of indoor, long-distance, track races in London which had generated a lot of publicity in 1878 and 1879, persuaded four of the top European professionals to go with him to the United States to take part in a series of 'Six Day' and demonstration races. His promotional visit was an attempt to market the already well-developed British sport commercially as a spectator enterprise in America, and provides a colourful vignette of the state of American cycling in 1879/80 which is examined in detail here.[6]

Charles Pratt, Frank L. Weston and others in the Boston area, key players in the promotion of amateur bicycling in the United States, were active in Boston from 1877 on. 'In the use of the bicycle, Boston has led the rest of the country thus far. Four gentlemen – a journalist, an architect, a lawyer and a merchant – were the first to introduce the bicycle', reported the *Boston Globe*, suggesting that there was already 'bicycle fever in this country'.[7]

A series of well-defined events marked the beginnings of the amateur sport there. English bicycles were first imported into the United States by the firm of Cunningham, Heath and Co. in 1877 (see Fig. 4. 1). They had first attracted attention when they were exhibited at the Centennial Exhibition in Philadelphia from May to November of 1876. A late 1877 report noted the dual potential of the bicycle as a 'means of locomotion for useful work as well as exhilarating sport':

> The surprising machines displayed by English makers... attracted much admiring attention from many visitors, and a considerable number of the curious vehicles have since been sold in various directions. They have given so much satisfaction that the call for them has increased of late, and they are now for sale in all our principal cities. ... There is a strong probability that the bicycle, in its vastly improved construction, will come into extensive use in our country; not, as in former years, to run an ephemeral career as a novel toy, but to become a staple addition to our means of locomotion for useful work as well as exhilarating sport. There are many among our readers who will take to them as a fish does to water. Among the same... may also be found the champion rider, and the American mechanic, to still further improve the machine.[8]

The American Bicycling Journal was founded in December 1877 by Frank W. Weston, a partner in Cunningham, Heath and Co., and an Editorial in its first issue described the bicycle as 'perfect in its mechanical principles, the acme of graceful strength combined with delicate construction, affording to its rider a maximum of speed in return for a minimum of effort and exertion'. It was 'a means both practical and enjoyable of rapid locomotion'. Lovers of the bicycle could 'benefit themselves and posterity morally, mentally, and physically, by sparing a portion of their time for healthful exercise in the open air, expanding their chests and their hearts'.[9]

The Boston Bicycle Club, the first American cycling club, was founded in February 1878, and others quickly followed. News of Etherington's London promotions, and other bicycle racing activity, reached the United States by means of reports in the *American Bicycling Journal*, and the expanding American cycling scene appears to have attracted sport entrepreneurs. Thus what was at stake, as the commercial context to Etherington's visit, was competition for a share of the large American market. Colonel Pope of the Pope Manufacturing Company was also attracted to the machines he had seen at the Philadelphia Exhibition. The momentary co-operation between Pope and the British was soon pushed aside by Pope's aggressive manufacturing and marketing and his assertive legal manoevering to make it as difficult as possible for the British industry to gain a competitive foothold in the United States. Pope appears not to have been interested in using professional, indoor-type racing as an advertising medium to sell bicycles, and to have preferred club channels for his publicity.

Writing in 1890, E.P. Prial, the editor of *The Wheel and Cycling Trade Review*, noted:

> In a history of the sport it is but just to say that of the early makers and importers the Pope Company had the best conception of the business, and apparently took a broader view of the future of the sport than any of their contemporaries. They sank capital in manufacture and experiment, constantly improved their wheels, and nursed the sport. They helped clubs, and established a magazine to promulgate the doctrine of the wheel, on which they spent $70,000 in four years.[10]

Outline of Chapter 4

This chapter explores the emerging American sport in the late 1870s, its debt to its British model and suggests ways in which it became distinctively American. The role played by Etherington's professional tour in raising awareness of competitive cycling is discussed, as is the subsequent foundation of the amateur League of American Wheelmen. It is in a sense a geographical case-study of aspects of the mutual relationship which linked Britain and the United States in the expansion of a major late 19th century sport and an important manufacturing industry.[11] Once again, the symbiotic relationship between economic and manufacturing activity and cultural manifestations of sport such as club formation and actual racing events is significant, and especially well understood by a major figure like manufacturer Colonel Albert Pope.

Section 2 (The foundations of American cycling) charts the revival of cycling in the United States from 1877 onwards, based in Boston. It documents the importation of both equipment and organizational and institutional aspects of the sport from England, including the first American club, the Boston Bicycle Club. It also notes the first emergence of an American cycling press, and the spread of cycling clubs outside New England. Important figures in American cycling, Charles Pratt, Frank Weston and Col. Albert Pope are introduced.

Section 3 (Harry Etherington: sport entrepreneur and cycling promoter) introduces Harry Etherington as an example of an innovative sport entrepreneur in England in the late 1870s. Etherington, promoter, journalist and publisher, specialized in organizing ambitious, professional, long-distance, indoor bicycle races.

Section 4 (Etherington's 'Anglo-French' tour of America and its repercussions) describes the undeveloped state of the sport in the United States in 1879. It explores

Etherington's visit to the United States that year with a team of noted European professional riders. The tour was intended not only to profit from introducing bicycle racing – a brand-new sport - to the American public, but also to encourage the export of English bicycle technology. The profitable American industry was, however, also being energetically contested by the Pope Manufacturing Company.

Section 5 (The foundation of the League of American Wheelmen) documents the foundaton of the first governing body of American cycling which was based upon its British model, the Bicycle Union, and shared the British body's concepts of a sport based in honourable amateurism and a code of behaviour rooted in middle-class respectability. The League oversaw both competitive and recreational aspects of cycling. Club growth was considerable, and combined 'Meets' of many clubs were held in Springfield. Mass., based on similar events organized in England.

2. The foundations of American cycling

American bicycle racing was much less advanced than the British sport in the first half of the 1870s. The American velocipede 'craze' of 1868-69, according to an account from December 1877, 'died out in this country as rapidly as it arose, until their use seemed to be quite given over to an exceptional youngster here and there on his two wheels'.[12] Such indoor racing as occurred appears to have been infrequent, and probably imported. A New York photograph from the mid-1870s appears to advertise the services of a French performing group, the Martel family (see Fig. 4. 2). In 1876, English professional 'star' David Stanton visited the United States. Stanton, who rode a 'Humber' bicycle, arrived not just to race but also to investigate the potential of the bicycle in the American market. On 18 April 1876, the *New York Times* reported an 'Exciting Bicycle Match' at the American Institute Building on 63rd Street between Mr. McClellan, 'the American champion', and Mr. Stanton, 'the English long-distance champion'. On 11 May, Stanton was still in New York, where he raced William Butler of Kentucky over 50 miles, when 'the spectators, notwithstanding the inclement weather, were numerous'.[13]

There is a further glimpse of indoor professional sport in November 1876, when William Du Noille raced the same William McClellan 'for the championship of America'. Du Noille, 'who rode a machine with a wheel of 55" diameter, appeared on the track attired in white breeches, with red and white stockings, flesh-colored flannel shirt and a green cap. His opponent rode a machine with a wheel of 52 inches diameter, and wore flesh-colored tights, a loose-fitting white frilled shirt and a white cap'.[14] An indoor 'championship'-level professional sport had thus emerged by the mid-1870s. In January 1878, English immigrant Charles Booth was called 'the champion velocipede rider of the world... prepared to defend his title against all comers' by the *Boston Herald*. Booth was a typical show-business professional cyclist who had raced in England and France before settling in America.[15]

What Charles Pratt called 'the revival of velocipeding, the advent of the modern bicycle' in the United States occurred in the second half of 1877, when a group of enthusiasts who were to be of central significance in the business and sport of cycling in America began to ride in and around Boston, a solidly middle-class, business-oriented group which formed the nucleus for the foundation of the League of American Wheelmen in

1880.[16] *The American Bicycling Journal*, the first American periodical devoted exclusively to cycling, was first published by Frank Weston on 22 December 1877 in Boston and contains comprehensive documentation of the beginnings of cycling in America.

The high level of awareness of the English sport was communicated through this publication and the many English periodicals which reached America. Cunningham, Heath and Co., of Boston, began importing in November 1877 and from the first issue of the *American Bicycling Journal* ran advertisements for 'Imported English Bicycles', which were in hot demand: 'Intending purchasers are directed to send in their orders at once, the demand in England being so much ahead of supply that it has been found impossible to get orders for first-class machines filled in less than from two to four weeks. By telegraphing per Atlantic Cable, a fortnight can be saved, and C.H. and Co are now preparing a special code with the manufacturers for that purpose'. The company also organized a riding school.[17]

The Boston Bicycle Club, which became the model for dozens of American amateur clubs, was formally constituted on 11 February 1878 with 14 members. Its 'code of rules' consisted of seventeen 'Articles', one of which, 'Article 12 - Bicycle Meetings, and Club Riding Upon the Roads', consisted of fifteen sections. The purpose of the club was stated in these 'Articles' as being:

> 1) The mutual enjoyment of its members in the pursuit of Bicycling as a pastime; to which end club-meets, tours, excursions, races, etc. shall be arranged and carried out.
> 2) The promotion (by force of example) of the use of the Bicycle as a practicable and enjoyable aid to locomotion, by the general public.

'Clubs runs, tours and excursions' were governed by an elaborate set of 'Road Rules... the basis of which can be found in the justly celebrated Road Rules adopted by the Cambridge University Bicycle Club of England'. Its English parentage is thus spelled out in specific terms. A code of conduct was recommended for dealing with horses and other road-users, for example: 'A horse should never be passed on both sides at once', and 'A led horse should always be passed on the same side as the man who is leading it'.[18] The Boston B.C. (frequently known as the 'Boston Bi. C'., to distinguish it from the Boston Baseball Club) had its own club-room (in the same building as Cunningham,

Heath and Co, and the *American Bicycling Journal*) and consisted mostly of middle-class urban professionals, having among its founder members in 1878 'six merchants, four salesmen, four students, three lawyers, three clerks, two officers of corporations, one architect, one litterateur and one physician'. The oldest member was 'about fifty years of age', the youngest 'about seventeen', while the average age was 'about thirty'. By 1880, it had 44 members and by 1882 more than 100.[19]

The solidly pro-amateur orientation of the club was debated and emphasized from the start, and was 'settled' in May 1879, when there was 'a free expression of opinion from nearly all the members', and 'the president expressed what appeared to be the unanimous view of those present, that the object of the sought-for definition was to eliminate the money-making element from amateur athletics'. This 'amateur rule', according to Pratt, 'was taken up widely by other clubs, and has substantially prevailed ever since'. Forty clubs, organized on essentially identical lines, had come into existence by the end of 1879.[20]

The above statement of purpose asserted a utilitarian as well as a sporting role for the club, but political activity was also implied. Charles Pratt wrote that 'the Boston Bicycle Club has been often foremost, and its members have been often at the front, in all the various movements of defence and developments which affect the complex interests of bicycling in this country'. The members of the club were 'a band of active pioneers in almost all that relates to the multifarious interests of wheelmen' who 'began to make the conversion of the world one of its aims'. Idealism was, thus, not lacking. Its prime stated object was 'the pursuit of Bicycling as a manly and healthful pastime'; but club life, social life, was also seen to be of major importance:

> In the revival of bicycling it was to be restored to a habitation, a name, a realm. There were fewer charms in solitude. Unity was strength, and concert of action was necessary to conquest. Moreover, there was then the ever-present conflict between the club spirit and the non-club spirit; and the mission of the Boston Bi. Club was to promote and extend the former.....Club-life, in our modern society, is, apparently, a necessary element. It is sure to be found by the majority somewhere.

Clubs were seen as 'a practical example of the old adage that 'Union is Strength''.[21] But Charles Pratt, a precise and articulate historian of these early days, estimated that one year after the founding of the Boston Bicycle Club in February 1878, there were still

only 242 'bicyclers' in the United States (of whom about 40 were members of the Boston B.C.), a small club coterie limited geographically to Boston and the New England states, and racing was limited to a few inter-club events, or a single bicycle race included in an athletic club programme.[22]

The club spirit and pride in the new sport was manifested in club runs, the first of which was held on 9 March 1878. As in England, club runs were a prominent demonstration of club activity and attracted the attention of the public. Pratt remembered 'the novelty and the mystery of those early manifestations of collective bicycling':

> The meets were usually on the wide macadam before Trinity Church and the Art Museum, where the open triangular 'square'... afforded a small circuit for formation and fine road-surface for a fair start. The riders, of almost every age and stature, in motley costumes, and on mounts as various in style and construction, wheeled up there, dismounted and oiled up - the oiling process was then a most prominent and important part of the programme.

Hundreds, sometimes thousands, of spectators gathered on these Saturday afternoons to watch the start of the runs, until 'the sidewalks were almost impassable, the streets were impeded, and carriages waited'.[23] On the road, there was emphasis on riding in pairs, with an almost military precision; orders to start and stop were sounded with a bugle. Members were highly aware of the impression they made on the public. F.W. Weston reported in the minutes of a club meeting that his friends had reported that the club 'presented a most interesting and gratifying spectacle'. Even so, in retrospect, they were then 'raw recruits', and much less experienced than 'the well-disciplined clubs of today as they appear on any stated occasions'.[24]

A club uniform was considered desirable because it expressed group solidarity and respectability, and the appropriate cut and colour was vigorously debated. 'Having bought your Bicycle, your next requirement will be an Appropriate and Becoming Costume to Wear When Riding It', announced an advertisement in early 1878, 'All the latest patterns and styles of bicycling uniforms can be obtained at Oak Hall'.[25] The Boston B. C. uniform originally chosen was not successful ('the club was costumed like tramps for more than a year'), and was changed first to 'a seal-brown corduroy jacket and breeches, and helmet cap, with seal-brown stockings', and then in December 1880 to a dark green colour, 'which has become so well known, admired and copied'.[26] Well-organized behaviour and formation riding was recommended when riders were in public,

or taking part in formal parades, and as the 'Rules and Regulations' of the Boston Bicycle Club made clear, racing was discouraged on club runs: 'The object of Club excursions is not to ride against time, still less to encourage any competition between individual members'.[27]

Subsequently, the growth of cycling in the United States was rapid and can be charted by the continued formation of clubs, which indicated a nucleus of purposeful enthusiasts, although of course not every rider joined a club.[28] According to C.E. Hawley, writing in the first issue of *The Wheelman* in 1882, the cycling club had a social and moral agenda, as well as its more obvious sporting intentions; 'it becomes a centre for social meetings, where many, otherwise friendless, find society and a refuge from ennui and loneliness, and from temptation to seek objectionable distractions'. Clubs 'exercise restraint upon the individual in many ways, teaching him self-control and submission to discipline. ... The effects of a vigorous mass are always stimulating to the individual'.[29]

The *American Bicycling Journal* listed 17 clubs in August 1879 and 23 by October.[30] By March 1880, according to Pratt, there were about 50 clubs nationwide.[31] *Bicycling World*, in December 1880, reported 100 clubs, with 'an aggregate membership of about 2,000...probably near one third of the active wheelmen owning wheels on this side of the Atlantic'. The clubs were composed of 'gentlemen in the good American sense of the word...every profession and business and trade is represented in their ranks'.[32] *The Cyclist and Wheel World Annual for 1882* (a London publication) listed 101 American clubs (certainly an under-estimate by then), including the mid-western cities of Cincinnati, Cleveland, Grand Rapids, Louisville, Milwaukee, Minneapolis, Springfield (Ohio), St. Louis and Toledo, and Oakland and San Francisco in California. By way of comparison, British clubs listed in the same source in 1882 numbered 187 in the London area alone and 339 outside.[33] *Bicycling World* for January 1883 listed a total of 207 clubs in the United States and Canada, with 52 in Massachusetts, 27 in New York, 19 in Ohio and 16 in Pennsylvania.[34] Clearly this was a period of rapid expansion in the social popularity of the sport of cycling.

College clubs were also established, at Columbia University, New York (founded November 1879), Harvard (April 1879) and Princeton (October 1879). 'The American

colleges... are following in the footsteps of Oxford and Cambridge universities in boating and athletic sports', reported the *American Bicycling Journal*, 'It is suggested that the colleges should now introduce bicycle riding, ... bicycle contests for the championship would create just as much interest as the recent foot-ball match between Princeton and Yale'.[35]

At Cambridge, Massachusetts, in January 1879, the 'annual field sports of the Harvard Athletic Association' was held, but the track, 'though in capital condition for other sports, was much too soft for bicycle racing... another proof of the necessity which exists for a good cinder path, to enable us to exhibit any such record of speed as is found on the other side of the water. ... It is to be hoped that Harvard will organize its bicycle club without unnecessary delay'.[36] The club was formed in April, 1879, when 'a number of men assembled in Holden Chapel, Harvard College, for the purpose of forming an association of all members of the university interested in bicycling. Theretofore, though many students rode, they had done so singly, without feeling any stronger bond of union than that by which all riders on the steely steed are drawn together'.[37] In October, 1879, 'an athletic exhibition, under the auspices of the Brown University Athletic Association and the Providence Bicycle club took place at the Park Garden', where 'there was a good attendance of collegians'. Harry Etherington, and two of his professional companions, Terront and Stanton, took part in demonstration races.[38]

By the end of 1880, the Harvard club had more than 90 members, clubs had been formed at Amherst, the University of Michigan, the Massachusetts Agricultural College and the Pennsylvania Military Academy, while at the University of Pennsylvania, Dartmouth, Williams, Brown University, the University of Virginia, Rochester University and 'several other colleges, there are already devoted wheelmen, composing part of the active membership of other clubs'. Charles Pratt, who noted this popularity of college cycling as editor of *Bicycling World*, wrote that 'there can be no question... that the bicycle is best adapted... for recreative exercise by students... As a branch of college athletics, it is gentlemanly and elegant, and one that excites great interest. The university races in England, held year after year with increasing success, afford good examples for illustration'.[39]

Many spectators first encountered the sport when bicycle races were introduced into the athletic programmes of state Agricultural Fairs. In 1878, races were held in Framingham, Bridgewater, Concord and Taunton, Massachusetts and Portland, Maine and had 'practically become an established institution... the novel spectacle of bicycle racing proved a great attraction to the rural population, who thronged the grounds and manifested the utmost enthusiasm'. The tracks, however, were 'heavy and unsuitable'.[40] In early January 1879, a 2-mile bicycle race was included in the programme of the New York Athletic Club's winter meeting, but the track was 'not at all in good condition for the bicycle', again demonstrating the need for 'a proper cinder path laid for the purpose'.[41]

The bad condition of public roads, especially in winter weather, offered an impediment to competitive bicycling. Boston roads were as good as London suburban roads in good weather, sometimes better, but in winter 'it is only semi-occasionally that a run is enjoyable or even practicable'.[42] Hence the need for cinder tracks if serious competition were to be undertaken before spectators. The Boston Bicycle Club overcame the problem of poor road and track surfaces by laying out a measured half-mile on the 'hard, smooth' Boston city streets for July 4th celebrations, and held four races which were 'the first "official" acknowledgement of the existence and importance of the Bicycle and its riders, and of the claims of Bicycle racing to a position among other national and common sports and pastimes'.[43]

The summer of 1879 appears to have been the first season in which bicycle racing was widely included in athletic programmes in the United States, or promoted in dedicated events by bicycle clubs, and the first in which a formal 'championship' was held. Thus, at 'Bicycle Races' held on Huntington Avenue, Boston on 4th July 1879 (with Albert A. Pope as one of the Judges), a list of 'Rules and Regulations' included a prominent definition of professionalism.[44] (see Fig. 4. 3). And at a meeting of the National Association of Amateur Athletes at the grounds of the New York Athletic Club, four cyclists contested the first official amateur 2-mile bicycle championship of America, with L. H. Johnson of the Essex Bicycle Club (Newark, New Jersey) winning the 'proud distinction'.[45]

The foundation of so many clubs in such a short time shows an exceptional initial spurt of energy in the bicycling movement in the United States, particularly strong in urban and suburban areas, with an emphasis on organized recreational group riding and competition. For city dwellers, much of the appeal of bicycling lay in the rediscovery of the outdoors, and the easy access to places previously inaccessible. The organizing and institutionalization of the sport and pastime in New England, and from there more widely diffused into the country, based on the already established British model, has about it a quasi-colonial feel, of habits and customs transplanted from across the Atlantic. Indeed, there was frequent discussion in the American cycling press of its British origins. American cyclists, including businessman Colonel Pope, himself a club member, visited England to inspect the Coventry bicycle factories and to tour. *The American Bicycling Journal* frequently reprinted articles taken from the British cycling press, adding to the impression of imitation of a sport already flourishing elsewhere. Of the Boston Bicycle Club, Charles Pratt wrote that 'when it started nearly everything was English, except its membership, and part of that was; and its traditions and proclivities are still, as sometimes remarked, decidely British'.[46] For one writer, the bicycle united America and England in a brotherhood of physical and moral superiority:

> The bicyclers of England and America are a superior class of men, as is evident from the fact of their being drawn to an exercise which taxes their vigor and their manhood. ... The wheel tends to keep sound both body and mind, and makes men energetic and often daring. ... Its benefits are great to every man who rides, and thousands owe to it restored health and prolonged life.[47]

Amid this expansive amateurism, speculative professional racing continued. In May 1879, a 'bicycle match' of 500 miles, an indoor endurance test of the type much in vogue at that moment in professional pedestrianism and bicycling on both sides of the Atlantic, was promoted at the American Institute Fair in New York City. It was won by William De Noielle, with his son Charles De Noielle close behind. *The New York Times* published a report of alleged chicanery, typical of disreputable professional sporting events, the kind of low-class show business that amateur organizations sought to purge from sport: 'There was some complaint among the riders that they did not receive fair play...The judges and scorers were unknown persons of no particular responsibility, who seemed all to be friends of the De Noielles'. One competitor William Rutland was listed as 'the champion of England', and another, Daniel Belard, as 'champion of France',

although both were unknown in Europe. Although this questionable race was 'very meagrely patronized', still the newspaper thought 'it was one of the most pleasing exhibitions of endurance ever given in this City. Nothing could be more graceful than the easy, rapid motion of the bicycles, as they rolled almost noiselessly over the smooth floor of the Rink'. The spectator response seemed less enthusiastic. Near the end of the race, there were only about 500 spectators in the building, while the competitors 'seemed pretty well used up'.[48]

This particular race may have been disreputable but it brought attention to bicycling. The day after the race, the *New York Times* published an editorial entitled 'Personal Rapid Transit', affirming that the race at the American Institute 'has not only furnished a pleasing variation on the monotony of walking matches, but has called attention, in this City, to the possibilities of the bicycle':

> Writers talk of the age of steam, the age of the telegraph, the mail-coach age, but no philosopher has yet been prescient enough to describe the era of the bicycle. Certain it is, nevertheless, that this instrument is the only contribution of importance that the inventive genius of all the centuries has made to what may be styled the problem of personal locomotion. ... In the momentous matter of a more rapid personal motor than his unaided legs for the individual man, a motor wholly under his own control, thus far the only praiseworthy advance has been achieved by the bicycle. ... It is not, however, until we note the feats that have been performed on this machine that we feel it to be a power of the future - an element in the suburban problem of rapid transit. The speed achieved by the first four of the riders in the American Institute is most suggestive.

The *New York Times* article went on to refer to 'the far more startling performances which have been recorded for short distances - the distances that would represent ordinary daily use of the bicycle', and noted 'a wonderful race held in England only a short time since' in which the winner had covered 1060 miles in six days, in fact one of Harry Etherington's promotions:

> In England bicyclism is as much a mania as pedestrianism has lately been here. The clubs are numbered by the hundreds, and the 'horsemen' by tens of thousands; while, as to the steeds, it is alleged that 60,000 bicycles were made and sold in England last year. In America there has been no such bicyclical furor as yet; but at some points, and queerly enough at the geographical extremes of Boston and San Francisco, bicyclism has strongholds. New York has been, to a remarkable degree, free from the fever, but it would not be difficult to predict that the late contest at the American Institute will give it a start.[49]

It was indeed 'queer', as the *New York Times* commented, that the bicycle had quickly become so popular in San Francisco, at the geographical extremity of the country, a week-long railway journey across the United States. It would have been more logical for enthusiasm in other East Coast cities to have been an earlier phenomenon. But, nevertheless, the San Francisco Bicycle Club, founded Dec 1878, was the third cycling club founded in the United States, following the Boston (February 1878) and the Suffolk, also in Boston (April 1878).[50]

San Francisco had seen an energetic velocipede 'craze' in 1869, the *Daily Morning Chronicle* reporting in May 1869 that 'the velocipede is just at present quite the rage in this community'.[51] Possibly it was the strong British emigré community there which encouraged and stimulated bicycling, as well as the 'mild climate, with its snowless winters and rainless summers', which 'excites the envy of bicyclists of a more severe climate'.[52] The *American Bicycling Journal* reported in mid-1879 that 'the first bicycle race on the Pacific Coast took place on the 22nd of February last, under the auspices of the Occident Cricket Club, and formed one of the most interesting of a long series of Athletic competitions, in which the Caledonian, the Olympic and the Oakland Athletic Clubs took part...A large concourse of spectators, to most of whom the English Bicycle was a novelty, witnessed the race and expressed the most unbounded enthusiasm at the result. More bicycle races will doubtless follow'.[53] The 1-mile bicycle race was mixed with running, high jump, long jump, hammer-throwing, hurdling and base-ball throwing, and R. Searle won some 'bronze dogs' for winning it. 'The arrangements of the Club were perfect in every particular, reflecting great credit on the Secretary and other officers of the Club'.[54]

The first need for cycling enthusiasts was equipment and one San Francisco cyclist described in a letter to *Bicycling World* in May 1880 how bicycles arrived on the West Coast. One was 'imported direct from Paris in August, 1876, by Mr. R. de Clairmont, and in June, 1878, he imported a Coventry Machinist's roadster. ... Mr. G.L. Cunningham received a Duplex Excelsior from Cunningham and Co., of Boston'. Others did the same, and 'by December we found that we were sufficiently numerous to organize a club, which was done during that month', there being ten or eleven charter members. The writer went on to say that 'it has taken a year and a half to build up any

degree of confidence in the machine. The present year promises to show great accessions to our ranks, and much more interest in the sport than during the previous time'. The club made an effort to have 'the obnoxious ordinance in Oakland amended', which had been introduced to control the excesses of the velocipede fever of 1869, 'as the streets and roads in and about that city are by far the best riding we have', but despite the milder climate the Californian roads still presented as much of a challenge as those in the East, for:

> during the winter the country roads are as deep in mud as a western prairie, and the long, dry summers reduce such roads as have much traffic to a condition of dust better imagined than described...in the fall, after the first rains have laid the dust, and in the spring after the heavy rains have ceased, the sport may be enjoyed in its best form'.[55]

In November 1879, hardly two weeks after the first race of Etherington's tour in Boston, a professional 'three-day's bicycle contest' was promoted at the Mechanic's Pavilion, San Francisco. However, it was not until the end of 1880 that inter-club amateur races took place in San Francisco between the San Francisco and Oakland Bicycle Clubs, when 'the wheelmen and their friends gathered in large numbers', and the riders were 'now getting somewhere near the point of fast riding'. On a Sunday in November 1880, professional indoor racing was again organized at the Mechanics' Pavilion, 'on a track eight feet wide and seven laps to the mile'. Between four and five hundred people were present, but Sunday was not 'the proper day for public sporting, and gentlemen ought not to promote such infractions of good taste'.[56]

Thus, by late 1879, the time of the Etherington tour, although commerce between British manufacturers and Boston importers had already been established for two years, American cycling was still in its first, speculative surge of popularity. Etherington aimed to expand the 'box-office' profile of the sport and create a popular, profit-making, professional spectator sport in Boston and Chicago, and to diffuse it more widely. The time was ripe for such a business endeavour, he calculated.

3. Harry Etherington: bicycling entrepreneur and promoter

'To give even a brief outline of Mr. Etherington's career', said a contemporary account, 'would be to write the history of the sport of cycling'. Harry Etherington was enmeshed in the sport and industry, as promoter, journalist and publisher. Above all, he was an entrepreneur, selling the quickly expanding sport of cycling to the general public. Etherington was born in Sittingbourne, Kent in 1855, and was only twenty-four at the time of his 1879 trip to the United States. He had begun to ride the velocipede in 1868 and taken up the bicycle in 1875. He was a member of the Surrey B.C., which he called 'the crack amateur racing club of London', and later secretary of the Temple B.C., which 'under his secretarial administration became the largest bicycle club in London', with 150 members. He was a tourist rather than a racer, though he promoted the Temple B.C.'s financially successful 1877 club races, which had 72 entries.[57] (see Fig. 4. 4).

By the end of 1878, Etherington was involved with *Bicycling Times* as owner and editor and it was there that he published a two-page supplement called 'Etherington and Co's Bicyclists' Directory, Exchange and Guide', in which he described himself as 'Advertising Agent', with an office in Whitefriars Street, in the City of London.[58] In 1879 Etherington published *The Sporting Annual, or Sportsman's Guide and Athlete's Companion for 1879* (subtitled, 'A complete and comprehensive record of every sporting and athletic feat'), and *The Bicycle Annual for 1879* ('the only book of its kind issued'), an indication of the fast pace of his business activities.[59] By the time a full-page advertisement for his publications appeared in *Icycles, Wheel World Christmas Annual, 1880*, of which he was joint-editor, Etherington had a publishing business in Fleet Street and was involved in selling the sport of bicycling to consumers. *Wheel World*, he claimed, was: 'The recognized medium of advertisers to get their specialities and manufactures before the right people and into the proper channel'.[60] Subsequently, Etherington was joint-editor, from 1884 on, of the very successful *Wheeling*, with offices still in Fleet St.[61]

Etherington was a shrewd and perceptive innovator. He understood the drawing power of indoor, winter, long-distance sporting events, and was a pioneer in the promotion of cycling in London, hiring the best professional riders available. His first 'Six Days' bicycle race was held in the Agricultural Hall, Islington in November 1878 and won by

William Cann with a total of 1060½ miles.[62] A similar race was held at the same venue between 28 April and 4 May 1879 and won by George Waller, with a total of 1172 miles. A September 1-6, 1879 'Six Days Race', also at the Agricultural Hall, was marketed as the 'Long Distance Championship of the World', and pitted Waller ('the holder of the belt'), Frenchman Charles Terront, Higham and William Cann, the leading exponents of this kind of racing, against each other. This race 'proved from beginning to end to be of the most absorbing interest to the immense crowds of spectators. ... Almost from the word go the lead was maintained by Waller, closely pressed by the other riders, especially Terront'. On the 5th day, Waller rode from 6 a.m. to 12 midnight without a single stop or dismount, covering 220 miles, 'a performance which speaks volumes both for the endurance of the rider and perfection of the machine which he bestrode, and which was not treated to one drop of oil during the whole'. In total, Waller covered 1404 miles and Terront 1390 miles. Such a performance demonstrated both the extraordinary athletic ability of the riders and the increasing efficiency and reliability of their machines.[63] *The Referee* commented that 'the palm must be given to Waller – or rather to his machine, for there is little doubt that the rapid improvement shewn in Bicycling performances is due quite as much, if not more, to the superiority of the machines, as to the ability of the riders'.[64] (see Fig. 4. 5)

Champion John Keen was pragmatic in his criticism, however. He told an interviewer, 'I don't believe in six-day contests. It spoils your speed. If a man runs [i.e. rides – AR] fifty miles as hard as he can go, he can show plenty of staying power in that'.[65] But the evidently exploitative commercial nature of the Six Day race provoked charges of cruelty to the athletes in the press and objections from amateur circles. Gerard Cobb told a meeting of the executive of the Bicycle Union that 'to ride round and round some 250 yards of deal board...can serve no possible purpose but to gratify the peculiar tastes of those who seem to discover pastime in the grotesque struggles of penultimate exhaustion'.[66] Such criticisms from amateurs were greeted by Etherington, in an Editorial in *Bicycling Times*, with disdain: 'A feeble endeavour is being made to detract from Waller's performance by suggesting that it was not sport', he wrote. In response, he posed the question:

> What is sport? The only reply that can be made to such a question is 'Any contest of skill or endurance, or both, is sport'. The least cruel of any sports are those where a man is a free agent and 'takes it out' of his own physique,

> and does not act to the injury or detriment of any dumb animal. That bicycle racing has done more than anything else to improve machines no sane man who has studied the question will deny. That the wonder produced in the minds of non-riders by such marvellous performances as that of Waller must tend to increase the public interest in and respect for bicycling is certain. That there is any cruelty in such necessarily fatiguing, exhausting feats, is absurd, as the contest is quite voluntary. ... Men have from the earliest records generously admired feats of pluck and endurance...great feats of strength and endurance will always be considered in many thousands of men's minds to be sport par excellence.[67]

Indoor winter races such as these were not only profitable commercial entertainments, but they were also, of course, an important opportunity to advertize and sell bicycles. At the November 1878 race 'an exhibition of bicycles and sundries thereto pertaining, was held in the same building. Thirty-five different makers exhibited more than one hundred bicycles'.[68] On the same occasion, *Bicycling News* carried an advertisement for a 'Monster Exhibition of Bicycles, Tricycles and Bicycling Appliances', which also touted the event as the 'Great Six Days' Bicycle Race for the Championship of the World'.[69] Professional bicycle racing was already inextricably interlinked with the commerce of cycling, from which amateurism struggled to separate itself.

In some respects Etherington was an innovator, and in other ways an imitator. His idea of staging cycling events lasting for six continuous days in England and then of exporting them to the United States showed more enterprise than originality. Indoor long-distance racing was part of the sporting and entertainment practices of the times and first appeared in pedestrianism earlier in the 19th century, and had become hugely popular on both sides of the Atlantic in the 1870s. Long-distance walking or running races on the road were hard to measure and regulate, and no admission fee could be charged. It made more sense for a promoter to stage a long-distance pedestrian contest on a track or in an arena, where money could more easily be taken. The 1000-mile mark, a familiar walking objective, took many days and racing could not acceptably be held on Sundays. Hence the 'Six Day' Race.[70] Etherington's promotional originality was thus to adapt the established fashion for super-endurance events to the new sport of bicycle racing. He went to the United States aware of the fad for endurance events and with the hope that he might be able to cash in on it.[71]

An article entitled "Trans-Atlantic Bicycling", published by Etherington in *Bicycling Times* in October 1879, revealed the promotional ambition which lay behind this American tour. It was undoubtedly a piece of extravagant self-publicity. It spoke of Etherington's 'untiring zeal and unflagging energy in anything concerning his favourite sport', and suggested that the names of the members of 'the English Bicycling Team' were 'as familiar as household words'. Waller's 1404 mile ride in Etherington's September 1879 Six Day race was boosted as 'one of the most magnificent exhibitions of manly courage on record'. The article demonstrated the role of long-distance racing and exhibitions in publicizing the industry and the sport, and underlined the surprise that was felt at the distances accomplished in these endurance events:

> It is an established fact that the great success which has been attained by Bicycling in England is mainly due to its having been prominently brought before the public by means of racing; and it is equally certain that this rapid increase in the popularity of the sport is due to the untiring zeal and energy of Messrs. H. Etherington and C.J. Fox, Jun. of the Bicycling Times, who have promoted the four grandest competitions in the annals of the sport, they having started the idea and undertaken the necessary pecuniary risk.
>
> The events we have alluded to are the three great Six days' contests for the Long Distance Championship of the World, and the Twenty-six hours Championship of the World, competed for at the Agricultural Hall. At each of these contests, the immense and extraordinary distances accomplished were first demonstrated, each competition far exceeding in the distance ridden, the expectation of the most sanguine of our sport - it never having appeared possible to the promoters of the scheme, for a single moment, that such a grand performance as 1404 miles would ever in 108 hours be accomplished. ...
>
> In connection with competitions, the Bicycle Exhibitions promoted by Messrs. Etherington and Co. have materially assisted the development of our sport; for while the racing has interested and delighted hundreds of thousands of spectators, the latter have stimulated in a surprising manner the efforts of various firms of Bicycle makers throughout the country.
>
> Where for instance shall we see such a magnificent sight as that witnessed during the last great race for the championship of the world; the barriers were hardly strong enough to restrain the wild excitement and almost mad enthusiasm of the surging mass which crammed the great Agricultural Hall in London to witness one of the most magnificent exhibitions of manly courage on record. As the competitors, who were racing as though their very lives depended on their efforts, tore around the course the enthusiasm would be raised to fever pitch by the smallest incident as the men flew onwards to the coveted goal....
>
> Many of those who have witnessed these efforts have for the first time realized a feeling of respect for the skilful riders of the novel vehicle, the great utility of our iron horse. That any single man should by his strength alone be able to accomplish 1404 miles in six days, is a feat, which in itself would a few years ago have been deemed impossible.[72]

The racing achievements of the four 'champions' managed and promoted by Etherington confirm that he had engaged four of the biggest names in international bicycle racing, men who would 'win for themselves fresh victories, coupled with the respect and admiration of the American nation'. Charles Terront, William Cann, John Keen and David Stanton were experienced, seasoned professionals, deeply involved with the sport and the bicycle industry.[73]

4. Etherington's 1879 'Anglo-French' tour of America and its repercussions

An editorial in the *American Bicycling Journal* gave a frank assessment of the state of the sport in America at the moment of Etherington's arrival:

> In the present not wholly developed stage which bicycling has arrived at in this country, lacking as we do a single track to compare with those which the visiting riders have left behind them, and lacking too the sustaining universal public interest which assures the success of bicycle contests on the mother shore, we cannot but consider their visit in the light of an undertaking requiring more than a usual amount of pluck and devotion to the sport...In a private letter from Mr. Etherington, he explains that the visit is more of a private pleasure trip than a business enterprise... though of course, his riders 'will not disdain to engage in any fair contest which can be devised'.[74]

Despite the inadequate facilities and hesitant public reception, the Tour attracted a lot of attention in both the general and the cycling press, and Etherington produced a regular column for his paper, *Bicycling Times*, from which many of the details which follow were gleaned. Events were thus documented from both the British and American viewpoints.

Cann, Terront and Etherington sailed out on the steamship 'Montana' on the 4th of October, arriving in New York on the 15th, followed by Keen and Stanton on the 'Adriatic' early in November. Etherington, originally intending to go to Boston, was recommended to try New York, only to find that Madison Square Garden was unobtainable, 'the New Yorkers evidently not being fully alive to the pleasure and excitement of a sharp bicycle race'. Changing its plan of action, the group went up to Boston, 'the American bicycling metropolis', where they made their headquarters with the Pope Manufacturing Company at 87, Summer Street.[75] Etherington lost no time in challenging American professional riders. On 27 October, he announced a 100-mile handicap for 1 November, with a $200 first prize and a 10-mile start given to the American riders. He also announced a Six Day Race, with a $1000 first prize, a 100-mile start to be given. On 28 October, he sent a second letter to the *American Bicycling Journal*:

> I will match my team, either collectively or individually, against any team that can be organized, in this big country, to compete in a race at any distance, from 1 mile to 2 or 3000...To give our cousins an equal chance, I will handicap my team to give all comers starts from 75, 100 to 150 or 200 miles in a 6 days race, the races to be contested for in any large city in the United

> States where a suitable building and good track can be found. Or I will match my team against any one or two riders upon horses, number of horses to be determined upon according to distance or duration of race.[76]

The same issue of *American Bicycling Journal* also contained an Editorial, "Professional Bicycling", which was in essence a plea for honest professionalism:

> The minor contests which have hitherto taken place here are not, strictly, speaking, entitled to the term professional. Professional bicycling, as such, will really receive its first exposition in this city today, and the enlarging of the field of professional athletes which the Anglo-French bicycle contest must certainly result in, is fraught with not a little importance to the future of the bicycle throughout the country.
>
> Where contests for supremacy are carried out with manly fairness, their results can but be creditable both to the contestants themselves and the cause in which their efforts are made. More particularly is this the case in athletics, and the jealous care with which the amateur seeks to guard his title is the direct outcome of that spirit of honor, which should be distinctive of all who engage in athletic sports. The professional element, however, is unfortunately not so generally credited with that eager desire for absolute fairness which should outweigh all other considerations.

Evidently concerned with the bad reputation that professional sport had with the public, this Editorial argued that the Americans 'are fortunate in being able to profit by the experience and mistakes of the mother land. The dividing line between amateur and professional, while it should be most strictly defined, should not be observed in a way to exclude one class from interest in the other'. In these 'contests for supremacy carried out with manly fairness', the hope was that the racing would 'prove to the public at large that there is at all events one sport in which they can repose the utmost confidence'.[77] Another account, however, maintained that the 'comparatively small professional element' was 'remarkably respectable'.[78] The European party appear to have had no guarantee of competition arranged in advance, but Etherington's challenge was quickly answered by J.H.Mack of Brooklyn, who agreed to furnish a team.

While they were waiting for the American professionals to organize themselves, the visitors made at least two excursions with members of the Boston and Massachusetts Bicycle Clubs.[79] They 'were looked up to by the riders of that day as to a superior race of beings'.[80] On 29 October, they participated in the Providence (Rhode Island) Athletic Club Sports, where Etherington himself made an exhibition mile in a near gale-force wind. The Six Day race, the exciting contest 'for the Bicycular Championship of the

Universe', in which 'England and France Bid Defiance to the World!' (see Fig. 4. 6) took place before two of the star attractions, Keen and Stanton, had even arrived in America, even though their names were used in publicity for the event.[81] The American challengers were Gus Murphy, Thomas Harrison, George Harrison, Prof. Rollinson and Walter Lowder. The track, erected inside a huge marquee, was banked at both ends, allowing for faster turns (see Fig. 4. 7). The American riders were not very experienced and caused several crashes, and Terront and Cann were soon comfortably in the lead, the *Boston Globe* providing a vivid report of Terront in action:

> His appearance when riding is as though he belongs to and is part of his machine, so mechanically does he work and forge ahead. He is dressed in a pair of white flannel knee breeches, blue stockings and a light grey woollen guernsey, with a silk handkerchief tied loosely around his neck...His body is slightly curved and leaned forward, thus bringing his weight immediately over the centre of his front wheel and so avoiding the labor of dragging his weight from behind. When bent upon going at an extra rate of speed, he leans still further ahead and works, as it were, all over, and in a thorough business-like manner, and those little legs of his going up and down at a rate of 135 to 140 a minute. His friends speak of him as being a great favorite with every lady he comes in contact with.

Cann was, like Terront, 'but a sparse-built young man, thin and truly full of muscle and wiriness, and equal to any amount of strain and fatigue'. Etherington confided to the *Globe* reporter that he attributed the failure of the Americans 'to the fact of their want of knowledge as to how to proceed upon so long a journey, their partaking of food and drinks not being calculated to take them to the winning post'. The final evening's racing and attendance was 'all that could be desired by the managers'. Terront won, with 660 miles, well below what he was capable of, had he been pressed. It seemed, thought the *Globe*, that he had 'just been playing with his rivals'.[82]

Bicycling World, reporting this Boston Six Day race, said that as it was 'the first professional race in this country when men of any note were entered, it was looked forward to with great interest by all friends of bicycling'. They were happy that 'on Saturday evening the tent was fairly filled, and it was a noticeable fact that quite a large number of ladies were present'. But the paper was critical of the result: 'The sport has hardly attained growth enough in this country to enable us to name professionals to compete successfully with our English cousins, but it is hoped that before long America will be able to name men of equal endurance and speed'.[83]

The second week's racing consisted mostly of fiercely contested exhibition matches between Etherington's four riders. The language of the newspaper advertisements suggested the extent to which these events were being speculatively boosted. In spite of cold weather and small attendances, 'lovers of the bicycle who were not there missed a grand treat as all the contestants were in fine trim, and gave the best exhibition of the speed of the iron horse that has ever been given in this country'.[84]

To underline the extent to which Colonel Pope was interested in the racing, the Pope Manufacturing Company presented a handsome gold medal and Etherington decided to put it up for a 50-mile race between Keen and Stanton. Chicago was not a success. The amount of money being offered as the stake, $4,000, was so large that it led to accusations that the racing was merely a 'hippodrome', that is, a faked race with dishonestly advertized prizes designed to attract unsuspecting spectators. *The Chicago Tribune* reported that 'people did not take to it even with the flagging zeal which they manifest toward pedestrian hippodromes'. The event led to accusations challenging Etherington's honesty, which he resolutely defended in the British and American press.[85]

The most immediate repercussion of the publicity surrounding Etherington's visit was imitation; within a month, a 'three-day's bicycle contest' was promoted at the Mechanics' Pavilion in San Francisco, indicative of the influence of the newspaper press in the rapid communication of fads and fashions around the vast country. The *San Francisco Chronicle* noted that 'the recent bicycle tournaments in the East have generated an enthusiasm far superior to that of the pedestrian matches, and contests have been patronized by the best citizens of New York, Boston and Chicago'.[86] The *Chronicle* reported that 'the verdict of all those who have witnessed any of the riding is that it is sure to become a most popular amusement':

> Bicycle riding possesses all the charms of and many more than pedestrianism, and is without any of the disagreeable features of the latter amusement. It is neat and clean. The contestants use their muscles without any unpleasant effects being visible. Skill is required to ride at all, and the greater the skill required, the more graceful, finished and rapid the riding becomes. Whatever their real condition may be, the riders always look fresh and pleasant, and the machines are never anything but glittering, clean-cut and attractive to view. Added to these advantages possessed by the bicycle, are those of speed and

> novelty. Rapid motion alone is attractive, and when in a contest the more rapid the more attractive.[87]

To this reporter, the bicycle was thus expressive of a cultural and technological modernity; 'glittering', 'clean-cut', 'speed' and 'novelty' were key words used to describe the event. 'Rapid motion' had an intrinsic attraction. But perhaps most novel of all was the inclusion of two hours of women's bicycle racing each evening, at which time 'the number of spectators was swelled to about 1500'. Miss Lizzie Baymer, Miss Ada Lee and Mrs. Martin were:

> the most attractive feature of the exhibition...Miss Lee appeared all resplendent in a green silk page's suit, trimmed with gold, and with cardinal stockings clocked with navy blue. Her wealth of natural black hair is hidden under a coquettish blonde wig of the short-curl style...Lizzie Baymer appears much more to advantage as a bicyclist than she did as a pedestrienne. She was gorgeous in a Turkish vest, jockey cap, French tights of a flesh color, American bathing trunks and a button-hole bouquet of faultless construction. She rides well; she has muscular limbs, confidence and a serene smile – all that any bicyclist could ask for.[88]

This spectacle, however, was a risqué, exploitative commercial speculation in the manner of those which had been staged during the early days of the velocipede in the late 1860s, rather than meaningful athletic event for women cyclists. The novel sporting enterprise is seen here linked with old-fashioned show-business in a faddish search for profit.

Etherington's modestly successful tour to promote bicycling in the United States thus appears, in its impact in San Francisco, to have been influential beyond Boston and Chicago. Promoting a brand-new sport, without a proven record, particularly in the middle of winter, was a risky endeavour. The rider Charles Terront, talking to French journalist Baudry de Saunier twelve years later, did not have positive memories of this trip. The 200 metre track in Chicago was so small that it made him seasick, he remembered. Etherington agreed to divide the take (after expenses) into seven parts, two for himself and one each for the riders and his assistant, promising each rider not less than 10,000 francs. Spectators paid high prices, he said, but because of unforseen expenses, the riders only received enough to cover their passage back to Europe.[89]

But the Etherington tour should be seen as a significant component of the continuing flurry of commercial activity in the young bicycle industry in the United States. An

advertising flyer preserved in the United States National Archives confirms that Etherington's rider David Stanton, who was thirty-one in 1879 and a veteran professional, was not only racing on this trip to the United States but also acting as agent for Rudge's 'Humber' bicycle in America. His advertisement announced that 'David Stanton, Fifty and One Hundred Mile Bicycle Champion of the World, being now on a tour in this country, and being desirous of giving American Bicyclists the opportunity of purchasing the celebrated 'Humber' Bicycle, which are used by all first-class riders in England, and acknowledged to be far superior to any other ever made', would take orders in New York City.[90] (see Fig. 4. 8).

A second advertising flyer issued by the Pope Manufacturing Co., Boston, which appears to date from the second half of 1878, confirms that Stanton was competing in a market already energetically opened by Pope.[91] Entitled 'English Bicycles', the flyer announces:

> Having satisfied ourselves that the modern Bicycle, used by the English people, is a practical road machine of great utility; and learning from the best authorities that 60,000 of them were manufactured and sold in England last year, we have undertaken to introduce them into this country, and will keep constantly on hand, at our warerooms, a full line of Duplex Excelsior Bicycles, manufactured by Messrs Bayliss, Thomas and Co., of Coventry, England; also sample machines from all the best English manufacturers; and will take orders for any machine made in England, at as low a price as they can be purchased elsewhere.[92]

As an importer of English bicycles and maker of the first American bicycles, showing the commercial aggression which would typify his future business activities in the United States, Pope objected to Stanton's enterprise and in March 1880 took out an injunction in New York to restrain him on behalf of the Pope Manufacturing Company and its licensees, on the grounds of infringement of patent rights which Pope claimed to have acquired for the United.States. Pope's claims were grandiose:

> I have for the past two years and a half made this subject a special study and have obtained copies of every patent that has ever been issued in this country or relating to this subject, more than three hundred in number, and have given them a careful and exhaustive study comparing their mechanical features and mode of operation. I have been to Europe for the express purpose of studying this art and on a previous visit spent much time in investigating same.

The grounds of Pope's accusation against Stanton were in line with his attempts to secure sweeping patent and distribution rights to the bicycle: 'there are no unlicensed or infringing bicycles in this country save those that are about to be introduced and which

are offered for sale by this defendant; that this defendant has no regular place of business, and has no commercial standing or reputation; that if he is not restrained by order of this Court from selling his 'Humber' bicycles, this complainant and its licensees will be greatly injured'.[93]

The wider commercial context of Etherington's racing tour of America was thus competition for the American bicycle market. The Six Day races were important because they publicized bicycles. Pope used ownership of patents to try to prevent open competition in the bicycle market in the United States, and Stanton was a potential contender among the English makers and importers Pope was determined to brush out of his way. Simply stated, Pope wanted American cyclists to ride American bicycles, made by the Pope Manufacturing Company. (see Fig. 4. 9). The bicycle was seen as a patentable, licenceable product, and Pope, with aggressive lawyers including Charles Pratt working for him, won many victories until his final defeat in a lawsuit against Gormully and Jeffrey of Chicago which effectively declared the concept of the bicycle itself unpatentable.[94]

An article in *Bicycling World* in April 1881 described the Pope Manufacturing Co. as 'A Great American Manufacture', with agencies in two hundred cities and towns, which had 'expended thousands of dollars a year in systematic and judicious advertizing'. Pope had not tried 'to construct an entirely new style of machine, or to invent something more excellent' but had 'adopted the more prudent course of taking a good standard model already tried and popular'. In other words, he had copied existing, successful English machines. The enterprise was one 'which might be ventured upon by a competent businessman... an undertaking in which not only the article is to be manufactured, but the demand is to be manufactured for it'. Pope had taken up the industry 'when there was scarcely a perceptible demand for their product', and had 'spurred the demand by teaching the American people, by patronizing and encouraging the literature of bicycling, and favoring clubs and associations formed to promote its spirit and enjoyment'.

By 1881, in Hartford, Connecticut, Pope had created 'the largest and best appointed bicycle factory in the world', capable of producing 1,200 bicycles a month. Illustrations showed the workshops which mass-produced the bicycles 'from the rough material' and

storerooms full of the finished product.[95] (see Fig. 4. 10). This was assembly-line production of a consumer product on a large and modern scale.

In 1880, in *The American Bicycler*, Charles Pratt wrote of the Pope Manufacturing Company that it 'had during the year 1878 made a large plant and struck out with an energy and enterprise which was far-sighted, has continued to increase its facilities, and may still be called the only manufacturer proper in the United States'. He noted that 'during the year 1878 they devoted their attention to one style of machine... which has been sold throughout this country and even in foreign parts. They have special agencies in all the principal cities and many of the smaller ones, throughout the States'. Although the Europeans had ten years of development in contrast to America's two years, 'the works of the Pope Manufacturing Company are already said to be larger and richer in facilities than those of any other bicycling establishment in the world. During the past year, with only one pattern of their machine in the market, this company has furnished three-quarters of all the bicycles sold in the United States'.[96]

'The sport of Bicycling is one that has come into rapid favor in this country since the advent of the English riders, who have accomplished a thousand miles a week', reported *Whittacker's Handbook of Summer Athletic Sports* in 1880; 'the only drawback to its universal adoption is the first cost of the machines. When that is reduced, as it will be, to about fifty dollars, payable in instalments like sewing machines, the bicycle will become a favorite with the whole American population as it is in England with the majority of middle class young men'. The 'fever' was spreading thanks to the efforts of Mr. Wentworth Rollins, 'the present king of bicyclists in America', and 'the pioneers of bicycling in the United States were the Pope Manufacturing Company, who started factories and schools in the cities of Boston and San Francisco, where the fever started almost at the same time, but since that period bicycling has spread to most of the large cities'.[97]

Charles Pratt thought that Etherington's tour had 'waked up the racing interest throughout the country'.[98] Although the wider influences of Etherington's first racing tour are hard to assess, nevertheless it is clear that it was the first of many subsequent 19th century bicycle racing exchanges between England and the United States, a rivalry

contested throughout the 1880s and 1890s, producing heated exchanges in the press as to the relative value of British and American performances.

In an article, "Entrepreneurs, Organizations and the Sports Marketplace", Stephen Hardy suggests that: 'If historians are to uncover the development of the sport industry as a special, perhaps unique, system and structure, it will be necessary to outline the key moments of innovation and the key innovators in any given segment or activity'.[99] From the evidence of the 1879 tour described here and his subsequent visits to the United States, it seems reasonable to assert that Harry Etherington was an important international figure in the promotion and development of bicycle racing spectacles and other consumer sports events. *St. Stephen's Review* thought that he occupied 'a particularly prominent place in the annals of national and industrial exhibitions'. Its journalistic portrait praised Etherington's 'great powers of originality and organization... in his attempts to bring cycling into favourable repute'. The consensus appears to have been that Etherington was enthusiastic, honest and fair. 'Throughout the American continent, no Englishman connected with sport and the sporting press is better known or more generally liked than Mr. Harry Etherington, whose visits with the conquering teams of English cyclists have ever been warmly welcomed, while his peculiar dash and smartness have made the Yankees almost consider him as one of themselves'.[100]

5. The foundation of the League of American Wheelmen

Like its British counterparts, the Bicycle Union and the Bicycle Touring Club, which served as its models, the League of American Wheelmen was founded to validate and define concepts of sport based in honourable amateurism and a code of behaviour rooted in middle-class respectability. The League was founded for the legal and physical protection of bicycle riders and to promote and encourage racing and recreational riding. Like the New York Athletic Club (founded 1866) and the National Association of Amateur Athletes of America (founded 1879), it was an institutional expression of the new importance of organized amateur sport and recreation in American society.[101] Charles Pratt described it as 'a wheelmen's protective league, which should combine the best points of the B.U. and the B.T.C.'[102] It grew directly out of the foundations laid down by Boston and New York cycling clubs and, and was organized by Charles Pratt, then editor of *Bicycling World* and President of the Boston Bicycle Club, and Kirk Monroe, President of the New York Bicycle Club.

The inaugural meeting of the League was held in Newport, Rhode Island, in May 1880, and it already had more than 500 members when its constitution was drawn up at a New York meeting in September 1880. A March 1880 list of American bicycle clubs showed 49 independent clubs, all formed within the previous two years, with a total membership of about 850, although the total number of bicycle riders was estimated as about 3,500.[103] The subsequent growth of the League was rapid, and by September 1886 stood at nearly 10,000.[104] Annual 'Meets' of the club were held at different locations, where racing was also held, and the parades of massed bicyclists through city streets appear to have attracted as many spectators as the racing itself. From 1881 onwards, annual League race meetings were also held for League championships, though the first such event, at the Polo Grounds, New York, was described as 'the dreariest and deadest occasion of a sporting sort'.[105] Road racing was limited by the appalling condition of country roads, and the most pressing problem even for off-road racing was a suitable surface, since most available tracks were grass trotting-courses. Pratt recommended the 'cinder-path' as 'the only really suitable track for bicycle racing... With the increasing interest in the sport, it is probable the like will be laid in many places, especially in connection with race-courses where it can be laid inside the trotting-track pretty satisfactorily. Next to this a good rolled grassy sod or a smooth gravel road is desirable'.[106]

The League of American Wheelmen's *Handbook* described it as an organization 'to promote the general interests of cycling; to ascertain, defend, and protect the rights of wheelmen (which are those of any driver of horse and wagon), to encourage and facilitate touring, and to regulate the government of all amateur sports connected with the use of the wheel'.[107] The L.A.W. thus, from its inception, brought a political awareness and activism to its existence as a sporting organization. Charles Pratt wrote in 1880 of 'favorable editorials and generous news columns of the daily and weekly papers', which had brought about 'a quite remarkable recognition of the rights of the bicycler throughout the country'.

Pratt also noted the symbiotic relationship between sport and the bicycle industry in the progress of bicycling, and the significant role of the Pope Manufacturing Company in making and distributing bicycles: 'At the bottom of all progress lies the commercial and manufacturing industry which bicycling has stimulated, and which in turn has stimulated bicycling'.[108] A threat from the state of Ohio to suppress bicycle riding there caused the 1883 L.A.W. President Bates to write:

> No doubt most members of the L.A.W. are generally unconscious that the organization possesses any political power, since the League was not organized for the purpose of exercizing any political power, and has never exercized any such power directly and consciously... The fact that we possess political power is our shield; the fact that we are ready to use it when attacked will double the strength of our shield. We trespass upon the rights of no man; let us make it plainly understood that no man will be permitted to trespass upon our rights with impunity'.[109]

Bates went on to remind readers of *Outing* that the League was, in 1883, already more than 3,000 members strong, and that 'these members are men and voters, not boys, men of business and political and social influence – gentlemen, including lawyers, editors, business men, cleregymen, doctors – men possessed of both brains and money, who know their rights, and are thoroughly and very widely organized to maintain them'.

As strongly asserted here, the vast majority of bicycle riders in the United States were from the relatively affluent urban middle-classes, and had good legal advice from their friends in Boston, New York and Washington D.C.[110] They were predominantly touring riders, and consequently the cycling clubs and the L.A.W. immediately became

outspoken and effective promoters of road maintenance and repair, leading to what was subsequently known as the 'Good Roads Movement'.[111] The League became a federation, each state being eligible to have its State Division, with most activities organized on a state by state basis.

Racing affairs were concentrated in the hands of the Racing Board which 'shall have charge of all matters pertaining to racing and the championships'. The American definition of amateurism in cycling was identical to that spelled out by the English Bicycle Union, the National Association of Amateur Athletes of America and the New York Athletic Club, and professionals were excluded from membership.[112] L.A.W. rules specified that 'an amateur is one who has never engaged in, nor assisted in, nor taught any recognized athletic exercise for money or other remuneration, nor knowingly competed against a professional for a prize'.[113] 'Maker's amateurs' quickly became an issue, however, as American manufacturers used racing to push their machines into the public eye and to rival British records. In 1885, the Racing Board collected evidence that 'almost every prominent prize-winner known to American wheeling had accepted pay from some bicycle-maker',[114] and there was a rash of suspensions of alleged 'professionals', causing them to become *de facto* professionals.

But it was clear that the Racing Board could not itself control the deals that went on between riders and manufacturers, and could not prevent promoting clubs from offering financial incentives to leading amateur riders to enter races at their events. Chairman of the Racing Board, Abbot Bassett, told a general meeting of the League in June 1886 that 'When a body such as ours proceeds to institute an inquiry into the relations between dealer and rider, it will find itself defeated at every point'. He also regretted that 'no work that the League delegates to its committees is more arduous than that which goes to the Racing Board, and no work is less pleasant in its nature'.[115] It was a widely recognized fact that star riders boosted box-office receipts and ensured successful events and that old-fashioned, part-time amateurism did not easily breed champion material.

Competition between British and American makers for the American market in bicycles was intense in the 1880s. Gormully and Jeffery of Chicago advertised their 'American Champion' bicycle as 'The greatest triumph of cycling manufacture in America. Entirely

manufactured in America, with our own plant, and on our own premises, and with every care to suit the TASTE and NEEDS of an AMERICAN WHEELMAN'.[116] While there was honest amateurism at the club level, at the top level of the sport amateur championship winners such as George Hendee, W.A. Rowe and George E. Weber were invariably supported with equipment and expenses, and manufacturers, including the Pope Manufacturing Co., the most aggressive and successful American maker, openly advertized the victories of both 'amateurs' and genuine professionals in the cycling press. (see Figs. 4. 11 and 4. 12). The Coventry Machinists' Co. declared that it had used 'No Paid Racing Men' in establishing American records in 1885 (see Fig. 4. 13), but top amateurs were under intense pressure to accept 'gifts' from manufacturers and to slip into legitimate professionalism. In 1886 President Bates told *Bicycling World*:

> If bicycling wants to captivate the American people, it has got to parade the fliers. If the League wants to spread the glory of the wheel, it has got to beat the British records, and breed the faster fliers in the world...Fliers have to be carefully cultivated from the hardiest stock. Somebody has got to pay for their cultivation...Unless somebody foots the bills, you don't have fliers. Whether the club, or a manufacturer, or a wealthy promoter of the sport, pays the expenses, makes no difference with the result.[117]

There was thus a tension within the League of American Wheelmen between the controversial, racing issues which concerned a minority of L.A.W. members and the recreational and touring issues which were the interests of the majority.

As the American sport grew, the huge annual 'meets' of the League of American Wheelmen and the Springfield Bicycle Club attracted the leading American riders and the cream of British cyclists. The Springfield Tournaments (which are discussed in greater detail in Chapter 5) grew in national and international importance to such an extent that in 1886 the Springfield Bicycle Club was able to advertize a 'Grand One-Mile Race for the Bicycle Championship of the World!' to be held in September.[118]

The ambitious promotions of the Springfield club's Henry E. Ducker, the son of British immigrants, raised the Springfield Tournaments to an unprecedented level of extravagance and success. At the first event, in 1882, 12,000 people attended and expenses amounted to more than $3,000, with a profit of more than $700. For the 1883 event, an expenditure of $10,000 was agreed.[119] While the influence of the annual Tournaments increased through the 1880s, Ducker's events became models of excellence

in the new sport, putting particular emphasis on attracting the participation of the top-class English riders and on the establishing and breaking of records. Both amateurs and professionals (in separate categories) were included in the programmes, even though the Springfield B.C. was an 'amateur' club. 'No man has ever given such an impetus to any recreative sport as Henry E. Ducker has given to cycling', said *Outing*, 'Almost wholely by individual efforts, he has brought cycling to the foremost position it now holds in America'.[120]

Harry Etherington himself returned several times to the United States and went at least once to Springfield as a reporter for *Sporting Life*. Top-class American riders found they could win cups as amateurs and make money as professionals in both England and France. The distinction between amateurism and professionalism in America was perhaps not surrounded by as precise a class demarcation as it was in Britain, thereby making the transition easier. World records were hotly contested on opposite sides of the Atlantic. In fact, there was hardly a world class or championship event through the 1880s which did not pit European against American cyclists. By the early 1890s, Arthur Zimmerman was one of a substantial number of world-class American cyclists able to command a good price in Europe. The trans-Atlantic competition between the top levels of both professional and amateur cycling in the late 1880s and 1890s is a story which needs to be researched in further detail.

The earliest club road racing in the United States was either distance-based, or place-to-place and the races were in general small affairs. In 1883, *Bicycling World* reported that 'the first 100 mile road race ever held in this country', organized by the Boston Bicycle Club, had only 10 contestants, and that 'the riders attracted little attention on the highway. Few who saw them would think them more than tourists on a pleasure trip'.[121] The winner's time was a slow 9h 47m, but roads conditions in the early 1880s were appalling. A large number of 'high-wheel' bicycle records was accomplished and reported in the cycling press, though guaranteeing accurate results was always difficult. In the 1880s, the League of American Wheelmen was involved in sanctioning races and approving road records and only later was a debate begun within the L.A.W. over the image of road racing, which continued into the 1890s just as it did in Britain.

6. Summary and conclusions

This chapter has given an outline of the essential shape of the first years of the sport of cycling in the United States, noting particularly the transmission of established British developments, both technological and social, into the fertile American context. Because of its strong cultural connections with the 'Old Country', Boston became the first business and institutional centre of American cycling, though other cities, New York, Buffalo, Philadelphia and Chicago, quickly became prominent.

Like their British counterparts, American cyclists were predominantly middle-class and participated in well-organized club runs, venturing out onto unexplored roads. Group solidarity and respectability were established by wearing a prescribed uniform and, indeed, club activity had a slightly militaristic feel to it. Many college clubs were formed, emphasizing the role of cycling as one of the many sports practiced in the wider athletic movement of the early 1880s.

There was certainly a professional, show-business element in American bicycle racing in its earliest days, typified by the events of Etherington's tour described here, but the sport developed most energetically as an amateur and club-based activity in the late 1870s and early 1880s, expressing the novel social and sporting aspirations of educated, middle-class, urban participants.

The organizational and cultural model was the already developed British sport, but the social level of American cycling clubs appears to have had less working-class participation than London or north of England clubs. The most prominent American clubs maintained downtown clubrooms, for example, where members could meet socially and where they could also store their bicycles. Certainly there is abundant evidence of ideological amateurism in the stated aims and agendas of the prominent East Coast and mid-Western clubs.

These aims were expressed institutionally in the foundation of the League of American Wheelmen, an influential organization which became the watchdog of cyclists' interests, and was the controlling body of bicycle racing in the United States. The first official championships were held under the jurisdiction of the National Association of Amateur

Athletes of America in 1879, but State championships were organized soon after its foundation in 1880 by the League of American Wheelmen, and national championships were subsequently held on an annual basis. From its inception, the L.A.W. was involved in efforts to remedy the neglected state of public roads in America, and exerted varied influence as a recreational, sporting and political organization.

Emphasizing the commercial link between sport and the bicycle industry which is the recurring theme of this account, it is important to note the growth of the manufacturing activity which was essential for the expansion of the sport in America, activity which has been outlined in this chapter in the competition between Etherington and Pope.

Once again, it is asserted that in the United States in the late 1870s cycling as a sport co-existed with, and was dependent upon, the industry which manufactured its essential tool. The sport and the industry sprang into existence alongside each other. The sport was promoted by manufacturers and supported by club formation. It built on the example of the existing English sport, which was translated into an American context.

Notes to Chapter Four

[1] C.E. Hawley, "Uses of the Bicycle", *The Wheelman*, Vol. 1, # 1, Oct. 1882, p.25.

[2] "Speech of the Right Hon. R. Lowe, M.P.", *American Bicycling Journal*, 11 May 1878.

[3] *Boston Advertiser*, date unknown, quoted in *American Bicycling Journal*, 11 May, 1878.

[4] See John Cumming, *Runners and Walkers: A Nineteenth Century Sports Chronicle* (Chicago, Regnery Gateway, 1981).

[5] S.W. Pope, "Amateurism and American Sports Culture: The Invention of an Athletic Tradition in the United States, 1870-1900", *International Journal of the History of Sport*, Dec. 1996, p.291 and p.298 and Ted Vincent, *Mudville's Revenge – The Rise and Fall of American Sport* (Univ. of Nebraska, 1981), pp.58-65.

[6] The early history of American cycling has not been much explored, or been the subject of much research. In spite of the recent heightened profile of the sport, with the Tour de France victories of Greg Lemond and Lance Armstrong, the cycling media shows minimal awareness of the importance of bicycle racing during the high-wheel period, or even in the 1890s. Cycling's history is generally seen as beginning in the post-World War II period, with the arrival of the European 10-speed bicycle in America. In this context, this chapter should be seen as an attempt to provide a profile of the neglected, but richly documented, early history rather than a comprehensive account.

[7] *Boston Globe*, 27 Jan. 1878, reprinted in *American Bicycling Journal*, 16 Feb, 1878, p.7.

[8] From the first issue of *American Bicycling Journal*, 22 Dec. 1877.

[9] Editorial, "Salutatory", op. cit., 22 Dec. 1877, p.1-2. Frank W. Weston, an Englishman living in Boston, was a central figure in establishing bicycling there. He was a partner in the importing firm of Cunningham, Heath and Co; he was a founder member and promoter of the Boston Bicycle Club and founder of the *American Bicycling Journal*.

[10] E.P. Prial, "Cycling in the United States", *Harper's Weekly*, 30 Aug. 1890. See also the following core articles on Pope's participation in the early American bicycle industry: "Col. Pope's Response to the Toast, 'The Wheel', at the League of Ohio Wheelmen Banquet", *The Wheelman*, Vol.1, #1, Oct. 1882, pp.69-72.; "Interview with Colonel Albert A. Pope", *Bicycling World*, 15 May 1880, p.222-23 and "A Great American Manufacture", *Bicycling World*, 1 April 1881, pp.326-331.

[11] Hawley, in "The Uses of the Bicycle", *The Wheelman*, Oct. 1882, wrote: 'The manufacture of bicycles has necessarily been an integral part of their diffusion through the world. In the brief space of twelve years their number has rapidly increased, until more than one hundred and forty manufacturers in England, besides several in France and the United States, are actively engaged in the business. Several thousand men are employed, and fully six millions of dollars of capital are invested in this business. One firm alone, the Pope Manufacturing Company, has facilities for turning out twelve hundred bicycles per month'. Stephen Hardy, "Entrepreneurs, Organizations and the Sports Marketplace", *Journal of Sport History* 13 (1986), is relevant here, as is an as yet unpublished article by Bruce Epperson, "The American Bicycle Industry, 1868-1900".

[12] *Boston Globe*, 4 Nov. 1877, reprinted in *American Bicycling Journal*, 22 Dec. 1877, p.7.

[13] *New York Times*, 18 April and 11 May 1876.

[14] *New York Times*, 30 Nov. 1876.

[15] *Boston Herald* quoted in *American Bicycling Journal*, 5 Jan. 1878, p.9. Booth was 'born in England, and first took to velocipede riding in Paris by giving exhibitions of trick riding at the Cirque Napoleon, where from skilful tricks and fancy riding, he was called the great velocipedian Ducrow, after which he returned to England, to Agricultural Hall, London, which is one of the largest halls in the world... While there he beat all the celebrated riders, French and English... He has given exhibitions of fancy and trick riding at all the principal theatres in England and some of the first in America. He arrived in New York in 1870, and travelled throughout the country and Canada giving exhibitions. At last he settled in Boston, and has been a constable in this city four years'.

[16] Charles Pratt, "Our First Bicycle Club", *The Wheelman*, March 1883, p.401.

[17] *American Bicycling Journal*, 22 Dec. 1877.

[18] These 'Rules and Regulations' were printed in full in *American Bicycling Journal*, 2 Feb. 1878.

[19] Pratt, op. cit., p.402. Another account, in *Boston Globe*, 27 Jan 1878 (quoted *in American Bicycling Journal*, 16 Feb.1878) underlined this upper-middle-class orientation: 'Four gentlemen – a journalist, an architect, a lawyer and a merchant – were the first to introduce the bicycle here'.

[20] Pratt, op. cit., pp.404-405.

[21] See "Bicycle Clubs", in *American Bicycling Journal*, 2 Feb.1878, 'A federation of individuals for the purpose of extracting from some particular sport or mode of exercise a greater amount of benefit or enjoyment than could be otherwise obtained, is a practical example of the old adage that 'Union is Strength' '.

[22] Pratt, op. cit., p.402.

[23] Pratt, op, cit., p.403.

[24] Pratt, op. cit., p.403.

[25] *American Bicycling Journal*, 30 March 1878.

[26] Pratt, op. cit., p.404.

[27] "Rules and Regulations of the Boston Bicycle Club", *American Bicycling Journal*, 2 Feb. 1878.

[28] The Suffolk Bicycle Club, the Montreal Bicycle Club and the San Francisco Bicycle Club were founded in 1878. Amhurst, Brockton, Essex, Fitchburg, Hartford, Harvard, Lynn, Massachusetts, New Haven, Princeton, Providence, Salem, Waltham and Worcester, clubs were added in New England in 1879. Outside New England, Baltimore, Brooklyn, Buffalo, Chicago, Detroit, Germantown, New York, Philadelphia, Providence, Rochester, Trenton, Utica and Washington D.C. saw clubs founded in 1879-80.

[29] Hawley, op. cit.

[30] *American Bicycling Journal*, 9 Aug. and 18 Oct. 1879.

[31] 'American Bicycle Clubs, March 1880', in Charles Pratt, *The American Bicycler* (1880, 2nd ed.), pp.245-7.

[32] *Bicycling World*, 10 Dec. 1880, p.67.

[33] C.W. Nairn and Henry Sturmey, *The Cyclist and Wheel World Annual* for 1882. These approximate numbers are confirmed by A.D. Chandler and J.C. Sharp, *A Bicycle Tour in England and Wales*, who in an Appendix give the number of clubs in England as 360 and in the U.S. as 130. They also give the 'number of bicycle and tricycle riders in England' as 250,000 and in the U.S. as '8,000, and rapidly increasing'.

[34] "Bicycle Clubs", *Bicycling World*, 1 Jan. 1883, p.6.

[35] *American Bicycling Journal*, 19 Jan, 1878, p.10, quoting the *Boston Globe*.

[36] *American Bicycling Journal*, 25 Jan. 1879, p.4.

[37] *Bicycling World*, 13 Dec. 1879.

[38] *Boston Herald*, newspaper clipping datelined 29 Oct. 1879, in Pratt scrapbook, Smithsonian Institution.

[39] "Bicycling at the Colleges", Editorial in *Bicycling World*, 26 Nov. 1880.

[40] Op. cit., 25 Jan. 1879, p.4.

[41] Op .cit., 25 Jan. 1879, p.7.

[42] *American Bicycling Journal*, 2 Feb. 1878, p.3.

[43] Op. cit., 9 Aug. 1879. These races led to an inquiry, conducted by Charles Pratt in Boston, into the amateur status of winner William Pitman, who was subsequently declared to be a professional and disqualified. The similar disqualification of another racer, W. M. Wright, by the New York Athletic Club led to a protest by Wright that 'he did not transgress any rule of bicycling athletics in force' (*American Bicycling Journal*, 9 Aug. 1879), which was true since the N.Y.A.C. had no formal jurisdiction over bicycle racing. The N.Y.A.C. sustained the disqualification, but Wright went on to be reinstated as an amateur by the National Association of Amateur Athletes.

[44] Advertising flyer in Charles Pratt scrapbook, Smithsonian Institution, Washington, D.C.

[45] *American Bicycling Journal*, 1 Nov. 1879.

[46] Pratt, op. cit., p.411.

[47] Hawley, op. cit.

[48] *New York Times*, 18 May 1879.

[49] *New York Times*, 19 May 1879.

[50] Nairn and Sturmey, *The Cyclist and Wheel World Annual for 1882*, p.286.

[51] *San Francisco Morning Chronicle*, 16 May 1869.

[52] *Bicycling World*, 1 May 1880.

[53] *American Bicycling Journal*, 9 August 1879.

[54] *San Francisco Examiner*, 24 Feb. 1879.

[55] *Bicycling World*, 1 May 1880.

[56] *Bicycling World*, 10 Dec., 1880.

[57] Biographical details from Karl Kron, *Ten Thousand Miles on a Bicycle*, pp.546-8; *Bicycling Times*, 9 Oct. 1879 and *St. Stephen's Review*, 30 April 1887.

[58] *Bicycling Times*, 31 Oct. 1878.

[59] *Bicycling Times*, 20 Nov. 1879.

[60] *Icycles - Wheel World Christmas Annual for 1880.* This advertisement shows the remarkable range of Etherington's publishing interests, involving the following titles: a) *Wheel World*, edited by Etherington and Lacy Hillier, 'A Bicycling and Tricycling Illustrated Monthly Magazine of Sport'. Etherington started *Wheel World* in 1880, ran it for eighteen months, then sold it to Iliffe and continued as editor of both it and *The Cyclist;* b) *The Cyclist*, edited by Henry Sturmey and C.W.Nairn in 1880 and later by Etherington himself; c) Henry Sturmey's *The Indispensable Handbook* and *Complete Guide to Bicycling*; d) *Hotel Charges Directory*, 'no traveller should be without this work'; e) *The Bicycle Annual for 1879* and *1880*; f) Charles Pratt's *The American Bicycler* was also advertised.

[61] Information from Etherington scrapbook in Lorne Shields collection, Toronto. Etherington's cycling interests subsequently diversified into the promotion of other events related to the marketing and selling of leisure-time activities, among them an annual 'Sportsman's Exhibition and Exhibition of Sporting and other Dogs', and 'Arcadia, A Veritable Fairyland', at the Royal Agricultural Hall in Islington and Olympia.

[62] *Bicycling Times*, 28 Nov. 1878.

[63] *Bicycling Times*, 11 Sept. 1879 and *American Bicycling Journal*, 18 Oct. 1879. Details of these three Six Day promotions were as follows. Nov. 1878 event: competitors included Cann, Edlin, Lees, Terront, Higham, Stanton, Keen, Markham; 1st – Cann, 1,060 ½ miles, 2nd – Edlin, 1,025 miles. April-May 1879 event: competitors included Waller, Terront, Lees, Stanton, Higham; 1st – Waller, 1,172 miles, 2nd – Terront, 1,128 miles, 3rd – Lees, 1,102 miles; 4th – Stanton, 1,100 miles. Sept. 1879 event: competitors were Waller, Terront, Higham, Cann; 1st – Waller, 1,404 miles, 2nd – Terront, 1,390 miles.

[64] *The Referee*, Sept. 1879, exact date unknown, advertisement reproduced in *The Years of the High Bicycle* (compilation of catalogues), Pinkerton, 1980.

[65] "An Interview with John Keen" (conducted in Boston, 16 Nov. 1879), originally published in *Bicycling World* and reprinted in *Bicycling Times*, 1 Jan. 1880.

[66] Address of President Gerard Cobb to the Bicycle Union, *The Country*, 21 Dec. 1878. Cobb disapproved of 'this new form of contest, for which there has recently been a kind of mania elsewhere'. Referring to his efforts to achieve a reform of amateur versus

professional restrictions (see previous chapter), Cobb regretted that 'whilst we have been endeavouring to make our new pastime the occasion of a change calculated to influence beneficially other forms of athletics as well, our own domain should at the same time have been invaded by this utterly aimless, and in the opinion of many, most mischievous type of contest'.

[67] *Bicycling Times*, 25 Sept. 1879.

[68] *American Bicycling Journal*, 25 Jan. 1879.

[69] *Bicycling News*, 22 Nov. 1878.

[70] See Chapter 7, "Six-Days Go-As-You-Please", in John Cumming, *Runners and Walkers: A Nineteenth Century Sports Chronicle*. British pedestrian champions had visited America as early as the 1840s; England versus America sold tickets. English runner John Barlow attracted a crowd of 25,000 people to Hoboken, New Jersey to watch him compete for a $1,000 purse. At a return match in November the same year, the *Spirit of the Times* reported an even larger crowd, estimated at 40,000 (quoted in Ted Vincent, *The Rise and Fall of American Sport*, University of Nebraska, 1981, p.34). Perhaps the most famous Six Day contest had been that between Edward Weston and Daniel O'Leary, both of whom had accomplished great walking feats on the road. In 1876, at the Agricultural Hall in Providence, Rhode Island, O'Leary defeated Weston, setting a world record of 519 miles. In 1876, Manchester's *Athletic News* carried an article entitled 'Long Distance Walking', which confirmed the fashionable currency of such events: 'At the present time, when the public mind is much exercised with regard to the feats of endurance exhibited by American and English pedestrians, a few details of long distance walking may prove interesting to our readers', it read. The same paper carried reports of the earliest Six Day bicycle races in the English Midlands (*Athletic News*, Manchester, 30 Sept., 21 Oct. and 2 Dec. 1876). By the 1880s, the Six Day pedestrian record was 568 miles, and by 1890, 619 miles. In the United States, a pioneer pedestrian marathon was staged at Madison Square Garden in 1878. The American Institute 500 mile endurance race had been presented in May 1879. In October 1879, just before Etherington's party arrived in the States, the *New York Times* reported that another Six Day foot-race 'for the O'Leary belt' had just begun at Madison Square Garden (*New York Times*, 6 Oct. 1879). Etherington, flowing with the sporting currents

of the times, eyed the Garden unsuccessfully for his 1879 American cycling Six Day debut.

[71] *New York Times*, 6 Oct. 1879.

[72] *Bicycling Times*, 9 Oct. 1879; this article was also printed as an 'Extract' to be used for advertizing purposes.

[73] Frenchman Charles Terront, who would become one of the most famous cyclists of the 1880s and 1890s, was only twenty-two, but had already, according to *Bicycling Times*, won 500 medals. He had placed second in two of the Six Day races, and won a 26-hour race. William Cann, from Sheffield, was twenty-six, and a graduate of the intense north of England professional scene. He had won Etherington's first Six Day in November 1878, and beaten the Mexican horseman, Leon, riding 19 separate horses, with a total of 960 miles: 'Cann is a bit of a wit, and is cram-full of Shakespeare, portions of which he rolls forth at opportune moments, much to the amusement of his friends'. London bicycle manufacturer John Keen, who had an unrivalled record in the English 1 mile championships - winner in 1873, 1876, 1878 and 1879, runner-up in 1870, 1872 and 1874 - was thirty years old, one of the veterans of English cycling, having first raced on the velocipede in 1869. 'His reputation as being THE man has enabled him to secure an immense number of patrons for his make of bicycle, known as the Eclipse, and richly he deserves it. We anticipate that when our American cousins see Keen moving along with his easy, graceful and mechanical-like action, they will open their eyes a bit' (*Bicycling Times*, op. cit). *Bicycling World* interviewed Keen in Boston and found him 'a gentlemanly, practical man, who knows the art and the business of bicycling in all their phases, and is ready in imparting his knowledge to others'. David Stanton, at 31 the veteran of the four, born in South Wales, was the first rider to have ridden 1,000 miles in the Six Day race of March 1878 and had the advantage of a previous, 1876, visit to America (*Bicycling World*, 13 Dec. 1879).

[74] *American Bicycling Journal*, 18 Oct. 1879.

[75] *Bicycling Times*, 27 Nov. 1879.

[76] *American Bicycling Journal*, 1 Nov. 1879.

[77] Ibid.

[78] Hawley, op. cit.

[79] On the first, Etherington and Cann returned home because of 'the vile state of the roads. In drawing a comparison with the English roads, a ploughed field and a billiard table would not be wide of the mark'. On the second, however, 'the riding of the visitors was much admired, that of Cann being particularly fleet and graceful. Terront's riding was plucky and rapid and very skilful, as was shown by his riding a very light racing machine steadily over the roughest country roads' (*Bicycling Times*, 13 Nov. and 27 Nov. 1879).

[80] "The Massachusetts Bicycle Club", *The Wheelman*, June 1883, p.166.

[81] *Boston Globe*, 3 Nov. 1879,

[82] All quotes from *Boston Globe*, 6-12 Nov. 1879.

[83] *Bicycling World*, 15 Nov. 1879.

[84] *Boston Globe*, 14 Nov. 1879.

[85] *Chicago Tribune*, 20 Nov.-7 Dec, 1879.

[86] In San Francisco, a row of six tents was erected, with a new track prepared, 15 feet wide and six laps to the mile, and six riders enlisted. 'The bicycle as a racing vehicle has not been greatly used in this country, though much in vogue in England', reported the *San Francisco Chronicle* – 'The interest in bicycle-racing in this country centers chiefly in Boston, though the love of locomotion on two wheels is widespread. The Suffolk Bicycle Club of Boston numbers 78 members and contains the best long and short-distance riders in this country. It was organized in the spring of last year, and has developed a very strong interest in the sport. From this nucleus, twenty-seven bicycle clubs have sprung up... Whether the San Francisco representatives of the eminently healthful and gentlemanly sport will gain as prominent a name for the State as the pedestrians and race-horses the contest which opens tonight at the Pavilion will tell (*San Francisco Chronicle*, 29 Nov. 1879). The racing, for a first prize of $500, was heavily advertised in the local press. 'It is a peculiar fact in connection with this diversion that the longer one gazes at the swiftly-gliding wheels and riders the more fascinated he becomes.', commented the *San Francisco Chronicle*, 'Horse-racing and pedestrianism pale into insignificance in comparison with this novel mode of rapid transit'. Dunbar, one of the riders, was 'an acrobat by profession, and is one of the acrobatic team of Dunbar and Fox'. Another, Bennett, was 'a plumber by occupation, and has had but a brief experience with the bicycle, but has already attained an astonishing degree of

proficiency'. Royston, 'a tall and slender youth, a native of England, was at one time a member of the famous London Bicycle Club, but has had no practice for four years' (*San Francisco Chronicle*, 30 Nov. 1879). Eggers, the winner, covered 543 miles; Merrill, 2nd, 512 miles. Eggers, who 'contested the race for his own amusement solely', gave his $500 prize to 'the German and other hospitals' in San Francisco. Eggers rode 'in the stiff English style - breast protruding, arms akimbo and at a most amazingly sharp angle...But he knows how to ride the bicycle' (*San Francisco Chronicle*, 3 Dec. 1879).

[87] *San Francisco Chronicle*, 3 Dec. 1879.

[88] *San Francisco Chronicle*, 12 Dec. 1879.

[89] Baudry de Saunier, *Les Mémoires de Terront.*

[90] Stanton's 50 mile (Aug. 1879, 2h 54m 343/5s) and 100 mile (Oct. 1876, 6h 45m) records were advertised as proof of the superiority of the 'Humber'. Stanton's advertising flyer was included as evidence among the legal documents described in footnote 88.

[91] In an interview in *Bicycling World* (15 May 1880), Pope stated that he was first attracted to the bicycle when he was visited by 'an English gentleman' in the summer of 1877, and he claimed to have had a bicycle made by July or August 1877. His first models were made by the Weed Sewing Machine Company at a factory in Hartford, Connecticut, and by the date of this interview he was able to claim that the Weed Company had 'more tools, dies and machinery used for the exclusive manufacture of bicycles than any other maker in the world; our facilities at the present time are equal to turning out twice as many bicycles as that of any other manufacturer'. In addition, he claimed to have 80 agencies 'in almost every State', and that 'three-quarters of the bicycles now sold in the United States are of our manufacture'. An article in *Bicycling World* ("A Great American Manufacture", 1 April 1881) gave details and pictures of an already substantial industrial enterprise.

[92] Charles Pratt scrapbook, Smithsonian Institution, Washington D.C.

[93] Advertising flyer and 'Motion papers for Restraining Order and Preliminary Injunction', filed 5 Feb.1880, motion granted 13 March 1880, both from National Archives, Washington D.C., copy supplied to me by David Herlihy. An interview with Colonel Albert A. Pope, conducted by the Editor Charles Pratt, was published in *Bicycling World*, 15 May 1880.

[94] Henry Sturmey, in *The Indispensable Bicyclist's Handbook*, for 1887, pp.346, "The Trade in America", had the following to say about Pope: 'The oldest firm in the American trade is the Pope Manufacturing Company, who commenced business some ten years since, and for a long time retained a monopoly by the purchase of every American patent touching on velocipede construction which could by any course of argument be construed to cover any vital portion of the modern machine. From time to time opponents sprang up, and although for a long time, by the expenditure of thousands of dollars, they were either crushed, bought off, or beaten out of the field, the company have at last found it advisable, either on the score of expediency or as a paying transaction, to grant licenses in certain quarters, and put up with the competition produced. The greatest rival of the Pope Company was for a long time the Overman Wheel Company...This firm is one of the most go-ahead in the States, and after a long and expensive litigation with the original firm, has arranged an armistice on mutual terms by which both firms use each other's patents'.

[95] "A Great American Manufacture", *Bicycling World*, 1 April 1881, pp.326-31. The article, written by *Bicycling World* editor Charles Pratt, could hardly be expected to have taken a critical stance on Pope's rapacious business methods since Pratt also worked as one of Pope's attorneys!

[96] Charles Pratt, *The American Bicycler: A Manual for the Observer, the Learner, and the Expert* (2nd Edition, 1880), p.205.

[97] Capt. Fred. Whittaker, *Handbook of Summer Athletic Sports* (New York, Beadle and Adams, 1880), p.46.

[98] Pratt, op. cit., p.228.

[99] *Journal of Sport History* 13, 1986.

[100] *St. Stephen's Review*, 30 April 1887.

[101] Prior to the founding of the L.A.W., there was in fact an American Division of the Cyclists Touring Club, and one of the founding fathers of the L.A.W., Frank W. Weston, continued as Chief Consul of the C.T.C. in the United States. See letter written by Weston, "The C.T.C. and the L.A.W." in *L.A.W. Bulletin*, 24 Dec. 1886.

[102] *Bicycling World*, 20 March 1880.

[103] Charles Pratt, *The American Bicycler*, op. cit., pp.245-247.

[104] The history of the foundation and early days of the L.A.W. is well documented and is told in a number of places. One reliable account is in Karl Kron, *Ten Thousand Miles on a Bicycle*, Chap. XXXVI, "The League of American Wheelmen", pp. 615-633. *Bicycling World* (successor to the *American Bicycling Journal*) contained ongoing accounts of L.A.W. activity and racing, and for a short time was published as the official organ of the League, which later contracted with *Amateur Athlete* to do the same thing before beginning to publish its own house journal, *League of American Wheelmen Bulletin*, in July 1885. A useful summary of League activity can be found in an Editorial, "The League in 1886", published in *L.A.W. Bulletin*, 31 Dec. 1886. The *Springfield Wheelmen's Gazette* is another important source. A wide-ranging chronological account of the L.A.W. from 1880 to 1896 was written by Abbot Bassett: published as "League of American Wheelmen: A Concise History of the Great Bicycle Organization", in the *Louisville Courier-Journal*, 9 Aug. 1896; it may well also have been published elsewhere.

[105] Quoted in Karl Kron, op. cit., p.616.

[106] Pratt, *The American Bicycler*, op. cit., p.155-6. An account of a ride from Fitchburg to Boston in April 1878 contained the following comments on the roads: 'we had a half-mile walk through gravel and loose stones', 'there was not a distance of two successive miles that we could ride without a dismount' and 'I dismounted by a side fall owing to an attempt to ride through sand several inches deep'. Road maintenance was done by local authority and was not kind to bicycles – 'For the past few weeks the country people have been doing what they call "making" roads; that is, hauling sand and dirt on the road and leaving carriages to roll it down, and it was an utter impossibility for anyone to ride through the stuff. Part of the way we rode on the turf in preference to the road, and for miles we rode in the wheel tracks about seven or eight inches wide'. (*American Bicycling Journal*, 27 April 1878).

[107] *L.A.W. Handbook*, quoted in Karl Kron, op. cit., p.622.

[108] Charles E. Pratt, op. cit., p.203-205. If any one book could be said to constitute an authority on early bicycling in the United States, it is this, published with the support of the Pope Manufacturing Company. 2,000 copies of the 1879 edition were sold, making a second edition necessary in April 1880. Pratt (1845-1898) was recognized upon his death at the relatively young age of 53 as 'a well-known lawyer and literary man...Mr. Pratt's

talents were largely bent towards mechanical matters, admirably fitting him for his specialty, that of a patent lawyer'. (Obituary, *Boston Sunday Globe*, 21 Aug., 1898). Another obituary can be found in *The Wheel*, 25 Aug., 1898. The Pratt scrapbook in the Smithsonian Institution, which could with great benefit to the history of the sport be transcribed and published, contains many interesting letters related to Pratt's central involvement in early cycling, and also photographs of him. An auction of Pratt's 'large and valuable library' was held in Boston on 4th-7th April 1899 (copy of Catalogue title-page in author's collection; whereabouts of original unknown).

[109] "The Political Power of the L.A.W.", *Outing* Vol.2, #2, May 1883.

[110] Detailed accounts of several of the largest and most prestigious clubs of this early period can be found as follows: "The Massachusetts Bicycle Club", *The Wheelman*, June 1883, pp.161-172; "The Springfield Bicycle Club", *Outing*, Aug. 1883, pp.337-344; "The Capital and the Capital Club", *The Wheelman*, Nov. 1883, pp.82-96.

[111] The most extensive account of the Good Roads Movement is Philip P. Mason, "The League of American Wheelmen and the Good Roads Movement, 1880 - 1905" (Ph. D. thesis, University of Michigan, 1957), which also has an excellent bibliography. See also W.H. Wheeler, "The Repair and Maintenance of Roads", *L.A.W. Bulletin*, 26 Nov. 1886, pp.534-537. A good recent account can be found in Glen Norcliffe, *The Ride to Modernity, The Bicycle in Canada, 1869-1900*, Chap.5, "Bad Roads, Good Roads", pp.149-177.

[112] Precise wording of the New York Athletic Club definition was as follows: 'An amateur athlete is one who does not enter in an open competition, or for a stake, public money, or admission-money, or entrance-fee, or compete with or against a professional for any prize; or has never taught, pursued, or assisted in the pursuit of execises as a means of livelihood'. (quoted Pratt, op. cit., p.162)

[113] *L.A.W. Bulletin*, 21 May 1886. The duties of the Racing Board were spelled out in detail in League regulations for 1886 published in this issue:

'(a) to the Racing Board are referred all matters pertaining to racing and the championships. They shall make all arrangements for the annual championships which are held under League auspices, and shall assign such other championships as are now or may be established, to be run under the auspices of such clubs or associations as they may consider most desirable, and under such conditions as they may deem expedient.

(b) It shall be their duty to make inquiry regarding any wheelman whose amateur status is questioned, and all protests or charges shall be entered with the Chairman of that Board, who will provide for an investigation by a member or members of that Board. Suspicious circumstances, which are in the judgement of any member of the Board sufficient to make the status of any wheelman a matter of reasonable doubt, shall be the basis of an investigation in the absence of formal protests or charges...

(c) It shall be within the province of the Racing Board to receive the request of any wheelman for reinstatement as an amateur...

(d) It shall also be within the province of the Racing Board to suspend from the race track..... any wheelman guilty of unfair dealings or ungentlemanly conduct on the track, or any wheelman who competes in a race not governed by the rules of the L.A.W...

(e) The Racing board shall have the power to make such rules for its government and the government of race meetings as may be deemed expedient...'

[114] Karl Kron, op. cit., p.629, and *L.A.W. Bulletin* for May-June 1886.

[115] *L.A.W. Bulletin*, 4 June 1886. An extended discussion of the problems of the Racing Board with the 'maker's amateur' problem, and the 1886 ruling declaring that many of the leading amateurs were 'professionals' is contained in the report presented by Abbot Bassett to the General Meeting of the L.A.W. in Boston, 29 May 1886 and reported verbatim in *L.A.W. Bulletin*, 11 June 1886, where a 'Legal opinion regarding the action of the Racing Board against the suspected parties' was also printed.

[116] *L.A.W. Bulletin*, 19 March 1886.

[117] Bates in *Bicycling World*, 9 July 1886, quoted in Karl Kron, op. cit., p.629.

[118] Advertisement in *L.A.W. Bulletin*, 6 August 1886.

[119] "The Springfield Bicycle Club", *The Wheelman*, Vol.2, #5, Aug. 1883.

[120] "One Man's Work for Cycling", *Outing*, Vol.13, #1, Oct. 1888.

[121] *Bicycling World*, 12 Oct. 1883.

Chapter Five

The consolidation and internationalization of the high-wheel sport from 1875 to 1885

1. Outline: the new sport expands and matures

The decade from the mid-1870s to the later 1880s is sometimes termed the "classic era" of high-wheel, or 'ordinary bicycle', racing. The design of the high-wheeler solidified as the bicycle for sport and recreation, and was as yet not seriously challenged by alternative designs, except for the emergence of the tricycle (which is discussed in Chapter 6). The sport enjoyed an exceptional expansion:

> Since bicycling in its modern development has obtained in Great Britain, no season has seen such a rapid and general advance as the season of 1880, now drawing to a close. Not only has an active proselytising from all other athletic sports gone on, but a distinctly consolidating and solidifying force has also been at work. A glance at our club directory will shew an immense increase in the number of these associations...[1]

The 'active proselytising' referred to here was the attempt of other clubs, athletic clubs especially, to include bicycle racing events in their programmes.

Such comments attesting to the rapid expansion of the new sport can frequently be found in the 1870s and 1880s, particularly in the annual trade reviews which charted its progress. While Britain's business empire was not immune to cyclical economic instability at home, nevertheless the bicycle industry - and the consequent growth of cycling as a competitive sport, a recreation, and of a new-found mobility - was creating an unexpected economic boom in Coventry, Birmingham, Wolverhampton, Sheffield and the other centres of the trade.

In 1878, in a major trade magzine, journalist H.H. Griffin wrote:

> Having just returned from an extended tour through the bicycle manufacturing district... we are very happy in being able to state the trade was never in a more healthy or vigorous state. It is, indeed, pleasant to be able to chronicle in these days of depression in business, wars and rumours of wars, strikes and failures, that there is at least one branch of national industry left us whose position is beyond being affected by the Eastern Question, or tightness of the money market. To show the numerical state of the bicycle trade we may incidentally say that the Coventry Machinists' Co. have made over 10,000 bicycles, Singer and Co. about 7,000, Haynes and Jefferis between the two. We thus get 25,000 from three makes.[2]

In another account from the previous year, Griffin reported 'a vast increase on all sides of the bicycle trade... the manner in which the leading and other firms have prospered is wonderful; in one case where eighteen months ago barely twenty men

found employment, now nearly five times that number are kept busy'. He estimated that there were in 1877 'about 100 makers in the trade', with the three largest of the nine manufacturers in Coventry (Coventry Machinists' Co., Singer, Haynes and Jefferis) employing a total of 400 workers.[3] In 1877, one estimate was that there were about 40,000 cyclists in the United Kingdom.[4] By 1885, another well-informed source wrote that:

> reliable figures are not readily available, but from information I have been able to gather it may be taken as a fair approximation that between 300,000 - 400,000 persons are to be found among the ranks of habitual cyclists... the number of machines placed on the market in the last ten years cannot be less than 300,000.[5]

As these figures indicate, the growth of cycling in the late 1870s and 1880s was remarkable. The bicycle industry thus expanded rapidly in a symbiotic relationship with the athletic and recreational consumers who bought, tried and tested its products. Industry and consumers were engaged in a mutually advantageous experiment.

Outside the bustling machine-shops of the manufacturers, the most conspicuous institutional aspects of the sport in Britain were the growth of the two national organizations, the National Cyclists' Union and the Bicycle (Cyclists') Touring Club, the formation of hundreds of cycling clubs many under the umbrella of the N.C.U., and the growth of a nation-wide programme of amateur and professional race meetings. The evidence points to the dominance of Britain both in the practical expansion of the bicycle industry and in the sport formation process. In continental Europe, particularly in France, but also to a lesser extent in Germany, Belgium, Holland, Italy, Austria and Bohemia, the sport grew along similar lines, although it varied in its dimensions from country to country, and developed later than in Britain. In all these European countries, British bicycles were at first in great demand, and British cycling was the model, although national industries also sprang up in response to demand. In the United States, the growth of the industry occurred with the Pope Manufacturing Co. as the leading manufacturer and the League of American Wheelmen, founded in 1880, as the governing institution of the sport. In 1881, the Pope Manufacturing Co. was described as 'the largest and best appointed bicycle factory in the world', capable of making 1,200 bicycles a month.[6]

In Britain, *The Cyclist and Wheel World Annual* for 1882 listed 189 'Metropolitan clubs' in Greater London, including a 'Press Bicycle Association - strictly confined to members of the Press', and 355 'provincial clubs' in the rest of the country, as well as 8 newly formed 'tricycle clubs'.[7] By 1889, the Cyclists' Touring Club was called 'the largest athletic association in the world', with a paid membership of more than 20,000 cyclists.The same source estimated that in 1885 there were 'not far from 400,000' cyclists in Britain, although it admitted that the figure 'is a rough one'.[8] Although only a small proportion of these cyclists rode competitively, such a large number of individual clubs and the large membership in two national organizations is further evidence of the overall growth and popularity of the sport at the time.

Racing enthusiasts trained and 'scorched' on the open road, with athletic and competitive priorities. Others preferred the more relaxed recreational and social aspects of cycling.[9] Individual tourists explored the extensive road network in Britain, while club cyclists were gregarious, and summer club runs and races were interspersed with social events - winter dances and smoking concerts. 'It is not a little surprising how gregarious are the manners and customs of the average amateur sportsman', commented a later editorial in *Bicycling News*; 'It is hardly too much to say that clubdom is absolutely essential to cycling, and that its wonderful popularity today may be to a very great extent ascribed to this cause'.[10] Joining a club gave social cohesion and both a rational and an emotional social purpose to the new athletic and recreational activity. Club members displayed pride of possession in the new bicycle and the mobility it gave, a pride which is illustrated in the many studio photographs of man and machine which survive from the period. Cycling was preeminently a public sport; wearing a club uniform was encouraged and was a way in which club cyclists demonstrated their respectability and their group solidarity in the face of criticism and resistance from other road-users (see Fig. 5. 1.) Others, often referred to as 'the unattached', preferred to remain outside this organized participation. The relative proportions of the 'attached' and 'unattached' are difficult to estimate (see further discussion in Chapter 9).

To ride the high-wheel bicycle, far from being quaint or romantic - as it has been retrospectively constructed in the popular imagination - was an expression of modernity and mobility for the riders of the 1880s, an energetic exercise and recreation with the

added spice of physical risk and travel to new places. The best riders tried their luck in formal competition, with pride in amateurism a strong driving force, and a few - the professional athletic elite - strove to earn their livings competing. Strictly utilitarian transportation was understated as one of the high-wheel bicycle's possibilities, though touring had both a recreational and a practical objective. Bicycle racing on the track was firmly established as both an amateur and a professional sport, with thousands of followers, a regular schedule of meetings and championships, a tightly organized structure, and an increasingly international upper-level of competition, while gruelling long-distance road races and time trials tested the strength and endurance of the toughest road competitors.

While bicycle racing on the road and track was dominated by the high-wheel (the 'ordinary') bicycle in the decade from about 1875 to 1885, cycling continued to evolve and change in its emphasis through the decade. With the addition first of the tricycle, then later in the decade of the 'geared up ordinaries' and the 'safety' bicycle, new designs of machine expanded the scope of racing and also competed for the consumer's attention, enlarging recreational and transportational possibilities. By the end of this decade, different designs of bicycles were pitted against each other in tests of speed and efficiency; promotional races staged by manufacturers were used to demonstrate the technological advantages of differing designs of bicycle and tricycle. With the advent of the 'safety' bicycle in the late-1880s, road racing became increasingly popular, and long-distance races especially caught the imagination of the public. These later developments will be further explored in Chapter 6.

Throughout this decade (1875 – 1885), it is important to state that high-wheel bicycle and tricycle racing remained a 'cutting edge' sport. There was nothing 'primitive' about early bicycle technology, which in fact advanced with intense technological application. Racing bicycles for the track were light and stripped of every unnecessary component, while those used for serious road riding were more robust, but still as light as possible. The technological challenge was to combine strength with lightness and to maximize the power output of the rider. The journalist A.J. Wilson commented in 1887 that:

> For racing purposes, specially constructed bicycles and tricycles are used. These are identical in design with the ordinary roadsters, but have no brakes to check the momentum, and their every part is made as light as possible, the thinnest

> gauge of steel tube being used; with very fine spokes; the lightest of bearings and forgings; and, in fact, with every part reduced in weight as far as is consistent with the strength requisite to withstand the strains of racing on smooth and level paths. Such machines, of course, would soon go to pieces if used on rough roads, and even on the path their life is but short; yet, when we look at the immense strain put upon a bicycle or tricycle by a powerful athlete, it is truly astonishing that they can be made so light and yet so strong.[11]

Technical improvements realized in racing were passed on to the recreational and utilitarian consumer. Hollow steel tubing, ball bearings, steering mechanisms, lightweight chains and efficient tensioned rim-and-spoke construction were examples of improvements made in the design of bicycles. The commercial character of modern sport is prefigured here – the bicycle industry was producing specialized sporting equipment which was tested by expert racers, who were then used to advertise its products to the public. The competitive spectator sport and the participatory recreational sport stood at the centre of multi-million pound/dollar businesses, and this economic relationship between competitors and the industry was an ever-present source of debate and controversy. There was constant tension and organizational wrangling between the 'pure', unsullied amateurism advocated by an activist such as George Lacy Hillier - which sought to distance the industry from the sport, and to keep money as much as possible out of competition - and a more realistic, pragmatic approach, which recognized the reality of 'maker's amateurs' and of sponsorship and professionalism on the French model.[12]

The 1880s were also marked by a struggle for the control of bicycle racing in Britain by the National Cyclists Union since other organizations, such as the Amateur Athletic Association, still claimed the right to promote bicycle racing, and there was also argument about which activities were likely to result in the expansion of the sport, or to demean it in the eyes of the general public.[13] Track racing, usually promoted by cycling clubs, continued as the mainstay of the sport. But concern about the negative public reaction to bicycle racing on public roads, which could be ruled illegal if it constituted 'furious riding', created a determination within the N.C.U. that road racing should be discouraged, eliciting a strong reaction from those clubs which made a speciality of road riding (discussed in detail in Chapter 7). In 1888, a new organization, the Road Records Association, was founded to promote individual place-to-place and long-distance record-breaking of individual riders on the road, outside the jurisdiction of the N.C.U.[14] The

strength of the specialized cycling media continued to be a crucial factor in the sport and industry, with editors playing an activist role. At the same time, championship-level racing between British and foreign riders played an important role in the growing internationalization of the sport.

Summary of Chapter 5

Section 2 (Bicycle racing infrastructure: road conditions and track construction) discusses the conditions encountered by the sport on the road and the need for specialized facilities for track racing. Spectators could not easily be accommodated during a road race, and conditions favourable to pure speed, and the presence of paying spectators, could only be created by the provision of a purpose-built, capital-intensive track. In terms of financial and social organization, gathering a paying audience around a track to witness racing was a more complex and expensive operation than organizing a road race – but the road race was more likely to be opposed by those outside the sport.

Section 3 (Competition in Britain: amateurism and professionalism in the 'classic' decade) analyses the increasingly elaborate codification of amateur track racing in the decade. Competition became structured, bureaucraticized, systematized, with many officials to supervise the proceedings. Control of the sport in Britain emanated from the National Cyclists' Union, whereas professional racing remained under rider, industry and promoter control. The professional careers of George Waller and H.O. Duncan are described and analyzed as emblematic figures of the new sport.

Section 4 (Competition in France: the tendency towards 'open' sport) compares and contrasts the parallel development of cycling institutions and competition in France, and the foundation of the Union Vélocipédique de France in 1881, based on the Bicycle Union and the League of American Wheelmen. In France, the distinction between amateur and professional was less precisely applied, and all riders were allowed to compete for prizes and cash. The development of international competition between France and England was thus discouraged by the failure of the controlling bodies to agree on a common definition of amateurism.

Section 5 (British 'Meets', the Springfield Tournaments and international world championship ambitions) discusses the growth of 'meets' and 'tournaments' in Britain and the United States which expressed the organized solidarity of cycling enthusiasts. As racing increased at these events, so too did international competition.The most important American tournaments were at Springfield, Mass., presided over by Henry Ducker. These events were elaborate international athletic enterprises which vied for 'world championship' status and were precursers of official cycling world championships and the Olympic Games. They were important contributors to the globalization of sport rivalries.

2. Bicycle racing infrastructure: road conditions and track construction

Although the well-established and impressive network of major and minor roads in Britain was often commented upon, road surfaces were often neglected, rough and unpredictable for cyclists on solid-tyred bicycles, and riding and racing on public roads had to take account of adverse conditions, especially in the winter and in bad weather. Road riding was regarded as a real test of strength, speed and endurance, and athletic performances on the road were judged by comparison with other modes of transportation, such as the horse-drawn coach and the railway. In England particularly, clubs held competitions on the roads, and long-distance place-to-place rides and 12 hour and 24 hour rides became recognized tests of stamina and riding ability. Stretches of well-maintained road, like the Great North, the Bath and the Portsmouth Roads out of London, were favoured for breaking speed records in the summer months, and feature prominently in the record books.[15]

Opposition was frequently expressed to racing on the public roads, however, especially to races involving group riding, and such road riding was limited in its attraction to spectators. Thus club promotions and contests of speed were more effectively run on an enclosed track where conditions could more easily be controlled, spectators accomodated, and the racing surface better prepared. 'Racing on high bicycles began to attract the attention of the public when proper cycling tracks commenced to appear in various parts of the kingdom. Previous to the construction of cinder tracks some racing had taken place on grass running tracks'.[16] The growth of bicycle racing as a spectator sport was thus dependent upon the provision of appropriate facilities, which involved an investment of capital, and where a progression from grass, to cinder, and later to specially laid wood and cement surfaces can be seen to have occurred.

In the United States, stretches of relatively good surface could be found on the outskirts of big cities, but further out, the condition of the roads was almost universally described as appalling.[17] One of the outstanding documents of travel by bicycle in America, Thomas Stevens' *Around the World on a Bicycle*, describes road conditions in the mid-1880s so bad that he had to walk for many miles, even in the East.[18] Bad road conditions, however, not only did not discourage the most athletic cyclists, but may indeed have served as an additional incentive to them to achieve newsworthy athletic feats. Century (one hundred

mile) rides by club members were documented in detail in the New England states, Washington, D.C., Cleveland, San Francisco - anywhere where clubs had sprung up. Typical speeds for a century on the road were between 7 and 10 m.p.h. Accidents were frequent and sandy roads sometimes necessitated miles of walking.[19] This general neglect of American roads led in the 1880s to the rise of the "Good Roads" movement within the League of American Wheelmen and the formation in 1888 of a National Committee for the Improvement of Highways. As early as 1881, Lewis Bates (President of the Michigan Division of the League and Editor of the *Detroit Post and Tribune*) spoke about the need for road improvement at the annual L.A.W. meeting in Boston. The bicycle, he said, was 'one of the great benefits bestowed on this country in that it educated young men to know the difference between a good road and a bad one'.[20]

In 1887, *Harper's Magazine* noted that 'the League of American Wheelmen members are everywhere serving the general public as well as themselves in striving with all their might to improve the conditions of American roads, and to keep them from the well-merited reproach of being the worst of those in use by civilized nations'.[21] In Britain, a Roads Improvement Association appealed to cyclists in the cycling press. (see Fig. 5. 2.) Although a detailed examination of the "Good Roads" movement is outside the scope of this account, it is important to take note here of this wider political involvement of the League, and its relevance to the growth of the sport.

In France, main roads were in general well maintained, which may partly explain the initial reluctance to build tracks and an early concentration upon racing on the road. Thomas Stevens, arriving in Normandy from England in May 1885, found the roads 'magnificent':

> A few days ago I called the English roads perfect... but the Normandy roads are even superior... There is not a loose stone, a rut, or depression anywhere on these roads, and it is little exaggeration to call them veritable billiard-tables for smoothness of surface. As one bowls smoothly along over them he is constantly wondering how they can possibly keep them in such condition.[22]

A French visitor to London told an interviewer from *Wheeling* in 1887 that racing was growing, especially in the Bordeaux region of south-west France, 'but the great fault is the want of tracks, the only three in France being at Bordeaux, Pau and Dax':

- 'Then what do you do when you want to give a race meeting?'

- 'The club giving the meeting has to get permission from the Town Council to enclose an avenue or road, and the expense of enclosing a place for one day is so great that the entries and gate-money do not cover the expense.'
- 'What do you think of our English tracks and roads as compared to the French?'
- 'There is simply no comparison; the English racing paths are as much superior to ours, as our roads are to the English ones.'[23]

In promoting the 1885 French championships in which champions De Civry, Médinger, Terront, H.O. Duncan and Garrard competed, the Véloce Club Bordelais struggled valiantly with less than adequate facilities. On 31 May, 15,000 spectators paid to see the racing, although 'the track was in an awful state, and after a few races, the surface cut up and made loose gravel holes all over the ground especially at the corners, where riding was indeed dangerous'. A few days later, however, at an evening 'fête vélocipédique' illuminated by electric light and attended by about 20,000 people:

> the arrangements were perfect and the illuminations magnificent, about two thousand coloured lamps, and as many Venetian lanterns, were strung over the track, from pole to pole, in a very pretty fashion, and gave a scene of splendour to the surrounding decorations of drapery, flags and banners of every country and colour. Chalk was strewn all over the track, and the electric lights shone brilliantly as daylight upon this white surface, making matters less dangerous for the racing division.[24]

In Agen, near Bordeaux, 'the Vélodrome du Gravier presented a very gay aspect, it being exceedingly well arranged... The track was in excellent condition, and up to the present day can rank as the best track in the country'. The track had a 'smooth surface', and was 'well arranged and in excellent condition - although the corners were sharp, they were easy to negotiate'. About 10,000 spectators were present, and 'the toilettes of the fair sex were exceptionally well to the fore, and gave an aristocratic appearance to the now popular sport'. As at Bordeaux, the 'night race meeting at Agen was lit by electric lighting which was 'upon a very large and gigantic scale; no less than 16 large globes of electric light were placed around the track to show the riders their way'.[25]

Such a progressive presentation of bicycle racing appears to have occurred in very few localities in France in 1885, and was exceptionally innovative.[26] The Bordeaux track was the first 'permanent' cycling facility to be constructed in France, and in 1892 it was reported that 'its example has been followed by several other cities. Some other tracks have already been constructed and others are proposed... but none of these are equal in

size and in their quality of construction to those abroad'.[27] With the building of at least three large new tracks in the early 1890s, however, Paris ensured that its facilities were world-class.

In Germany, where a British enthusiast, T.H.S. Walker, was editor of *Der Radfahrer* and President of the Berlin Racing Association (an organization to promote bicycle racing), there were about thirty tracks, some of which had cost as much as £1,000, which were 'the property of the clubs in the different towns' and 'are quite on a level with the leading clubs in England'. The Berlin track cost £700 and the four-lap to a mile Leipzig track had been built 'at great expense'. German racing was almost exclusively amateur in the 1880s: 'Professionalism simply does not exist here...no money prizes are given'.[28]

In Britain, the already mentioned Molineux track, with its ambitious promoter McGregor, certainly helped to encourage racing in Wolverhampton from the earliest days of the sport. In 1877, addressing an issue which was to continue to be of concern throughout the century, Alfred Howard wrote: 'The want of good racing paths is severely felt in various parts of the country, and causes much road racing, which we are afraid is likely to bring bicycling into disrepute. A race course...invariably fosters and encourages bicycling more than anything else. As proof of our assertion we point to Wolverhampton, where bicycling is popular amongst all classes'.[29] The two principal kinds of racing which occurred are deftly identified here: track racing demanded as fine a surface as possible, which had necessarily to be carefully and expensively prepared, while road racing used existing roads, and had to cope with whatever conditions were encountered, but risked alienating other road users and bringing cyclists in general into disrepute.

As is amply demonstrated in the above examples, the quality of high-wheel bicycle racing on the track in the 1880s increasingly depended, both for competitors and spectators, on the condition of the facility where the races were held, and the improvement of existing tracks and building of new facilities was a prominent factor in the sport. If good racing and high speeds (with the possibility of records) were to be realized, an improvised cinder or grass track normally used for horse-racing or other athletic events was unsatisfactory and dangerous, and a purpose-built, preferably banked, track provided much better possibilities. When in September 1880 English champion H.L. Cortis made an attempt to

achieve 'the unparalleled feat of Riding 20 Miles in an Hour', he chose the Surbiton Recreation Grounds Bicycle Track, 'acknowledged by all Bicyclists to be the fastest in England. (see Fig. 5. 3.) Not only was a hard, compacted surface needed for the actual racing, but also changing rooms for the cyclists and facilities for spectators including a grandstand, seating, railings and a refreshment booth. To build a good track was expensive, demanding investors, club backing and a well-managed organizational structure which would guarantee regular use of the new facility. Such a capital-intensive sports enterprise was a risky proposition. To succeed as a business venture, the track also had to be accessible to public transport, and was most likely to be situated either within or on the outskirts of an urban concentration. The building of dedicated cycling tracks in urban areas in the 1880s was evidence of the expansion and popularity of the sport, and could be achieved only with the growth of an effective management and financial infrastructure.[30]

In terms of the surface, what was necessary in the 1880s was 'a firm, hard and smooth surface, not liable to get loose in dry, nor sodden in wet, weather. A first-class track for cycling must be used for no other purpose, even running or walking races being detrimental to the surface by reason of the spiked shoes worn by pedestrians'.[31] By the mid-1880s, England had plenty of good tracks in the London area: Crystal Palace, Herne Hill and Alexander Park were the best, while Lillie Bridge and Stamford Bridge were considered less good because of inferior bankings. According to A.J. Wilson, writing in 1887, 'almost every city of size in England possesses some sort of a cycling track', and the same was true by then of most of the other principle European cycling countries and the United States, although Paris appears to have been late in constructing good tracks. In his account of his professional cycling career between 1880 and 1887, H.O. Duncan described racing not only at prominent British locations (London, Wolverhampton, Aberdeen, Edinburgh, Newcastle, Leicester) but also in France (Angers, Grenoble, Agen, Bordeaux, Toulouse, Pau, Montpellier, Narbonne), Italy (Turin), Germany (Berlin, Frankfurt, Munich, Bremen, Mannheim, Nuremberg, Augsburg) and Austria (Vienna, Linz).[32]

With the later explosion of popularity of cycling in the 1890s, the inadequacies of tracks constructed earlier were often remedied, and new, purpose-designed, state-of-the-art tracks frequently built and different surfaces, including wooden boards and cement instead of

compacted gravel, experimented with.[33] Following promoter H.O. Duncan's involvement in the building of the cement Vélodrome Buffalo in Paris (opened in June 1892), he engaged in a vituperative journalistic debate with Lacy Hillier (never one to avoid a good controversy), who had decided on a wooden board surface for the track at Herne Hill, about the relative merits of the two surfaces. Subsequently, with the introduction of the pneumatic tyre, cement was almost universally agreed to be the preferred material for outdoor tracks.[34]

American tracks were soon renowned for their size and quality. As early as March 1883, the official organ of the League of American Wheelmen, *Bicycling World*, published an extensive discussion of the intricacies of track measurement, emphasizing the necessity of standardization in measurement procedures in order to guarantee the authenticity of record rides.[35] When a party of English cyclists arrived in the United States in September 1884 to contest important races promoted by the Connecticut and Springfield Bicycle Clubs, they were impressed by the quality of the tracks in Hartford and Springfield (Massachusetts). In Hartford, 'by days of rolling and planing' the track 'had been made as hard and smooth as a floor. It was a revelation to the English wheelmen'.[36] In 1885, 'after many practical experiments had been made', a track of 'one-half clay and one-half gravel, thoroughly screened and mixed' was laid in Springfield. The track was again 'superb...the grandest racing surface in the world', and it was reported that 'many towns in the States are making tracks upon the same plan'.[37]

'For big things in the way of cycling tracks we must look to America', commented A.J. Wilson in 1887, 'where a specially-built track of half-a-mile in circuit exists at Springfield, in the State of Massachusetts, a city boasting of a cycling club so enthusiastic in the promotion of cycle races as to have achieved world-wide notoriety. Here, every autumn, an immense three-days meeting takes place, at which British as well as American riders compete for valuable prizes'. Wilson pointed out that several big meetings took place annually in the United States, 'which attract enormous numbers of spectators', but added that in England there was 'an uninterrupted series of Saturday afternoon meetings from May to September, it being no uncommon thing for two or three meetings in the London area to clash'.[38]

In fact, the number of excellent track facilities increased quickly in the United States in the 1880s, especially in New England, where they were organized by local clubs and supported by city councils and Chambers of Commerce. In Lynn, Massachusetts, the Lynn Cycle Club held a 'Grand Opening Tournament' for its new track on Memorial Day, 31 May 1886. 'Although it is the centre of bicycling, Eastern Massachusetts has not heretofore possessed a complete and modern cycle track', read an advertisement for the event; 'The necessity for such led to the formation of the Lynn Cycle Club Track Association, which with commendable energy and dispatch has evolved the finest bicycle racing track to be found in the world, being a dead level, three-lap track, of perfect design. The opening tournament will include the fastest men in America, and extraordinary time is expected'.[39] A similar advertisement for 'The Third International Tournament' of the Connecticut Bicycle Club at Hartford in August 1886 explained that 'Charter Oak Park has been greatly improved during the past year, and is now faster than ever'.[40] Such expenses, it is evident, had to be justified in economic terms, and both amateur and professional cyclists had to prove their worth by generating box-office revenue from spectators.

Outstanding distance rides on the road were much reported and recorded, but were by their nature more difficult to time accurately and convincingly. Since speed on a bicycle was so evidently related to surface, the improvement of tracks saw an increase in speeds and thus stimulated record-breaking attempts and the establishment of national and world records, and it is from the early 1880s that a consistent recording, timing and discussion of international bicycle records can be charted. Carefully measured tracks meant that distances as short as ¼ mile or as long as 100 miles could be accurately calibrated, and thus competition between English, French and American riders could be carefully documented, and international records established and compared. The world record times achieved at the 1885 Springfield Tournament, as will be discussed later in this chapter, led to an intense and acrimonious debate about the accuracy of timing methods.[41]

The whole question of track construction, of the size of a track, the banking, and the surface, was subjected to scientific examination. This was particularly true as the high bicycle was succeeded by the safety bicycle, the solid tyre gave way to the pneumatic tyre, and speeds greatly increased in the early 1890s. The track should be banked to enable

riders to maintain a constant speed, and eliminate the obstacle of difficult, dangerous corners. Fast speeds could be maintained, and skilful tactics employed, only on a well-designed, well-built track. Since the purpose of the sport was 'to allow talent and speed to shine through', wrote one French commentator, 'cycling tracks should be arranged as perfectly as possible, to ensure interesting and consistent results'. The subsoil needed to be properly compacted, and the surface neither too soft or too hard. The surface had to be 'affected as little as possible by rain, heat or ice; water should not remain on the surface, but run off it so that it dries quickly. These necessary conditions have to be especially studied and the engineers who have the responsibility of constructing cycling tracks have to understand them'.[42]

Whereas a rider on the road had to face all the vagaries of weather and geography, the intention of a purpose-built track was to exert control over as many of the variables of racing conditions as possible, to ensure an unmediated test of pure speed.

3. Competition in Britain: amateurism and professionalism in the 'classic' decade

Of the 1877 racing season, Alfred Howard recorded that 'the bicycle races which have taken place during 1877 are almost innumerable... In the Midlands and the North there have been very few athletic meetings at which a bicycle race has not been the most attractive feature of the programme. To bicyclists the most noteworthy facts are the increase of the race meetings of bicycle clubs'.[43] Charles Spencer wrote in 1883 that it was 'a proof of the high estimation in which the sport of bicycle racing is held by its votaries' that in 1881 225 bicycle race meetings, consisting of considerably more than 1000 separate races, as well as 30 tricycle meetings, had been held in Britain.[44] Through the 1880s, this number expanded and races were routinely documented in the cycling and local newspapers. However, the implementation of centralized bureaucratic control over this expansive sporting activity was not yet complete. In the early 1880s, when racing on the 'high wheel' bicycle was firmly established and a network of cycling clubs was doing much of the race promotion, a good deal of the racing was still being promoted by other athletic and social organizations, rather than under the jurisdiction of the Bicycle Union.

One of the principal voices of the sport, *The Cyclist*, for example, on 25 May 1881 advertised a total of twelve upcoming race meetings for bicycles (and also tricycles, which were just starting to be featured in racing), many of them for the Whitsun Bank Holidays on Monday and Tuesday, 6-7 June, and it is worth looking more closely at these (see Fig. 5. 4.). These were all races on a track. The Sutton Bicycle Club, the Stanley Bicycle Club, the North Kent Bicycle Club, the Lombard Bicycle Club and the London Bicycle Club all advertised bicycle racing, some specifying that the racing would be 'Under the Rules of the Bicycle Union, and open to Amateurs as defined by the Bicycle Union'. The Belgrave Road Grounds, Leicester, advertised three continuous days of professional and amateur bicycle racing, including the '1 mile professional race for championship belt', a '1 mile Bicycle Race for the Championship of Leicester', as well as a steeplechase, a 'Grand Assault at Arms', a 'half-hour go-as-you-please', and the 'Royal Original Clown Cricketers'. The 'Sixth Annual West of England Bicycle Race Meet' at Bristol was also advertised, as were the 'Athletic Sports' to be held in Liverpool and at Loughborough. The Coventry Independent Order of Odd Fellows were holding 'A Grand Fete and Amateur Athletic Sports', which included running, sack racing and hurdles, a bicycle exhibition,

and 'grand theatrical entertainment', as well as bicycle and tricycle racing, while at Leamington there was to be the 'Midland Counties Bicycle Meet and Monster Fete', including 'Leonati, the Bicycle Spiral Ascensionist, the Wonder of the Age', and 'a balloon ascent by Mr. Adams'. The Leicestershire Cricket Ground would be holding its 'Annual Amateur Athletic Sports', including cycling and running races, and the Tricycle Association advertised its 'Amateur Championship 50 mile Road Ride'.[45]

Clearly, although the sport had moved on greatly since the early 1870s and there was a well developed and widespread institutional structure by 1881, there were also many similarities with earlier racing in the integration of amateur bicycle racing into a wider programme of athletic, recreational and entertainment activities. Perhaps the most conspicuous feature of these events advertised in 1881 was the preponderance of amateur racing over professional. Indeed, the promoters at the Belgrave Road Grounds, Leicester were the only organizers advertising professional racing and cash prizes, with '£200 in prizes' in May 1881. This may perhaps have been indicative of a decline in the popularity of professional racing as participatory amateur competition increased. Alfred Howard's comment in 1877 that 'contrasted with professional, amateur bicycling has not made equal progress in the way of fast or sensational times, although there has been a much greater increase of amateur than of professional riders' tends to give support to this view.[46] Perhaps it would be accurate to suggest that a growing number of amateur competitors would increase local interest and spectatorship, but that those same amateur competitors would be most likely to be among the spectators eager to watch on the rarer occasions when leading professionals competed.

A race programme from only three years later illustrates the championship-level development of the amateur sport in the mid-1880s. In July 1884, the '25 miles Amateur Championship Race Meeting' was held at Gateshead-on-Tyne (near Newcastle, in north-east England) as one of the National Cyclists' Union championship series. It was held under the jurisdiction of the N. C. U.'s local Newcastle centre, which appointed a distinguished team of officials, including George Lacy Hillier (judge), Harry Etherington and Henry Sturmey (umpires), consisting in all of eight umpires, a timekeeper, a handicapper, a starter, six clerks of the course and four laptakers, an indication of how formalized the organization of racing had become. Fourteen riders contested the 25 mile

bicycle championship. In the programme, the N.C.U. amateur cycling championships were listed since 1878, codified according to distance, name of rider, club, time, date, place and category of event, confirming the legitimacy and status of the Championships (see Fig. 5. 5.). In 1878, there had been only two categories of N.C.U. championship events (2 miles and 25 miles bicycle), but by 1884, this had increased to seven (1 mile, 5 miles, 25 miles and 50 miles bicycle, 1 mile, 5 miles and 25 miles tricycle). The cover of this programme contained an advertisement for Humber bicycles, even though nearly all of the riders mentioned in it were amateurs and were not supposed to endorse a specific manufacturer (see Fig. 5. 6.).[47] A year later, a programme for national championship races in Birmingham in June printed an even more elaborate list of the structure of National Cyclists' Union officials for the event (see Fig. 5. 7.).[48] In an undated photograph from the same period, officials can be seen gathered to the right of the competitors at the start of a race (see Fig. 5. 8.) In all these respects, bicycle racing had quickly become structured, codified, bureaucratized, systematized – illustrating the wider developmental characteristics of sport in general during the period.

Whereas amateur racing was thus increasingly controlled, officiated and adjudicated by the National Cyclists' Union and its affiliated clubs in the 1880s, professional racing remained largely outside its jurisdiction (except when amateur versus professional events were specifically sanctioned by the N.C.U., as described in the previous chapter), and professional racing was circumscribed by the available pool of talent, the energy of promoters and the varying regional enthusiasm of local populations for novel and dramatic sporting events featuring 'star' performers. Contracts were drawn up and stakes held by trusted outsiders often associated with the sporting press. The dominance of Wolverhampton in the early professional sport led to the emergence of a riders' code referred to as 'the Wolverhampton rules' which governed conduct during competition and attempted to ensure fair play on the track. These rules stipulated, for instance, that: 'Riders must pass each other on the outside, and be a clear length of the bicycle in front before taking the inside; and the inside man must allow room for his competitor to pass'. In an attempt to keep the racing honest, the rules also included the stipulation that: 'If the judge is convinced that two riders arrange for the winner to divide any prize, they shall be disqualified, and the prize given for a race at the next meeting'.[49]

Professional racing appears to have been concentrated principally in the industrial, heavily working-class urban areas such as London, Wolverhampton, Sheffield, Leicester and Newcastle, although leading riders would certainly have travelled outside their home bases to compete, and the popularity of the professional sport may well have shifted and changed from place to place. Further detailed study of this early professional cycling competition is needed. An American report from 1884 maintained, not entirely accurately, that 'professional racing...is entirely confined to the Leicester and Newcastle districts, amateurism holding sole sway elsewhere'.[50] Another report spoke of a proposed tournament in North Shields, near Newcastle, a town which was 'situated in the midst of a racing community. We have within six or eight miles four tracks and two are in course of construction. The public of our district have made cycling their chief sport'.[51] The question arises, of course, whether this local writer was accurate in the mid-1880s in evaluating cycling above other sports (soccer or boxing, for example) in popularity and importance, and it is instructive to take the opportunity to examine Newcastle and its local cycling champion, George Waller, to assess the significance of professional cycling there.

George Waller (c.1855 - 1900) was one of the most experienced and prominent of the small group of leading professional high-wheel cyclists in the late 1870s and 1880s.[52] (see Fig. 5. 9.) His obituary said that 'it was as a cyclist that he made his name famous' and that 'as an athlete...he astonished all the world by his wonderful endurance'.[53] Waller was apprenticed as a stone mason and had worked as a diver, 'repairing the Tyne docks under water',[54] but was competing in Wolverhampton as early as 1876 and at a very young age worked as a professional for the Coventry maker, Hillman, Herbert and Cooper, whose bicycles he used in competition and thus advertised.[55] In April/May 1879, Waller won Etherington's Six Day race at the Agricultural Hall, London, with a total of 1,172 miles, and in September of the same year exceeded that distance in the 'Long Distance Championship of the World' with a ride of 1,404 miles, a previously unimaginable distance for a bicycle rider, beating the French rider Charles Terront by only 12 miles (see Chapter 4, section 3). This sensational record-breaking endurance ride was widely reported in the press, even in the United States. Returning to Newcastle, 'he made quite a triumphal procession. At many of the railway stations on the route, crowds of people awaited the arrival of the train and cheered him. The Central Station in Newcastle was

crowded by thousands of people'.[56] In short, Waller found that the London race had made him a local hero.

After this athletic and 'show business' success, which thrust the 24 year-old into an unexpected prominence, Waller decided to invest in bicycle racing in the north of England, competing in and promoting events. He acquired land to build a Bicycle Ground in Byker, Newcastle, where he promoted racing, and at the same time bought a large marquee 200 yards long (similar to and probably inspired by that used by Etherington on his American tour) with which he could promote racing by installing a temporary wooden track. With this he toured the north of England, mounting a show which was a combination of athletic contest and carnival or circus, with slow and trick riding, a brass band and other attractions. Other 'star' riders, John Keen, H.O. Duncan, William Cann and Tom Battensby were hired by Waller. After his Bicycle Ground failed and the cycling 'circus' was destroyed in a ferocious storm, Waller became a successful builder before suffering a fatal head injury in a pony-trap accident at the age of 45. Waller's business and career possibilities in sport, like those of Harry Etherington and other young men who were seized with enthusiasm for the bicycle at a young age, were inspired by the novel recreational and business opportunities which presented themselves. With money earned in the sport, Waller appears to have speculated in taking professional sport into the local community. A fuller, more precise, assessment of the role that he played in popularizing cycling in the Newcastle area, and its popularity in comparison with other sports, can only be made with further research.[57]

Further evidence of the rift in class and social expectations in Britain between 'gentleman' amateurs and the predominantly working-class professionals is provided by H.O. Duncan in his autobiographical account, *The World on Wheels*, which also contains many observations on the differences between the sport in England and France.[58] Following his racing career in Britain and France, which lasted from about 1880 to 1887, Duncan became agent in Paris for the Humber Company (1887 - 92) and later represented the Rudge company there. He became one of the most important and innovative promoters and managers of continental bicycle racing, a role he was enabled to fulfill because of his early experiences in professional racing, and he gained international fame managing French record-breaker Charles Terront. With bicycle racing as his chosen field, he

pioneered the practice of creating record-breaking 'sensations' for commercial publicity purposes.

Herbert Osbaldeston Duncan (1862 - 1945) came from an established Leicestershire family, and his grandfather was 'owner of the best stable of race-horses in England'.[59] According to his own account, Duncan did not need to race bicycles to earn his living, and in this respect (and in his upper-class background) was untypical of professional cyclists in general. He began his career as an amateur in England, became a professional in 1880, and was one of the first English cyclists to race in France, where class distinctions in the sport were not so finely observed as in England. He 'gave up all thought of a business career to gain sporting laurels in England, France, Italy, Germany and Austria'.[60] His most successful years as a competitor were from 1884 to 1886. He was professional 'world champion' at 50 miles in 1885 and 1886 and runner-up in various other short-distance championships in 1885 and 1886.[61]

Duncan's arrival among the professionals in 1880, he remembered, 'created quite a sensation in England. It was the first time that a young man of a family so honourably known had joined this class of racer'. He was:

> perfectly disgusted at being obliged to mix with the 'pro element' of those days. I did not realize what it really meant, whether it was the black atmosphere of Wolverhampton, the horrible dressing rooms or the men who were taking part in the handicap. Something strange had entered into this new sporting life for me and I tried to ascribe it to the fact that the spectators at Wolverhampton were different from those I had appeared before at Windsor or in London. I realized that the professional racing bicyclists were a class of men difficult to mix with and, as I have already hinted, the dressing rooms were filthy, barren and unfit for use. The first thing I did at Wolverhampton was to ask the proprietor of the grounds for a suitable room in his hotel in which to dress for the various heats during the three days of the mile handicap.[62]

Duncan described 'a striking example of how professionals were pictured in the minds of everybody in England in the early days', an incident which 'proved that the English professionals were not held in very high esteem'. He and French champion Baron Frédéric de Civry (who was living in England at the time) were engaged to compete at 'a very excellent gravel-laid bicycle track in the Sale Botanical Gardens near Manchester', and were offered accomodation at a hotel owned by the promoter. When they arrived at the hotel, he appeared flustered and invited them into the bar to wait while their rooms were

prepared. Later, over a glass of wine, the promoter 'confessed his astonishment at our appearance on our arrival. "I expected to see two strongly-built men with scarves around their necks - in fact, two pros of the type I am accustomed to meeting", he said... Arrangements had been made for two quite ordinary rooms, but when he found himself in the presence of two "well-dressed" men, he had given instructions that we should be given the choicest rooms in the hotel'. Duncan wrote that he was so affected by his social alienation from the English professional scene that he 'decided not to race again as a professional in England, and during the whole of 1881, I refused to race anywhere in the country'. Having inherited a fortune from his family at the age of 21, he 'felt completely independent of this professional stigma which had practically poisoned my sporting career', and preferred to live and compete in France from then on.

Duncan's contact with the more rational, 'open' French sporting scene confirmed him in his dislike of the class-bound British professional scene. In France he 'found there was practically no such division between amateurs and professionals and the regulations only made a distinction between juniors and seniors. Cash and objets d'art, medals etc were offered as prizes by the bicycle clubs who organized the races'. He concluded that:

> the cash prize system and the payment of expenses in an open honest manner is the real solution of the progress of international sport...Because a few gentlemen desire to retain their status purely as amateurs, the National Cyclists' Union has drawn up drastic regulations to govern these few towards maintaining their select seclusion to the detriment of the whole sport in general and the 'professionals' in particular...The word 'professional' should be entirely discarded and abolished forever and some suitable designation invented to cover all other racing cyclists under a proper classification.[63]

Duncan's anomalous position with regard to the English cycling scene serves to emphasize the deeply-rooted class distinctions which characterized it, in particular its tendency to encourage, exalt and codify amateurism as a superior, desirable kind of athletic activity and to look down upon professionalism. Because Duncan was untypical of how professionals usually were and were thus expected to be, he found the stratified British sport hard to accept and therefore preferred to live and race in France, where a less class-conscious sport structure prevailed. His rejection of the then current amateur/professional dichotomy, his espousal of cash prizes in sport and his innovative approach towards the promotion of cycling, gave him an unusual status and an attitude which anticipated the much later 'open' structure of sport organization.

4. Competition in France: the acceptance of 'open' sport

A reliable, critical account of French cycling between about 1870 and 1890 has not been published to date in either French or English, in spite of a plethora of source material and a wealth of historical accounts from the 1890s. Much of the recent French history of the sport shows an approach based either on a concentration on a semi-fictionalized, neo-biographical style, or a tendency towards wide-ranging, over-theorized sociological accounts. However, a recent book by Alex Poyer, *Les Premiers Temps des Vélоce-clubs: apparition et diffusion du cyclisme associatif français entre 1867 et 1914* (2003) presents a more comprehensive, sociological and geographical account of French institutions and developments. The present account attempts to provide a brief survey of the main outlines.[64]

In spite of its early prominence in velocipede development, the French industry and sport was severely disrupted by the Franco-Prussian War of 1870 - 71, although the duration and geographical extent of this disruption has not been accurately chronicled. It appears to have been most severe in Paris and the industrial north-east, but to have had less impact in the regions, particularly in the Bordeaux area and the south-east. The non-essential young bicycle industry was interrupted by the manufacturing needs of the war in France and normal social and recreational activities were limited in the war zones.

Most contemporary British accounts asserted the superiority of the English bicycle industry and the dominance of English athletes, but this assumption was challenged by the French, creating a long-standing sporting rivalry. One of the leading 'French' competitors, James Moore, who won important races in France and featured in unofficial 'world championships' (using technologically advanced bicycles by French maker Meyer and Paris-based English maker Charles Garrard), was in fact an English ex-patriot based in Paris. Between 1870 and 1877, Moore won four of these 'championships' (1870, 1874, 1875 and 1877).[65] In 1874, following races for a 'championship cup' between French and English riders in Wolverhampton, where James Moore, John Keen and E. Shelton won the first three places, *Le Vélocipède Illustré* asked: 'For how much longer will the English riders go on outwitting the French on the bicycle? Who will come forward to beat these racers from the other side of the Channel?'[66] In 1878, an Editorial in *The Bicycle Journal* explained that 'the superiority of English mechanical arts and appliances' and 'the

practical nature of the English character' was responsible for 'the spread of their pastime'. In France, cycling 'seems to live a mere lingering existence; probably it was nipped in the bud by the Franco-German war; the absence too of a love of out-door exercise has doubtless tended to keep the sport at a low ebb in spite of the splendid climate'.[67] While this kind of chauvinism (which was expressed in editorials on either side of the Channel) now influences an objective evaluation of the level of sport in each country, it is clear that whereas there was indeed a competitive and recreational disruption in France, the energy for cycling did not flag in England in the early 1870s and that an experienced English champion such as John Keen was always very hard to beat. As far as machines were concerned, English bicycles were much sought after in France and sold through agents in Paris.[68]

In the late 1870s and early 1880s, clubs were actively formed in Paris and and French provincial cities, there was plenty of racing activity on both road and track, and a lively specialist press was created. According to H.O. Duncan's account of the period, however, there were few purpose-built tracks in France, and races were held 'upon the public promenades, gardens or military grounds. A long public walk or promenade was staked off with wooden railings and gaily decorated with national flags, coloured-paper lamps, ribbons and flowers'. We have already seen that in at least one location - Bordeaux - progressive presentation of bicycle racing took place, including the use of electric light for night-time meetings. Race meetings were organized by the local bicycle club, with local civic dignitaries involved, and the races 'formed part of the annual fêtes subscribed to by the leading trades people and the town itself and were held with luxurious surroundings. Many of the bicycle clubs throughout the country were exceedingly chic, rich and prosperous', particularly the leading Paris clubs, such as the Vélo-Sport de Paris.[69]

In this sense, outlined by Duncan, French bicycle racing appears to have developed differently from the British sport, with athletic cycling events tending to be based within local civic or religious (feast day) celebrations, rather than in the wider context of other athletic events. The scale of the sport in France appears to have been smaller than in England, less widely disseminated among the population and slower to expand. One French source, from 1892, remarked that 'it is only in the last ten years that the cycling

movement has really taken off...we are well behind our neighbours, the English, in this respect'.[70]

The Union Vélocipédique Parisienne was founded in 1876 and the French governing body, the Union Vélocipédique de France (U. V. F.), in 1881. Poyer explains that the U.V.F. was the brain-child of Paul Devillers, the editor of *Le Sport Vélocipédique*. It was inspired by the formation of the British and American governing bodies, and had as one of its intentions to build better relations with those national bodies, particularly over the definition of amateurism.[71] The U.V.F. began with nine clubs as members and increased by 1892 to 60 member clubs and in a tremendous spurt of growth to 179 member clubs and about 2,500 individual members in 1893.[72] A prominent publication from 1891 listed 270 French cycling clubs, with 18 in Paris, 5 in Rouen and Toulouse, 4 in Grenoble and Marseille and 3 in Bordeaux – few towns had more than one or two clubs.[73] Another, from 1892, agreed, quoting 260 total clubs with 15 in Paris. That same source, however, emphasized that England had more than 1,000 cycling clubs, with more than 280 in London alone.[74]

From the late 1870s, several outstanding French cyclists emerged who became contenders in fiercely contested professional 'world championship' competitions between England and France. These included James Moore, Laumaillé, Camille Thuillet, Frédéric de Civry, Paul Médinger, H.O. Duncan, Charles Terront and Jules Dubois. These professionals travelled widely within Europe to race, including Britain, France, Italy, Austria and Germany. De Civry and Médinger both spent time living and competing in England and H.O. Duncan lived in France. Following a racing tour in Germany and Austria in 1887 (encouraged by T.H.S. Walker, the English editor of the leading German cycling paper, *Der Radfahrer*), Duncan stayed in Berlin for three months to train amateur members of Berlin cycling clubs.[75]

In spite of the expanding professional sport, however, and the energetic racing activity within France, the equal participation of France and Britain in international amateur competition was prevented by the differing structure of competition in the two countries - British amateurs could not race in France without danger to their amateur status, and French riders (who were categorized only as 'seniors' and 'juniors', all of whom could

win cash prizes) could race in Britain only as 'professionals'. The situation was made more complicated by lack of agreement even within the U.V.F. northern and southern member clubs. According to a correspondent who wrote to *Wheeling* in 1892, 'the U. V. F. has thrown overboard all legislation of every kind upon the amateur question... For years past the amateur-professional difficulty has been the burning question in French cycling circles, never settled, always temporized with, until now amateurs and professionals are all one in a state of utter chaos'.[76] The irony of the situation, though, was that the best French riders were as good as the English professionals, whereas many of the English 'amateurs' ("makers' amateurs") were in fact as 'professional' as the French. Only bureaucratic definitions kept them from competing against each other, and discouraged the wider development of 'open' international competition.

5. British 'Meets', the Springfield Tournaments and international world championship ambitions

From the mid-1870s on, a significant feature of the socialization of British cycling was the holding of annual 'Meets', attended by club members and unattached enthusiasts, an expression of the organized solidarity of cycling as an athletic and recreational activity. The emphasis here was at first recreational and touristic rather than competitive, but the sport and its clubs were at the centre of attention of these gatherings.

The first of these was held at Hampton Court, near London, in April 1874, when 'some fifty well-mounted bicyclists rode in procession... amidst the applause of several hundred spectators'.[77] The events grew in size and importance. In 1876, 289 riders from 16 clubs, as well as about a hundred cyclists 'not enrolled in any club', attended. 'Vast crowds of people assembled to witness the spectacle, which was imposing in point of numbers and unparalleled in its novelty'. Further 'Meets' were held that year at Leamington, Bristol and Crystal Palace, London.[78]

The following year at Hampton Court, 41 London clubs and 20 provincial clubs totalling 1,028 riders gathered with about 200 'unattached' riders, while in 1879 73 London clubs and 23 provincial clubs gathered for a procession 'which pleased an immense concourse of orderly and well-managed spectators'.[79] From 1877 to 1880, similar 'Meets' were held in Scotland, at Edinburgh or Glasgow.[80] The 1880 Hampton Court 'Meet' attracted a total of 100 London clubs and 37 'country' clubs, with the Temple Bicycle Club (secretary, Harry Etherington) fielding 49 participants, and a total of 1,745 riders taking part in the procession.[81] Charles Spencer reported that at the 1882 'Meet', 'no less than 2,500 defiled before an assembly so numerous that it was impossible even to form an approximate estimate of their number'; 132 London clubs and 53 provincial clubs were represented.[82]

Another well-attended annual 'Meet' of cyclists was held at Harrogate, Yorkshire from 1877 onwards, organized by the Bradford Cycling Club, where parades, races and games were held over a period of three or four days at a temporary cycling camp and cyclists slept in tents, like Boy Scouts. At these events, the sport of cycling drew people away from their everyday concerns, and participants and spectators were united in a non-utilitarian celebration of health, fitness and club-based good fellowship, allied with

enthusiasm for the technological modernity of the bicycle. The events were also demonstrations of mass-solidarity in sport. Riders were encouraged to take pride in representing their clubs in uniform and the processions were choreographed for the most impressive effect. At a 'Meet of Bicyclists and Tricyclists' held in connection with the Leicester Bicycle and Athletic Sports in June 1884, the committee presented a silver bugle 'to the club most largely represented and presenting the neatest turn-out'.[83]

The idea of a 'meet' or 'camp', a temporary celebration of riding, competitions, displays and socializing rooted in club life, was a British practice which was soon incorporated into the American sport. 'Among all the outdoor sports, which, from their nature, call for a certain amount of communion among their followers, perhaps the one which appeals most to the spirit of good fellowship, developing generally into close friendship, is cycling', wrote a contributor to *Outing* in 1884.[84] From 1880 onwards, the League of American Wheelmen held an annual 'Meet' where racing and social events were combined in a week of activity.[85] These L.A.W. events and also the Springfield Tournaments, organized by the Springfield Bicycle Club at Hampden Park, Springfield, Massachusetts from 1882 onwards, epitomized the unfolding energy of American high-wheel bicycle racing. The Springfield Tournaments showcased the best United States and British riders and became the most important annual events where a high level of international competition was promoted, and where British and American times could be compared. Springfield was also the scene of the establishment of many American and world records between 1883 and 1886. The 'Meets' had thus evolved into important demonstrations of competitive riding and speed.

An Editorial in *The Wheel* called the first Springfield Tournament in September 1882 'the largest and most successful bicycle race meeting that this country has ever seen', and congratulated the Springfield Bicycle Club for 'undertaking such an enormous scheme, that will naturally advance the growing cause of bicycling'.[86] At the Tournament, George Hendee, a member of the Springfield Bicycle Club, broke the American ½ mile record. The 16 year-old Hendee was 'an early-to-bed and early-to-rise young man, temperate in habits, neither smoking, chewing nor drinking. He was always foremost in athletic sports, and was one of the leaders of Springfield high school in long and high jumping'.[87] The 1883 Tournament, another 3-day affair, included both amateur and professional events,

and was advertised as 'The Monarch of all, the Grandest, Greatest and most glorious Bicycle Camp, Meet and Tournament'. A $1,500 gold cup (the Columbia Bicycle Prize Cup) for the 20 mile amateur championship of the United States was awarded by the Pope Manufacturing Co., but 'it will probably not be so offensive to amateurs, or so conspicuous a piece of advertising, as to deter any wheelman from desiring to possess it, or any amateur racing man from competing for it'.[88] In the 10 mile event, 'ten of the foremost riders of the day were entered', making it 'without doubt the most exciting race ever witnessed'.[89] The ninth mile was decisive; 'the crowd saw that the real struggle had begun, and every man, woman, and child got up and yelled for all they were worth' as Hendee 'set a fast pace, and came to the finish ten yards in front of the plucky young Englishman, 'Doodle' Robinson'. There was great excitement: 'Hats, canes, and parasols flew up in the grand stand; old and young men jumped up and down, shook hands, hurrahed and cheered with all their lungs. Hendee, who bore his honors most becomingly, was carried off by his friends. Prize, a $300 gold medal'.

By the end of 1883, Hendee had won 28 first prizes and 3 second prizes, worth $2,600, held several world records, and was 'the acknowledged pet and pride of Springfield' and one of the best-known cyclists in America.[90] The 1883 Springfield meet was 'distinctly a triumph of American cycling', said *Bicycling World*, which 'proved that we are able to promote and carry out in this country a race meeting which will vie with any ever held in the older countries'.[91] (see Fig. 5. 10.)

The 3rd Springfield Tournament, in 1884, a 4-day event, was ambitiously advertised: 'The Springfield Bicycle Club will spare neither pains nor expense to make this the Great Cycling Event of the World for 1884'. $8,000 in prizes were offered and $20,000 laid out for the promotion. The Club boosted the event: 50,000 people, it was claimed, had attended the 1883 Tournament, and even more would attend 'the greatest sporting event of the year'.[92] Professional riders were invited to compete for substantial cash prizes in both 1883 and 1884, and the amateurs were rewarded with bicycle hardware and huge, elaborately decorated cups. 'The use of the cup as a prize for victors in contests of skill and strength dates back to the old Olympic games in Greece', explained *The Springfield Wheelmen's Gazette*:

> In the early Olympiads, the prizes were simply laurel wreaths, and the winners returning from the games were welcomed as greater heroes than even warlike conquerors. In later years, after the Greeks had acquired from conquered nations great stores of the precious metals, elaborate articles of gold and silver took the place of the laurel wreath. These trophies were most often in the form of exquisite design and delicate workmanship, and ever since the cup has been an approved reward in all athletic contests.[93]

This 1884 Springfield Tournament was an ambitious athletic event, and the 'throng' that gathered was 'cosmopolitan, with wheelmen present from all over the United States, Canada and England'. Visiting from England were professionals Richard Howell (Manchester) and Robert James (Birmingham), and amateurs Sanders Sellers (Preston), R. Chambers (Birmingham), G.H. Illston (Birmingham) and H.W. Gaskell (Birmingham) and 'they came to ride, not to disgust people with swaggering remarks, as some of the Britons did last year'.[94] On Thursday, 18 September, it was estimated that there was an attendance of 15,000 people. Total attendance for the four-day event was 40,000, earning the Springfield Bicycle Club $7,000. The 21 year-old Sellers, who had just set a new 1 mile world record of 2m 39s at Hartford, broke several other world records at Springfield and won every race in which he started, including a win over the reigning American short-distance champion, George Hendee. This was described as 'the smashing of a local idol, a catastrophe which the worshippers seemed to take more to heart than the idol did'.

For his efforts in America, Sellers won 'a $100 dollar diamond stud, a $100 Colt shot-gun, the Springfield club cup, a silver tea-service, a $50 marble clock, a pottery umbrella-rack and a $100 cup', while Richard Howell, a professional from Manchester, won $740 and a gold watch.[95] The *Springfield Wheelmen's Gazette* reported that at the event, all track records from ¼ mile to 10 miles were broken, as well as eight world records. The paper compiled 'a very complete and perfect report of the meeting... The timing is accurate, two men timing the first man, and one each the second and the third... The races were run on the new half-mile track, which is pronounced by racing men to be the most perfect track in the world'.[96] Praise for the event was hyperbolic; it was:

> undoubtedly the most notable occasion of the sort yet held in the world. The number, fame, and skill of the contestants, the excellence of the track, the completeness of the arrangements, the magnitude and character of the crowds witnessing the sport, and the results of the races, combine to make the occasion unique and memorable.[97]

There was rivalry between clubs in the promotion of prominent American events. In September 1884, the New Haven Bicycle Club gave a tournament at Hamilton Park, Connecticut: 'The New Haven Club is noted for its world-wide hospitality and the generous manner in which it entertains its guests...Racing men will find Hamilton Park to be one of the fastest half-mile tracks in the U.S.'[98] Earlier in the season, there were major tournaments at Pittsfield (Mass.), Cleveland (Ohio), Hartford (Conn.), Albany (N.Y.), a Pennsylvania L.A.W. division meet at Philadelphia and Germantown, and then the Springfield and New Haven Tournaments. But Springfield, heavily promoted, was the leading American cycling event, which 'was regarded in England as a matter of international importance...Springfield is known where it never was known before for any reason, as the great cycling center of America...In matters pertaining to the wheel, Springfield undoubtedly leads the world'.[99]

The 1885 Springfield Tournament marked a further intensification of competition between Britain and the United States. Comparative records of British and American record times were published in cycling journals on both sides of the Atlantic, and the September event was advertised as 'the one and only Great International Meeting for the Year', showing the desire of the organizers to promote a world-class event.[100] The Springfield Bicycle Club invited 'all the riders in the world, professional and amateur, to visit Springfield and contest in friendly rivalry for supremacy and honor'. The track had been improved and was expected to be 'at least 4 seconds faster, so that it will be possible for our racing men to go below 2m 35s for the mile', while improvements in management, 'and particularly in the matter of timing', had been made.[101]

The British 'invasion' of 1885, to compete at the Hartford and Springfield Tournaments, was led by promoter Harry Etherington, also the editor of *Wheeling*. Fourteen championship-level amateur and professional riders (including English title-holders Richard Howell and Fred Wood) crossed the Atlantic.[102] All the professional and amateur American and world records fell, suggesting that up to that time, 'most of our races have been simply a procession of wheelmen riding at a fair pace'.[103] Most dramatic was William A. Rowe's lowering of the amateur 1 mile world record to 2m 35 2/5s, as well as breaking the 3 and 20 mile records, feats which 'stamped him without a doubt the fastest

amateur bicycle rider in the world today... To the credit of America, it can be said that he is an American and rides an American (Columbia) wheel'.[104]

In England, *The Cyclist* published an article written by Lacy Hillier ("A Burning Question - The Records! What Are They Worth?") which questioned the accuracy of the world record times achieved at Springfield, accusing American time-keepers of incompetence and their watches of inaccuracy, and suggesting that it was in the interests of the Springfield Bicycle Club, at their 'big business meeting', to fabricate the fast speeds and that Harry Etherington was in some way complicit.[105] The article suggested that the fast times tended to favour the American competitors (even though British riders had won many of the prizes), and that American officials were dishonest in their measuring, timing and judging. The American press was incensed. 'Who is Mr. Hillier that he sets himself up as the great and only infallible cycler of this earthly planet, the god to whom all cyclists in America must bow in reverence?' asked Henry Ducker, editor of the *Springfield Wheelmen's Gazette*. *Cycling Times*, an American paper, felt 'considerable disgust at the manner in which some of the English cycling papers have expressed themselves'.[106] Chauvinistic claims became a part of the 'style' of high-level international contests.

Most annoying to Americans in Hillier's suspicions and accusations was 'the aspersion upon the honor of the wheelmen of America and particularly the L.A.W... It is for that body to judge whether the times made at Springfield are correct or not... To doubt them is uncourteous and insulting in the extreme and unworthy of a member of the British press'. The year 1885 had also been marked by the well-publicized completion by Thomas Stevens of his journey by bicycle across America.[107] *The Springfield Wheelmen's Gazette* was proud to editorialize that 'as the year 1885 is about to close, America holds all the important records...all accomplished by the energy, enthusiasm, and enterprise that are born of the American people, and are found in an equal degree nowhere else on the face of our globe'.[108]

National aspirations and rivalries, and the associated jingoistic journalistic posturing, were thus carried into the public arena through the medium of athletic competition. It is noteworthy that such expressions of chauvinistic athletic pride were expressed from both sides of the Atlantic within the new sport of bicycle racing. The Americans were seriously

challenging the British cyclists in a series of well organized, annual international promotions. The fast times at Springfield were the result of a good track and heated competition between well-prepared athletes. 'Our American racing men are only just beginnning to find out what they are capable of doing on the bicycle when thoroughly trained and carefully fitted for contests of speed and endurance. So far the Englishmen have beaten them at the shorter distances, but Yankee muscle and pluck are not going to be kept in the background for any length of time', said the *Mirror of American Sports*.[109] Amid the international controversy about fast times, after spending the summer in Springfield William Rowe was welcomed home in Lynn, Mass., where 'the platform at the depot was packed with humanity as the train approached', and thousands of people had gathered to greet him in Central Square.[110] The contested Springfield times were allowed to stand, and American manufacturers, particularly the Pope Manufacturing Co., advertised their victories in the cycling press.

The unprecedented success of the Springfield Tournaments was attributed largely to the entrepreneurial skill and energy of Henry E. Ducker, one of the original members of the Springfield Club, President of the Club from 1882 to 1887 and founder of the *Springfield Wheelmen's Gazette*: 'In his own town he has raised an obscure club to a position of such prominence as to be almost without a rival in the whole country'. Ducker spent in excess of $60,000 in promoting bicycle racing during his Presidency, and made a profit for his club. In 1883, Ducker 'raised the Springfield people to such a pitch of enthusiasm that, on the second day of the tournament, all the banks and principal manufacturies, many of the stores, and even the public schools, were closed'. Ducker understood the necessity for efficient promotion, financing and organization:

> Mr. Ducker is essentially an originator. Whatever tends to make a successful race meeting when traced back, nine times out of ten, will be found to have its impetus from him. The arranging of programs, track building, timing, scoring, novelty races, all bear his stamp. Everybody concedes that the Springfield tournaments were models; everything was managed with clockwork precision, and rarely was there a hitch in the program'.[111]

In 1886 Ducker ambitiously proposed that the next Springfield Tournament be considered a 'recognized championship of the world' which would 'establish beyond dispute who is entitled to the championship of the world, believing that these contests... will prove a means of introducing a friendship among wheelmen unknown to any other sport'. Early

that year, Ducker wrote to Abbott Bassett, Chairman of the Racing Board of the League of American Wheelmen, promising that:

> the Springfield Bicycle Club will do all in its power to assist the N.C.U. and the L.A.W. in uniting upon a plan to establish a recognized championship race of the world. The Springfield Bicycle Club hereby extends to the legislative bodies of the world a cordial invitation to send representatives to the fifth annual meeting of the club to be holden at Springfield, Mass... in the month of September 1886, and there to enter into a friendly competition for the championship of the world on such conditions as may be mutually agreed upon.[112]

Riders were to be invited from other countries, and expenses in the United States were to be paid. At the 1886 Springfield Tournament, the races were advertised as 'World Champion- ships', although the lack of a world governing body prevented formal recognition of this claim to the status, and there was always the considerable problem of enticing top riders to cross the Atlantic. There was also the continued question of defining 'amateurism'. A new category – 'promateur' - was introduced for 'maker's amateurs', into which stars such as Hendee and Rowe were put, and pressure on the event from bicycle manufacturers continued to exert a challenge to 'pure' amateurism. An editorial in the *Springfield Wheelmen's Gazette* from April 1887 maintained:

> Mr. Ducker well knows, as does any man who has ever had dealings with the racing men, that the word amateur is a FARCE of the biggest kind. Take a tournament of the size of the Springfield Tournament, and we can name one in which sixty-three different men were entered as amateurs, and only TWO (2) owned their wheels; the entire balance, sixty-one men, had their machines furnished by the manufacturers... neither Mr. Ducker nor the Springfield Club is to blame.[113]

That the 'makers' amateur' problem was as much of an issue in England at the same moment was described in an American report from 1888:

> Many first-class men have been removed from the amateur ranks by the suspensions of the N.C.U.. "Makers' amateurism" was their crime, and though many sympathize with them... still they were wittingly breaking the Union rules, and it was imperative – if amateurism were to exist – that they should be suspended. Most of them have accepted their sentence and turned professionals...[114]

In 1888, Ducker continued his push to claim 'world' status for American cycling events by promoting a three-day 'Annual World's Cycling Tournament' under the auspices of the Buffalo International Fair Association.[115] But in spite of attracting thousands of spectators to Buffalo, this event fell far short of a true 'world championship', since only two English

professionals and one French attended, the track was not ready, the weather was terrible and many contractual and financial disputes erupted. According to professional manager W.J. Morgan, 'Henry Ducker's reputation for veracity and management has received a shattering blow which will take years to regain'.[116] However, Henry Sturmey, the editor of *The Cyclist*, thought the event gave hope for the future:

> The interest which this Buffalo Tournament engenders once more turns our thoughts to that day in the dim and distant future when some universally recognized system of International contests may be arranged, when International championships shall be held in the different cycling centres of the world in rotation, and when each country shall be represented by a specially selected team of both amateurs and professionals.[117]

Both Springfield and New Haven, perhaps more so than the comparable English Tournaments, had about them an air of middle-class respectability, a large proportion of both competitors and spectators being from the urban professional classes, a result of their roots in Boston, New York and Philadelphia and the old university towns of New England. At the same time, a new kind of wide-ranging social democracy was implied by the presence of competitors from Chicago, Denver, St. Louis and other mid-western locations. On the East Coast of America, bicycling was certainly not viewed as a proletarian activity, and there hardly seem to have been enough professionals for them to be seen as a socially threatening presence, although the amateur sport was consistently suspicious of the 'maker's amateur'. The *Providence Journal* praised bicycle exercise in the following expressive phrases, emphasizing its following among the educated classes: 'It brings into play every muscle, expands the chest and fills out the unused air cells in the lungs, steadies the nerves and brings them into harmonious action with the muscles, purifies the blood and sends it tingling along the flaccid limbs, improves the digestion, increases the appetite, and gives a new tone and fresh vigor to all the vital parts. One of the keenest delights about the whole exercise is the after-glow'.[118]

At the Springfield Tournaments it was insisted 'that the men who enter for the tournament races should make a respectable and decent appearance as regards costume', and on one occasion it was remarked that 'without exception the amateurs were neatly dressed'. The Springfield Tournaments were attended not only by 'the most respectable and refined female society of Springfield', but 'many ladies came from a distance and expect to witness a contest of gentlemen of good taste, who know how to demean themselves in

good society... the Springfield Club purposes to keep that good character if possible, and proposes that those who enter the races shall be properly dressed'. Bare legs were discouraged, as were 'fancy circus tights'; encouraged were 'a loose woolen shirt, and drawers and stockings of the same material, elastic, comfortable and cool, entirely unobjectionable in every respect'.[119]

From 1882 to 1886, the Springfield Tournaments were expensively organized, elaborately choreographed, international athletic enterprises. They should be seen, in both their organizational intentions and their spirit of competitive 'friendship' between nations (as well as in the often-expressed chauvinism and nationalism), as precursors of the first official cycling world championships in 1893 and the first Olympic Games in 1896. It should also be stressed that the British-American sports rivalry/alliance which conceived the idea of and wished to preside over the institution of these 'world' championships was viewed as despotic by another European rivalry/alliance consisting of Austria-Hungary, Germany, France and Italy, which promoted various 'European championships' to contest supremacy within their own bloc, and which ended by wresting control from the British-American dominated International Cyclists' Association which was created in 1892.[120]

In 1884, a writer in *Outing and The Wheelman* noted that a Springfield clergyman 'remarked that he knew of nothing so nearly resembling the old Olympic games as a modern bicycling tournament', and suggested: 'Perhaps there may be some lessons for us in our modern tournaments. We may, perhaps, gain some hints of high and beautiful motives with which to invest our innocent and healthful recreations'. He went on to explore the history, the significance and the moral values of the ancient Olympics.[121]

The Springfield Tournaments, under the direction of Henry Ducker, were international events which vied actively for 'world championship' status. The 1885 1 mile event was touted in publicity for the Rudge company as having been 'The Bicycle Championship of the World', and the 1886 event was again advertised as the '5th Grand International Tournament' of the Springfield Bicycle Club, with a 'Grand One-Mile Race for the Bicycle Championship of the World'.[122] (see Fig. 5. 11.) Whereas the many other events at the 1886 Tournament were specifically designated as either 'amateur' or 'professional', Ducker challenged the prevailing tendency to separate amateur and professional classes by

giving the 'World's Championship' on this occasion a 'promateur' category, that is open to 'maker's amateurs' - amateurs whose true status was questionable. In the 'world championship' race, George Hendee was defeated by William Rowe, but unlike the fiercely contested 1885 races, the 1886 event was diminished in stature because many of the leading English amateurs were advised to stay away because of the risk to their status in participating in the 'promateur' events.

In their movement towards international competition and 'world championship' status, the Springfield Tournaments were typical of a global sport phenomenon which has now been well documented, and which was well illustrated within cycling in the late 1880s.[123] In 1885, the Springfield races were advertized in England as 'The Great International Races' and in 1886, the German Cyclists' Union announced 'Great National and International Races' in Berlin.[124] In April 1888, 'International Races' were held in Leicester and Jarrow-on-Tyne; in May 1888, a 'Munich International Tourament' was held; in June the same year, 'Great International Races' in Berlin and a 'Glasgow International Exhibition and Grand Amateur Athletic and Cycling Meeting' were held; in August, a 'National and International Two Days' Meeting' was held in Scheveningen, Holland, while in Birmingham, England a 'Grand International Cycling Tournament – England versus the World' was promoted by *Sport and Play*.[125] In September, as has already been noted, the 'International Tournament' was held in Buffalo. It was clear that a newly popular international element had been introduced into the sport of cycling at its most intense competitive levels.

The events and trends within cycling described in this chapter were part of a larger process of institutionalization and globalization of modern sport in Britain, France and America. Eric Hobsbawm refers to this process as 'the mass-production of tradition', which he sees as occuring on both a social and a political level. He comments on the speed with which 'in Europe sport in the modern form was a conscious import of social values and life-styles from Britain, largely by those influenced by the educational system of the British upper class'.[126] We have already examined the diffusion of British influence into the United States in the late 1870s in Chapter 4. A further example of this 'importation' of British sport can be seen in the case of T.H.S. Walker, who was influential in introducing amateur cycling into Germany and edited *Der Radfahrer*, the leading German cycling

magazine in the 1880s, as well as importing bicycles into Germany and building and managing a track in Berlin.[127]

Hobsbawm describes the growth of amateurism as 'a spontaneous attempt to draw class lines against the masses', a tendency that has been illustrated here in the conflicted attitudes towards professional cycling in Britain in the case of H.O. Duncan. Hobsbaum further describes 'an attempt to develop both a specific new bourgeois pattern of leisure activity and a life-style... and a flexible and expandable criterion of group membership', an analysis which well delineates the rapidly growing cycling club life of the 1880s and the exclusive sporting fraternities which massed at such events as the Springfield Tournaments and the League of American Wheelmen 'meets' in America and the Harrogate and other 'meets' in Britain, which have been described here.[128]

Technologically speaking, there was also energetic development of tricycles in the 1880s, parallel with the development of the high-wheel bicycle, and this will be more conveniently discussed in Chapter 6, section 2, although chronologically it overlapped with many of the developments discussed here.

6. Conclusions

The nature of high-wheel competition:

This chapter has been concerned mainly with high-wheel bicycle racing, one of the most prominent, and arguably the most dramatic and exciting, of the newly emerging participant and spectator sports of the period. As has been previously emphasized, there was at the time nothing quaint or romantic about racing high-wheel bicycles; sentimentalization of the high-wheeler came only later, after it had slipped into the past and become technologically outmoded.

Throughout this decade, the machines demanded from manufacturers for competition and club riding on road and track had to be light and strong, and sporting priorities prevailed in general over practical utility.

Road and track surfaces were frequently bad in these early days of competitive and recreational cycling. Bad road conditions increased the merit of athletic rides. But satisfactory racing on an enclosed track demanded a good surface and capital investment in the sport, increasing the pressure in the direction of professionalism.

Amateur and professional racing became increasingly segregated, although top amateurs frequently slipped into the category of 'maker's amateur', those who accepted equipment, expenses and cash prizes although they were not supposed to do so.

Because the French did not accept the British definition of an amateur rider, and allowed cash prizes and equipment sponsorship in competition, the smooth flow of competition between the two countries was disrupted.

At its highest athletic level, the sport instituted well-contested national championships in Britain, France and the United States and produced a bevy of amateur and professional champions, many of whose names have been noted in this account.

The 'classic' period of high-wheel bicycle racing - the late 1870s and 1880s - can also be seen to have diversified as it expanded. Tricycle racing introduced another layer of

complexity into the sport, because tricyclists demanded their own events and added to the categories of speed and distance events for which championships could be awarded and records set, as well as providing a whole range of new recreational opportunities (see Chapter 6, section 2).

International competition:

As top-level international competition increased in the 1870s and 1880s, races were promoted as 'world championships' although there was as yet no world governing body to give them a mutually agreed legitimation. An intense rivalry developed between Britain and France dating back to the mid-1870s, and American riders were drawn into this international arena from the mid-1880s on, with important international contests promoted on American soil at Springfield, Mass. and Hartford, Connecticut.

Elsewhere in Europe (particularly Germany, Italy, Holland, Belgium and Denmark) and Australia, competitors were a little later in entering the international arena, because the sport developed more slowly there.

Road racing and road time-trials were hotly contested in Britain although important international contests were usually held on the track, road racing (with a few exceptions) not yet having emerged at an international level.

As the sport of cycling expanded and solidified in Britain, France, Germany and the United States in the 1880s, so international competition became more attractive, viable and potentially profitable as a spectator experience – and, indeed, nationalist and chauvinist feelings were encouraged and promoted, to give added emotion to international exchanges.

But international competition also lifted the sport to a new, high level of intensity, the athletic demands increased, and specialization became more inevitable. Professionalism expanded as manufacturers sought new and exciting ways to bring their products to the attention of the spectating public, and top amateurs were increasingly tempted into the professional ranks.

Notes to Chapter Five

[1] "Resume for 1880", in Lacy Hillier and Harry Etherington, *Icycles, The Christmas Annual of the Wheel World*, p.11.

[2] *The Bazaar, Exchange and Mart*, 17 April 1878. Griffin's figures refer to total production over the years to date of just these 3 important firms. He also reported here that 300 machines per week were made by the three Coventry firms quoted, a total of 500 per week total Coventry production. Wolverhampton (12 firms) made 100 per week; Birmingham (10 firms) also 100 a week; London (nearly 30 firms) added another 150 a week; rest of the country (45 firms) added another 150 a week – making a total of 1,000 machines per week. If the average value of a bicycle was assumed to be £10, then bicycles worth £10,000 were produced each week. Griffin thus calculated that 25,000 bicycles were being made in a year, worth £250,000. The 1877 total he estimated at 20,000 bicycles, 1876 – 15,000, 1875 – 10,000, prior to 1875 – 10,000, giving a total of about 80,000 bicycles manufactured up to 1878.

[3] "Introductory Notes", H.H. Griffin, *Bicycles of the Year 1877.*

[4] Quoted at the A.G.M. of the Southampton Bicycle Club, *Bicycling News*, 12 Oct. 1877.

[5] Viscount Bury, *19th Century Magazine*, Jan. 1885.

[6] "A Great American Manufacture", *Bicycling World*, 1 April 1881.

[7] C.W. Nairn and Henry Sturmey, *The Cyclist and Wheel World Annual*, 1882.

[8] Bury and Hillier, Badminton *Cycling*, 1889 ed., pp. 3 and 307.

[9] It is difficult to assess the number of cyclists who took part in formal competition as opposed to those who participated in club and recreational activities. An intensive study of the numbers of race meetings promoted and advertised in cycling journals (the vast majority of which can be documented), and an analysis of the numbers of events and actual entries in these events, might give approximate figures. Certain clubs specialized in racing and promoting races, whereas others were more interested in recreational and touring activities. An educated estimate is that the proportion of enthusiasts who raced in formal competition on a regular or occasional basis (as distinct from participating in club runs) may not have exceeded 10% of the total number of cyclists (for further discussion of racing versus recreation cycling, see Chapter 8).

[10] Editorial "A Cosmopolitan Club", in *Bicycling News and Sport and Play*, 8 April 1896.

[11] A.J. Wilson, *The Pleasures, Objects and Advantages of Cycling*, p. 65.

[12] As will be described later in this chapter, the French sport did not undergo a similar polarization of 'amateur' and 'professional' competitors in the 1880s. Competition was organized according to experience level, and prizes consisted either of cups and medals, equipment or cash. The participation of the industry was not regarded as intrusive and the categorization of the two classes, and their separation in competition, was not seen as a priority.

[13] 'Britain' was not a simple geographical category. Scottish and Irish cyclists resented control from London and argued for a measure of regional autonomy in the control of their affairs. There was an Irish Cyclists' Union and a Scottish Cyclists' Union. Even working-class Birmingham rebelled against the centralized control of the National Cyclists' Union. Through the 1880s, the Amateur Athletic Association continued to claim its right to promote bicycle racing as part of its athletic meetings, and there were occasional outbreaks of squabbling between the N.C.U. and the A.A.A.

[14] This organization still exists.

[15] See S.H. Moxham, *Fifty Years of Road Riding (1885-1935): A History of the North Road Cycling Club* (Diemer and Reynolds, Bedford, 1935).

[16] "The Trade and Racing", W.J. Grew, *The Cycle Industry* (Pitman, London, 1921), p.67.

[17] Discussion of the state of American roads can be found in Philip Mason, "The League of American Wheelmen and the Good Roads Movement, 1880 – 1905, Ph. D. thesis, University of Michigan, 1957. Mason writes, 'At the beginning of the 19th century the roads in the United States were so bad that it was cheaper to send goods by ship 3,000 miles to Europe than to transport the same commodities overland for more than 30 miles. One road authority declared in 1854 that "the common roads of the United States are inferior to those of any other civilized country"'.

[18] Thomas Stevens, *Around the World on a Bicycle* (Scribner's, New York, 1889).

[19] See, for example, the report – "The Notable Runs and Excursions of 1883", *Outing and The Wheelman*, Feb. 1884. The writer conducted a survey of 'over three hundred clubs in the United States' in compiling this article. Non-competitive, organized century runs tended to level the distinction between racing and recreation – they were athletically

challenging, but without a finishing order. Many accounts of races and rides over American roads were published in the pages of *Bicycling World* in the 1880s.

[20] Quoted in Philip Mason (Footnote 16 above), Chapter 3, "Origins of the Good-Roads Campaign of the League of American Wheelmen, 1880 - 1888". See also Lewis Bates, "Effect of the Bicycle on Our Highway Laws", *The Wheelman*, Oct. 1882, pp.40-44 and Lewis Bates, "Good Common Roads and How to Make Them", *Outing*, Dec. 1884, pp.194-200.

[21] Quoted in *L.A.W. Bulletin*, Feb. 1887.

[22] Stevens, op. cit., p.104-5.

[23] "A Frenchman on French cycling", *Wheeling*, 28 Sept. 1887.

[24] "Racing at Bordeaux", p.799 and "Racing Under the Electric Light at Bordeaux", *The Cyclist*, 10 June 1885, p.800. I am assuming that this French visitor's 'only three' tracks in France should not be taken as absolutely accurate, since the citation in Endnote 23 mentions a fourth track at Agen, near Bordeaux.

[25] *The Cyclist*, 1 July 1885, p.895.

[26] The electric lighting is also reported in H.O. Duncan, *The World on Wheels*, p.319.

[27] Author's translation: *La Vélocipédie Pour Tous, par Un Vétéran*, Paris, 1892 (reprinted by Éditions du Layet, Cavalière, 1987), p.245.

[28] *The Cyclist*, 26 Aug. 1885, p.1110. *The Cyclist* (9 Sept. 1885, p.1185) reported that the Berlin track (organized by resident English entreprenuer, T.H.S. Walker) was 'a real beauty, and would very decidely open the eyes of some of the English riders who fancy the Germans know little or nothing of racing. The path is over 19 feet wide and about 400 yards round, with excellently planned corner-ends, well banked, and two long straights'. It was surfaced with 'broken bricks, clay and ashes, which apparently binds well, and makes an excellent surface, standing the enormous amount of work thrown upon it well, as there are some 55 share-holders in the company owning the path, and they all have the right to go and bang round by the hour'.

[29] Alfred Howard, *The Bicycle for 1877*, p.10.

[30] See G. Lacy Hillier, "The Classic Tracks of London. Their history, peculiarities, legends, and frequenters, with brief notes of feats accomplished and records made thereon", a series of articles in *The Wheel World*, March, April, May and September, 1886.

[31] A.J. Wilson, *The Pleasures, Objects and Advantages of Cycling*, op. cit., p.63.

[32] Duncan, op. cit., pp. 316-320.

[33] Wilson, ibid, p.63. An index of British tracks in Lacy Hillier's Badminton *Cycling* (1889 edition) lists tracks at the following locations, several of which were indoor: Agricultural Hall, London; Alexander Palace, London; Aylestone Road Grounds, Leicester; Belgrave Road Grounds, Leicester; Bridlington Quay; Cambridge; Sophia Gardens, Cardiff; Coventry; Crystal Palace; Hampden Park, Glasgow; Jarrow; Kennington Oval, London; Lillie Bridge, London; Lincoln; Long Eaton; Lower Aston Grounds, Birmingham; North Durham, Newcastle; Oxford; Paignton; Stamford Bridge, London; Surbiton; Taunton Athletic Grounds; Wallsend; Weston-super-Mare; Molineux Grounds, Wolverhampton. An account of the building of a significant track in Nijmegen, Holland in 1885 is found in Gertjan Moed, "The First Cycle Track in the Nederlands", *Cycle History 10, Proceedings, 10th International Cycling History Conference.*

[34] See *Wheeling*, 25 July, 8 and 29 Aug., 5, 12, 19 and 26 Sept., 3, 10 and 17 Oct., 19 and 26 Dec. 1894. The debate was also conducted in *The Sportsman* and *Sporting Life*, and the issue was further discussed in H.O. Duncan, *Vingt Ans de Cyclisme Pratique*, Introduction, p.III.

[35] "Track Measurement", *Bicycling World*, 2 March 1883, p.199.

[36] "The Broken Records at Hartford and Springfield", *Outing and The Wheelman*, November 1884, p.128.

[37] "The Great International Races in America", *Wheeling*, 12 Sept. 1885.

[38] A.J.Wilson, op.cit, p.64.

[39] *The Cycle* (Boston, Mass.), 28 May 1886.

[40] *The Cycle*, 20 August 1886.

[41] Later discussion of track building can be found in M. P. Paret, "How to build a cycle track", *The Wheel and Cycling Trade Review*, 30 March 1894. In the United States in the 1890s, prominent tracks were built at the following locations: Woodside Park, Philadelphia; Willow Grove, Philadelphia; Tioga Park, Philadelphia; Asbury Park, New Jersey; Waverley Park, Newark, New Jersey; Vailsburg, Newark, New Jersey; Charles River Park, Cambridge, Mass.; Manhattan Beach, New York; Crescent Park, Providence, Rhode Island; Hampden Park, Springfield, Mass.; Coliseum, Worcester, Mass., and The

Oval, Rochester, New York. Temporary tracks were also frequently built for indoor, winter events.

[42] *La Vélocipédie Pour Tous, par Un Vétéran*, Paris, 1892, op. cit., p.239-40.

[43] Alfred Howard, *The Bicycle for 1878: A Record of Bicycling During the Past Year*, "The Year's Bicycling", pp.7-23.

[44] Charles Spencer, *Bicycles and Tricycles.*

[45] *The Cyclist and Bicycling and Tricycling Trades Review*, 25 May 1881. *The Cyclist* was an influential weekly journal edited in London by C.W. Nairn and in Coventry by Henry Sturmey.

[46] Alfred Howard, *The Bicycle for 1877: A Record of Bicycling for the Past Year*, "The Year's Bicycling", pp.7-10.

[47] National Cyclists' Union race programme from 26 July 1884 (author's collection).

[48] N.C.U. programme for 1 mile bicycle and 5 mile tricycle national championships; Aston Lower Grounds, Birmingham, 13 June 1885, author's collection.

[49] Nahum Salamon, *Bicycling: Its Rise and Development*, p.77 prints the following: 'Rules to be observed by professional riders. (These are the oft quoted Wolverhampton Rules).

1. Riders must pass each other on the outside, and be a clear length of the bicycle in front before taking the inside; and the inside man must allow room for his competitor to pass.
2. One attendant only shall be allowed in the dressing room, or on the course, with each rider, and he must not touch the machine at starting.
3. If the judge is convinced that two riders arrange for the winner to divide any prize, they shall be disqualified, and the prize given for a race at the next meeting.
4. If a rider fails to appear in time, his partner shall run with another. No walk over will be allowed.
5. In order that the course may be in as good condition as possible for competitors, no practising will be allowed on the day of the race.

The number of each rider will be shown on the telegraph-board at starting, and the number of the winner of each heat'.

Considering the range of competitive situations that were likely to have been encountered in professional contests (especially concerning the organization of money and questions of sporting behaviour during races), these 'Rules' quoted by Salamon

appear somewhat sparse and inadequate. This suggests that specific contests may have drawn up their own sets of rules.

[50] "British cycling in 1884", *Springfield Wheelmen's Gazette*, Dec. 1884.

[51] Letter from J. R. Hogg, of North Shields Bicycle Club, in *Springfield Wheelmen's Gazette*, March 1886.

[52] An accurate estimate of the number of professionals competing in Britain in the 1870s and 1880s is difficult to make. Alfred Howard's *The Bicycle for 1877* listed dozens of riders who competed in professional races at Molineux Grounds, Wolverhampton, but many of those were probably ordinary working-class athletes ineligible to race as amateurs. The number of professionals capable of earning a full-time living in the sport was probably rather small. A list of leading British high-wheel professionals from the 1870s and 1880s must certainly include: Tom Battensby (Newcastle), William Cann (Sheffield), F. Cooper, H.O. Duncan (mostly living in France), Harry Etherington (London), H. Higham (Nottingham), Richard Howell (Manchester, later moved to U.S.A.), Robert James (Birmingham), John Keen (London), F. Lees (Sheffield), James Moore (usually resident in Paris), R. Patrick (Wolverhampton), Walter Phillips (Wolverhampton), John Prince (London, later emigrated to the U.S.), S. Rawson (Derby), E. Shelton (Wolverhampton), David Stanton, George Waller (Newcastle) and Fred Wood (Leicester).

[53] "Death of Mr. G.W. Waller", *Newcastle Daily Chronicle*, 7 Nov. 1900.

[54] *Bicycling Times*, 11 Sept. 1879.

[55] Howard, *The Bicycle for 1877*, op. cit., listed Waller as competing at Molyneux Grounds, Wolverhampton in April, August and September 1876.

[56] *Newcastle Daily Chronicle*, op. cit.

[57] Many of the details of Waller's life have been taken from Helen Sinclair, *Cycle-Clips, A History of Cycling in the North-East.*

[58] H.O. Duncan, *The World on Wheels*, Paris, 1927, pp.315-22 and 329-38. Duncan's career is chronologically documented in two places: *World on Wheels*, pp. 316-320 and in *Le Sport Vélocipédique*, 6 Feb., 13 Feb. and 27 Feb. 1885.

[59] Duncan, op. cit., p.315; see also Andrew Ritchie, "The Cycling World of Paris", *The Boneshaker*, #143, Spring 1997.

[60] Duncan, op. cit., p.316.

[61] Duncan's early career is documented at length in four biographical articles by L. Saint-Savin and G. de Moncontour in *Le Sport Vélocipédique*, 6 Feb. 1885, pp.77-79, 13 Feb. 1885, pp.91-93, 20 Feb. 1885, pp.100-101 and 27 Feb. 1885, pp.114-115.

[62] Duncan, op. cit., p.335.

[63] Duncan, op. cit., p.336.

[64] Alex Poyer, *Les Premiers Temps des Vélоce-clubs: apparition et diffusion du cyclisme associatif français entre 1867 et 1914* (L'Harmattan, Paris, 2003). Several histories of French cycling were written in the 1890s, the most significant of which are L. Baudry de Saunier, *Histoire Générale de la Vélocipédie*; Bonneville, *Le Vélo, Fils de France* (Etac, Nice, 1938); H.O. Duncan, *Vingts Ans de Cyclisme Pratique* (Juven, Paris, 1897).

[65] See Appendix I for the championships and also Nick Clayton, "The Cycling Career of James Moore", *The Boneshaker* #125, Spring 1991.

[66] *Le Vélocipède Illustré*, 11 April 1874.

[67] *Bicycle Journal*, 8 Feb. 1878.

[68] In 1887, a French visitor was asked, 'There are very few French manufacturers, and most of the machines are of English make, are they not?' He replied, 'Yes, the only good French makers are Clement and Co, the others getting their machines manufactured in England, and the safety is chiefly ridden'. "A Frenchman on French Cycling", *Wheeling*, 28 Sept. 1887.

[69] Duncan, op. cit., p.336.

[70] *La Vélocipédie Pour Tous, par Un Vétéran*, Paris, 1892, op. cit., p.225.

[71] Poyer, p.59.

[72] Statistics from *Le Véloce-Sport*, 1 June 1893.

[73] L. Baudry de Saunier, *Histoire Générale de la Vélocipédie*, pp.301-309.

[74] *La Vélocipédie Pour Tous, par Un Vétéran*, Paris, 1892, op. cit., p.225.

[75] Duncan, op. cit., p.320. Walker was influential in the export of English cycling to Germany in the 1880s. See Rüdiger Rabenstein, "T.H.S. Walker – English Cycling Pioneer in Germany", *Proceedings of the 5th International Cycle History Conference*. Walker's career is further documented in Christiane Eisenberg, *'English Sports' und Deutsche Bürger, Eine Gesellschaftsgeschichte, 1800 – 1939*, p.225 and Rüdiger Rabenstein, *Radsport und Gesellschaft*, p.225-228. He would repay further study.

[76] "A Few Words on the French N.C.U.", *Wheeling*, 2 Nov. 1892.

[77] Charles Spencer, *Bicycles and Tricycles* (Cycling Classics reprint, pp.72-73).

[78] Alfred Howard, *The Bicycle for 1877*, op.cit., pp.7-10.

[79] Howard, *TheBicycle for 1878*, op. cit., p.22; "The Hampton Court Meet", *Bicycling News*, 16 May 1879.

[80] Hillier and Etherington, *Icycles*, op. cit., "Resume for 1880", p.15

[81] "Hampton Court Meet, 1880", *The Cyclist*, 26 May 1880.

[82] Charles Spencer, op. cit., pp.73-74.

[83] Advertisement, *The Cyclist*, 11 June 1884, p.593.

[84] "With the League of American Wheelmen at Washington", *Outing*, Sept. 1884, p.425.

[85] The L. A. W. Meets were held as follows between 1880 and 1892:

1. Newport, Rhode Island, May 31, 1880
2. Boston, Mass., May 30, 31, 1881
3. Chicago, Ill., May 30, 31, 1882
4. New York, N. Y., May 27, 28, 1883
5. Washington, D. C., May 19, 20, 1884
6. Buffalo, N. Y., May 26, 27, 1885
7. Boston, Mass., May 27-29, 1886
8. St. Louis, Missouri, May 20, 21, 1887
9. Baltimore, Maryland, June 18-20, 1888
10. Hagerstown, Maryland, July 2-4, 1889
11. Niagara Falls, N. Y., Aug. 25-27, 1890
12. Detroit, Mich., July 16-18, 1891
13. Washington, D. C., July 18-20, 1892

[86] *The Wheel*, 13 April 1883, p.6.

[87] *Springfield Wheelmen's Gazette*, May 1884, p.9. *The Springfield Wheelmen's Gazette*, first published in April 1883 as a club magazine, quickly achieved national prominence, with an 1885 circulation of more than 15,000, telling evidence of the quickly expanding American bicycle racing scene. An advertisement in the July 1884 issue stated that the *Gazette* 'will be national in its character, furnish the news in a compact and well-classified form, a firm upholder of the League of American Wheelmen, and an able exponent of the ideas and wishes of gentlemanly amateurs'. It also aimed 'to spread the feeling of good fellowship now existing among wheelmen'.

[88] "Wheel News, The Springfield Meet", *Outing*, Oct. 1883, p.69.

[89] *Springfield Wheelmen's Gazette*, May 1884.

[90] *Springfield Wheelmen's Gazette*, May 1884.

[91] *Bicycling World*, 28 Sept. 1883.

[92] Advertisement, *The Cyclist*, 11 June 1884, p.594.

[93] *Springfield Wheelmen's Gazette*, July 1884.

[94] These British cyclists all fell into the category of 'maker's amateurs' since their travel was paid for by the makers of the machines they rode. The L.A.W. did not object, but a strict interpretation of the N.C.U. amateur rules would have branded them as 'professionals'. The N.C.U. was still in occasional heated discussion with the Amateur Athletic Association about who had the right to define and legislate amateurism in cycling.

[95] "The Broken Records at Hartford and Springfield", *Outing and The Wheelman - An Illustrated Monthly Magazine of Recreation*, Nov. 1884, pp. 128-131. Sanders Sellers' father was 'a prosperous manufacturer of Preston, England'. Sellers' records in Springfield in 1884 were reported to have 'electrified and astonished the wheel world', but at the end of the year, 'having beaten the best men on the path, he has decided to retire upon his laurels', and he subsequently disappeared from the sport. See *Springfield Wheelmen's Gazette*, Dec. 1884.

[96] *Springfield Wheelmen's Gazette*, Oct. 1884.

[97] *Outing and The Wheelman*, Nov. 1884, p.145.

[98] *Springfield Wheelmen's Gazette*, July 1884.

[99] Editorial in *Springfield Wheelmen's Gazette*, Nov. 1884.

[100] *Springfield Wheelmen's Gazette*, March 1885.

[101] *Springfield Wheelmen's Gazette*, April 1885.

[102] The complete team consisted of amateurs Percy Furnival (aged 19), R.H. English, M.V.J. Webber, W.A. Illston (18), R. Cripps, R. Chambers, A.P. Engleheart, F.W. Allard and professionals Richard Howell, Fred Wood and Robert James (see *The Cyclist*, 26 Aug. 1885, p.1131).

[103] *Springfield Wheelmen's Gazette*, Nov. 1885.

[104] *Springfield Wheelmen's Gazette*, Nov. 1885.

[105] "The Springfield Tournament", *The Cyclist*, 30 Sept. 1885, p.1255.

[106] Quoted in *Springfield Wheelmen's Gazette*, Nov. 1885. A London correspondent to *Bicycling World*, 10 Sept. 1886, p. 464) wrote: 'It seems to many men on this side that the American papers have an exaggerated idea of the importance of Mr. Lacy Hillier's utterances. You may rest assured that his following is a very small one, and diminishing daily. International snobbery, as manifested by the pen of a small stockjobber, in an unpopular cycling paper, is as offensive to English as to American eyes...the man who prostitutes his paper to air his malice against America is a very poor journalist, a very ordinary Stock Exchange operator and merely a figure head to the paper'.

[107] Accounts of this ride across America were serialized in *Outing* from April to July 1885, and were continued as "Around the World on a Bicycle", from Oct. 1885 to June 1888. Stevens arrived back in California in Jan. 1887. The full account of the trip was published as *Around the World on a Bicycle* in 1889.

[108] Op. cit., Nov. 1885.

[109] *Mirror of American Sports* was the official publication of the Illinois division of the League of American Wheelmen; quoted in *Springfield Wheelmen's Gazette*, Nov. 1885.

[110] *Springfield Wheelmen's Gazette*, Dec. 1885.

[111] Howard P. Merrill, "One Man's Work for Cycling", *Outing*, Oct. 1888, pp.32-39.

[112] *The Cycle* (Boston), 9 April 1886, p.22.

[113] "Misguided Wheelmen. The Pure (?) Amateurs – Where Are They?", *Springfield Wheelmen's Gazette*, April 1887. Since Ducker was the editor of the paper, this was probably written by Ducker himself.

[114] "Cycling in England in 1888. A Retrospect of the Past Season", *The Wheel and Cycling Trade Review*, 9 Nov. 1888, p.240-41.

[115] Merrill, op. cit., *Outing*, Oct. 1888, and "Our Monthly Record", *Outing*, Oct. 1888, p.88-89.

[116] "Senator Morgan on the Buffalo Cycling Tournament", *The Cyclist*, 3 Oct. 1888, pp.1377-78.

[117] *The Cyclist*, 5 Sept. 1888, pp.1249-50

[118] *Providence Journal*, quoted in *Springfield Wheelmen's Gazette*, August 1884. These suggestions about the class background of both competitors and spectators in bicycle racing in the United States at this time, however, are not asserted with great confidence.

It would be safer to say that further research and investigation needs to be done into the class orientations within the new sport to be on firmer ground.

[119] *Springfield Wheelmen's Gazette*, August 1884.

[120] See Gherardo Bonini, "National Identity and Ethnicity in European Cycling before 1914", *Annual of the European Committee for the History of Sport*, 2001.

[121] "The Crown of Wild Olive", *Outing and The Wheelman*, Jan. 1884.

[122] Advertisements, *Wheeling*, 23 Sept. 1885; *The Cycle*, 20 Aug. 1886, p.346 and *L.A.W. Bulletin*, 6 Aug. 1886, p.137.

[123] See Maarten Van Bottenburg, *Global Games* (Chicago, University of Illinois Press, 2001).

[124] *Wheeling*, 12 Sept. 1885, p.325 and *Wheeling*, 9 June 1886, p.136.

[125] All references from *The Cyclist*, 1888.

[126] See Eric Hobsbawm, "Mass-Producing Traditions: Europe, 1870 - 1914", in Eric Hobsbaum and Terence Ranger, *The Invention of Tradition*. The classic study of the origins and nature of the athletic enthusiasm and influence which radiated from the British public schools, and had a global impact, is: J.A. Mangan, *Athleticism in the Victorian and Edwardian Public School – The Emergence and Consolidation of an Educational Ideology*.

[127] See Endnote 75 for references to Walker.

[128] See Hobsbawm, op.cit., "Mass-Producing Traditions: Europe, 1870 - 1914".

Chapter Six

Discourses about sport, speed, utility and safety: tricycles, 'geared up ordinaries', the 'safety' bicycle and the pneumatic revolution, 1885 - 1892

1. Outline: development and production of new and alternative designs

In terms of the development of bicycle technology, the mid- and late-1880s presents an extraordinary historical period of activity, of interaction between technology, design, sport and utilitarian transportation. It also presents an extraordinary moment of *variety* in the range and number of solutions being proposed to essential and crucial questions about human-powered transportation.

During this period, complex and far-reaching technological and design experimentation occurred within the bicycle industry, with constant practical input from participants within the sport, thinking which was of decisive importance in the future evolution of the bicycle and of the sport itself.

If bicycle racing had until the mid-1880s largely concentrated its attentions on the use of the high-wheel bicycle, the later 1880s were a time of diversification and new departures which brought about a plethora of radical redesigns of the machines used for racing (the 'tools' of the sport), and redefined the subsequent nature of the sport. The future possibilities of recreational and utilitarian cycling were also profoundly and permanently changed in this short period of intense industrial design and production.[1]

To reiterate once again, the suggestion is advanced here that bicycle racing was a crucially important and prominent proving ground for technological change within the industry, and that success in sport was a critical test of the merits of one design over another. The advertising pages of the cycling press were crowded with manufacturers' proud and frequently exaggerated boasts of the superiority of their products, measured in terms of design, speed, strength and reliability – claims which, of course, having been advanced in a highly competitive marketplace, have to be treated with caution by the historian. Successful championship and record rides were systematically used to create positive publicity, and collaboration between makers and leading riders was carried into the arena of retail marketing through this extensive advertizing.

In Britain, in addition to the regular programme of club races and National Cyclists' Union-sponsored championships on the track, organized road racing became increasingly popular and prominent in the 1880s, and clubs such as the North Road C.C., the Catford C.C. and the

Anfield B.C. began to specialize in this branch of the sport. The N.C.U. itself did not, however, promote or encourage road racing, and the growing popularity of racing on the road in fact presented the national organization with a serious public relations problem. Some races were organized by manufacturers themselves to test their products with the specific intention of garnering publicity, raising further official objections within the sport. N.C.U. amateur purists objected that true amateurs would not take part in such commercially-oriented races. But Harry Etherington, the editor of *Wheeling*, argued in favour of them in 1885:

> What is the difference between a prize given by a club or by a firm of manufacturers... are they in any respect detrimental to the sport? Far from it. In our opinion it is quite the reverse... Nothing can bring out the good points of a machine like a trial over 100 miles of straight-away road embracing surface varying from the roughest macadam to the smoothest gravel. The result of one of these competitions does far more good to wheeling than any amount of path-riding... and yet we are told that these races or rides do no good to the sport... The public are thus shown what the powers of a machine really are, and are not slow to profit by it.[2]

The continued popularity of road racing, particularly road racing with commercial involvement, became a divisive political issue within the N.C.U. and a challenge to its authority, a tension which led in 1888 to the creation of a new, breakaway organization, the Road Records Association, devoted to the promotion of racing and record breaking on the roads of Britain, outside the jurisdiction of the N.C.U. This divisiveness will receive further attention later in this chapter, and in Chapter 7.

In France and the United States, the growth of road racing appears not to have been greeted with organized opposition as it was in Britain, and from about 1890 onwards a shift in European racing emphasis appears to have taken place, with French road competition becoming increasingly prominent, as will be discussed later.

Radical design changes in the bicycle industry in the mid-1880s included the development of tricycles, of solid-tyred 'safety' bicycles like the 'Xtraordinary' (a lever-driven high-wheel bicycle), the 'Facile' and the 'Kangaroo' (smaller front wheels driven by levers or chains, see Figs. 6. 1. and 6. 2.), and ultimately the development of the rear-driven 'safety' bicycle.[3] The period from about 1884 to 1890 was one of extraordinary technological and design ferment, the industry producing, *at the same time*, high-wheel bicycles, tricycles of

many different types and, increasingly, many different versions of experimental 'safety' bicycles. Racing remained a dominant priority of the industry, a 'trial-and-error' method of testing machines for mechanical feasibility, strength, efficiency, reliability, comfort and speed, qualities which were also relevant to the marketability and user-friendliness of new ideas for the wider consuming public, who ranged from athletic, to recreational, to purely utilitarian users.

The wider market for utility cycling had still hardly been tapped by the end of the 1880s, and cycling remained largely a sport and recreation for the young and athletic, with the racing largely based in the clubs. While racing and riding in the club scene continued to be dominated by the high-wheeler, tricycles were also raced, and various 'safeties' were a serious challenge in record-breaking. Whereas races on the track were by then familiar tests of pure speed and endurance, rides on the road added the less controllable elements of landscape, weather and road conditions and were tests not only of the speed and endurance of the athlete, but of the mechanical reliability and especially of the hill-climbing and descending possibilities of the various novel designs of bicycle. (see Fig. 6. 2.) The implications here for the growth of a utility market were considerable.

Very soon after the 'safety' bicycle had rapidly become the almost universally accepted substitute for the soon-to-be-outmoded high-wheel bicycle, the pneumatic tyre was introduced and swept away the solid tyre, which had become an effectively outmoded technology by the end of 1891. The historical profile of the period examined in this chapter is one of fast-moving design, technological and economic events, and of animated discussion within the bicycle industry, the cycling press and the sport of cycling.

Outline of Chapter 6

Section 2 (New departures: tricycle racing and recreational tricycling) charts the emergence of the tricycle and its impact on racing and recreation. Sturmey spoke of 'a tricycle revolution'. The tricycle was safer than the high bicycle, and provided oppportunities parallel to it. Its cost effectively restricted its use to those with money. The tricycle provoked many technological improvements, and these were tested particularly in racing on the road. Competition, recreation and utility were the objects of attention from manufacturers.

Section 3 (Alternative designs: the 'Facile' and the 'Kangaroo') describes the road rides in which new designs of 'safety' were tested, and long-distance records broken. Technological advances achieved with these new designs - particularly chain development – were crucial in the production of the rear-driven safety and its originality.

Section 4 (The rear-driven 'Rover safety' and the first 'safety' races) covers the introduction of the "Rover safety', the most successful of the alternative designs. Better mechanical efficiency, producing not only greater comfort, but also greater speed, characterized this bicycle. With it, the design and configuration of the modern rear-driven bicycle came into focus. The superiority of the 'Rover' was demonstrated in a series of races on the road, which were criticized by proponents of amateurism as being too commercial and 'a scandal to the sport'.

Section 5 (The growth of road racing and foundation of the Road Records Association in 1888) gives an account of the 'mania' for long-distance road racing which occurred in the mid-1880s and was the testing ground for rival designs of 'safety' bicycles. It also explores the process of authenticating such rides, class-oriented opposition to such road riding from within the National Cyclists' Union, and the foundation of an alternative organization to support them, the Road Records Association.

Section 6 (Competition and the revolution of the pneumatic tyre) explores the repercussions of the rise of the 'safety' bicycle. Vibration was one of its disadvantages, giving rise to exploration of various kinds of 'cushion' tyres. Greeted at first with derision, Dunlop's fat, pneumatic tyres quickly began to win races over the old-style solid tyre, inaugurating a revolution within the bicycle industry and sport. The first demonstrations of pneumatic superiority were made in races in Ireland and England in 1889. The basis of the Dunlop pneumatic tyre industry was quickly established in Britain and the United States.

2. New departures: tricycle racing and recreational tricycling

Although some of the developments in tricycle technology occured in the late 1870s and early 1880s, it is appropriate to examine their contribution and significant role here since Chapter 6 concentrates overwhelmingly on the impact of alternative designs and new departures in cycling sport and recreation.

While energetic, athletic men mastered the high-wheel bicycle and spectators flocked to see the novel bicycle racing, tricycles were manufactured and marketed in Britain from 1876 onwards, went through intense technological development in the 1880s, and had a significant impact on the growth of the sport, carving out a parallel niche in the cycling marketplace and widening and diversifying the range and interest of the sport. They also moved cycling purposefully in the direction of recreation and useful, practical transportation and made it possible for women (who were excluded from high-wheel cycling except for a handful of professional exceptions) to participate at least on a very limited basis.

Bicycle makers took up the same challenge that had confronted the velocipede makers of the 1850s and 1860s, which was to make a successful, efficient, 3- or 4-wheeled human-powered vehicle, but the makers were by the late 1870s in a position to benefit from the technological gains achieved by the years of improvements in high-wheel bicycle technology.[4] Light, strong, all-metal wheels and ball-bearing systems were particularly beneficial, as of course were the by then well-established, relatively affluent bicycle factories with their experienced, skilled manpower, wide variety of machine-tools and marketing and advertising departments. Perhaps the most significant new factor in bicycle and tricycle design in the early 1880s was the widespread use of chains to connect crank systems to driving wheels and the rapid improvement in strength and flexibility of these chains, which were to be crucial for the subsequent development of the 'safety' bicycle.

In 1880, an annual review of the sport reported that 'tricycling has been making rapid strides, and is fast becoming a very important branch of the wheel sport... In and around Coventry it is quite a commonplace thing to see ladies and young girls on these neat machines, for which the City of Spires is celebrated'.[5] In 1884, when Henry Sturmey published the 4th Edition of his *Tricyclists' Indispensable Annual and Handbook*, he

documented more than 100 manufacturers of tricycles in Britain, with the majority in Coventry (20 makers, 120 varieties), Birmingham (12 makers), Wolverhampton (9 makers, 25-30 varieties) and London (12 makers, 30 varieties). These makers had, for about three years, he wrote, 'given almost their entire attention to the improvement of the once-despised machine, with a result which has not only astonished themselves, but opened up a healthy, invigorating, and economical pastime to thousands of men who would never have taken the trouble to learn to ride the bicycle, as well as to the fair sex, to whom the bicycle was, of course, a sealed book'. Use of the tricycle had 'spread throughout the length and breadth of the land', and was 'destined to effect a practical and social revolution, having a considerable and lasting effect on the physical constitution of the people'. Tricycling was now 'one of the leading pastimes of all classes, sexes and ages, and the heavy lumbering vehicle of yesterday has given place to dozens of varieties of light, airy, handsome structures, the outcome of the best mechanical skill in the country'. The greatly improved tricycle had 'opened up a new method of progression, a new sport, and a new branch of manufacturing industry, all of which tend in their own small ways to the elaboration and completion of the civilization of the world, and of England in particular'.

The improvements in the tricycle had thus widened the possibilities for recreation and sport, but due to the cost of the machine, it was more likely to be used by the aristocracy and the affluent upper-middle class:

> Many of the crowned heads of Europe are now possessors of the new vehicle for occasional use..., and a large number of the English aristocracy not only possess them for occasional use in private, but appreciate the pastime to the full, and put them to the legitimate use of exploring the country by their means. Retired military and naval men in hundreds patronize the new form of wheels, and professional and business men of all classes find the possession of a tricycle not only lessens their own labours and expedites their work, but affords them the means of pleasurable and health-giving recreation in their spare hours, whilst the ladies in great numbers already find in the new pastime an exercise that puts rinking and lawn tennis in the shade by its greater usefulness, greater variety, and more health-giving properties.[6]

Sturmey discussed the general advantages and disadvantages of the tricycle for various uses. On the plus side, it was more stable, more comfortable, less dangerous and 'of more universal utility' than the bicycle. On the negative side, it was heavier, slower, giving 'more frictional resistance by reason of a larger number of bearings and greater road

resistance', and more difficult to store. In terms of comparative speed, a stripped down tricycle ridden by an experienced rider was only marginally slower than the bicycle. The tricycle gave adaptability for gearing, and engaged many of the issues involving pedalling rate and wheel rotation which were to be of crucial importance in the rapid emergence of the 'safety' bicycle, including two-speed gearing. The growth of the tricycle thus marked a large expansion of both racing and recreational cycling, and of the industry.[7]

In the emergence of the tricycle, sport and recreation were once again crucial factors in influencing technical and manufacturing decisions, and the tricycle was quickly integrated into competition. 'In England there has been a rapid increase in the use of the tricycle within the past year or so, and this use has been stimulated in every possible way by manufacturers and others interested', wrote Charles Pratt, editor of *Bicycling World*; 'An esprit du corps has been developed among the devotees of this new favorite'.[8] This 'esprit du corps' was partly concerned with the need some tricyclists felt to distinguish themselves, as a superior class, from the bicycle-riding *hoi polloi*. 'Tricyclists will generally be of a better class than bicyclists, and will seldom consist of mere beardless youths, but men of position and experience, and above all, by the fair sex', wrote a correspondent to *Bicycling News*.[9]

In 1880, a letter was sent to tricyclist members of the Bicycle Touring Club, which said: 'It is desired by most Tricyclists to separate themselves entirely from the Bicyclists, who are a disgrace to the pastime, while Tricycling includes Princes, Princesses, Dukes, Earls, etc. There are none of the upper circle who ride bicycles'.[10] With the habitual clubability so characteristic of the bicycle movement, a separate Tricycle Association was formed in 1882, 'for the purpose of carrying out the Annual Meet and Championship Road Ride from year to year...and generally to advance the interests of tricycling', only to be quickly re-amalgamated with the Bicycle Union to form the newly-named National Cyclists Union in 1883.[11]

The energetic introduction of tricycles thus expanded the size of the market for cycles of all sorts to include younger women, children and older men, all of whom could for the first time take their recreation safely, respectably and comfortably in public. The tricycle provided the opportunity for women to participate in recreational club activity with men.

'Health is in fashion. Girls no longer pride themselves upon painfully pinched feet or spider-like waists', wrote a contributor to *Outing and The Wheelman* in 1884; 'Every form of exercise that takes girls and women out of doors is a direct power in making the health and happiness of the world. The growing use of the tricycle is a very good thing. There is no doubt that a woman's right to a healthy body is on the way to full recognition'.[12]

The 'sociable' tricycle, which seated the woman rider beside her companion (and later the tandem bicycle, which at first put the woman in front of the man and then later behind him), became popular and was frequently illustrated in the press. 'Cycling provides a healthy, invigorating, and entirely novel form of exercise for ladies, and if not overdone is of marked benefit to the majority, who obtain a breath of fresh air combined with a certain amount of healthy exercise and mild excitement', wrote Lacy Hillier:

> By far the larger number of our lady riders began their cycling experiences upon sociables or tandems, with their husbands and brothers, and thus gained by degrees the experience and confidence necessary for the fullest enjoyment of a cruise upon wheels, eventually attaining the self-reliance necessary for a trip upon a single tricycle. It is perhaps upon a tandem with a gentleman companion that the lady rider looks most at home, and when, clad in a well-fitting and becoming costume, she flits by on the front seat of one of these light and speedy machines, the most sceptical observer is converted to the same view.[13]

Women were still constrained, however, by their long skirts – 'the voluminous divided skirt has proved singularly ill-adapted for the work' - and the influential 'rational dress' movement for women within recreational cycling can be dated from the earliest women tricycle riders in the 1880s.

Here, in the case of the tricycle, new technology, expanded possibilities for recreational sport and a provocative social mobility were inextricably intermixed. Experience upon the tricycle thereby provided an opening for some women to move later to the more independent 'safety' bicycle.

The merits and demerits of different designs of tricycle were tested in races in England, though the Americans were not so involved in tricycle development, which appears to have been a mostly British preoccupation. In 1882, the National Cyclists' Union instituted an offical 5 mile tricycle championship on the track; by 1884, three distances were competed for, at 1, 5 and 25 miles. Records were quickly established, and as quickly

broken in the new field of tricycle competition. In July 1883, the London Tricycle Club held a 24 hour race for tricyclists in which 67 competitors took part, and the race was won by Tom.R. Marriott, captain of the Nottingham Tricycle Club, with a total of 218 ¾ miles.[14] In 1885, Marriott set a tricycle record of 6 days 15h 22m for the ride from Land's End to John O'Groats, which was actually faster than the standing bicycle record (James Lennox, July 1885, with 6 days 16h 7m). But this record was beaten a year later, when G.P. Mills rode a Beeston Cripper tricycle over 881 miles from Land's End to John O'Groats in 5 days 10h, beating Marriott by 29 hours.[15]

Because of the plethora of different designs of tricycles (both single and tandem), records were set on many different kinds of machines and races were used to evaluate the merits of rival design concepts. As with the bicycle, records continued to be compulsively attacked and beaten. For road riding, the tricycle was in one important respect superior to the high-wheel bicycle – because it was usually geared lower, it could be ridden uphill more efficiently. 'Bicyclists of fair skill are astonished to find that tricyclists can hold their own upon the road, and even beat them at hill work', wrote Lacy Hillier:

> When tricyclists can cover 150 or 180 miles within 24 consecutive hours; when many men, no longer young, can be found able to cover 70, 80, 90 or even 100 miles in a day; when members of the softer sex are able to cover similar distances, and surmount hills which are considered a fair test for the bicyclist's skill, it cannot be denied that the tricycle can claim an equal place with its two-wheeled rival.[16]

3. Alternative designs: the 'Facile' and the 'Kangaroo'

Long distance rides on the road of between 100 miles and 24 hours in length were established tests of endurance and mechanical reliability in Britain, and had a particular technological significance in the mid-1880s.

In the fall of 1883, J.H. Adams established a record road ride of 242½ miles in 24 hours on Ellis and Co's 'Facile' bicycle, a 'dwarf' ordinary bicycle with a treadle-driven, indirect front-wheel-drive mechanism, allowing a lower centre of gravity. In May 1884, Adams, of the Lewisham Bicycle Club, established another important record on a 46 inch 'Facile' safety bicycle made by London manufacturer Ellis. Adams rode the full distance of more than 900 miles from Land's End in the extreme south-west of England to John O'Groats in the far north-east of Scotland in 6 days 23h 45m. He set off on 17 May and arrived in John O'Groats on 24 May, accompanied by Tom Moore, of *Bicycling News*, who used the train and a bicycle to keep up with him. On this 'End-to-End' ride, Adams did consecutive daily mileage totals of 123, 111, 112, 92, 144, 134 and 204 miles, for a total distance of 924 miles, and was paced over parts of the route. On the seventh day, 'despite the fact that he had 200 miles of ground still to cover, over an unknown road and against a choppy wind, Adams announced his intention to reach John O'Groats that day or perish in the attempt'. The Ellis company made use of Adams' record in publicity for their machine (see Fig. 6. 1.).[17]

Adams beat the previous record, 9 days 4h 40m, established by James Lennox in 1883, by the large margin of more than two days. *Wheeling* thought the ride was 'by far the biggest thing ever done in the history of cycling, and proves Mr. Adams the best road rider in the world. The Facile bicycle, his mount, must also be awarded every praise...The Scotch roads were remarkable, as being much superior to the English, and beautifully engineered through the hills'. The ride was considered sufficiently important for 'a perfect portrait and biography of Adams' to be published by Harry Etherington's publications *Wheeling* and the *Sporting Mirror*. In October, 1884, 'the indomitable Adams' again broke the all-day (24 hour) record on the 'Facile', increasing it to 266½ miles. 'The firm of Ellis and Co. have every reason to be most thoroughly satisfied with this grand performance', reported *Wheeling*, 'which stamp the 'Facile' to be quite the machine of the road'.[18]

While the 'Facile' was one experimental new 'safety' bicycle, another was the 'Kangaroo', designed by William Hillman and first introduced commercially by the firm of Hillman, Herbert and Cooper in 1884, which differed from it in one important respect. While the cranks of the 'Facile' were connected to the front driving wheel by levers, the 'Kangaroo' was chain-driven (see Fig. 6. 2.). Chains were being increasingly used for the heavier, more cumbersome tricycles, but had not yet become generally used for the 'safety'. Irish journalist R.J. Mecredy wrote that the 'Kangaroo' was 'not generally used until comparatively recently', one of the possible reasons being 'that chains had not been got to work really well when these machines were first proposed'. In 1884-85, Mecredy notes, 'came the great Kangaroo rage. From being a totally unknown machine it suddenly jumped into popularity, largely owing to a number of road records which were made on it'.[19]

Chain technology, which helped to free bicycle design from the limiting direct drive to the front wheel, was being rapidly developed in the mid-1880s for drive mechanisms on tricycles and its practical significance was just beginning to be recognized in thinking about 'safety' bicycles, and subjected to minute examination (see Figs. 6. 3 and 6. 4.):

> Just as the modern tricycle owes its success to the development of the bicycle, so in turn the modern safety bicycle is indebted to the tricycle for its possibility; for until the tricycle had enabled manufacturers to grasp the chain-gearing principle thoroughly it was impossible to properly construct a chain-geared bicycle, and until the tricycle had so far familiarized the public with the lowly position of its rider that vulgar derision was silenced, nobody would look with favour upon the insignificant dwarf bicycle.[20]

A ride of 27 Sept 1884 was highly significant, when George Smith (Merry Rovers Tricycle Club) established a new 100 mile bicycle road record on the 'Kangaroo' of 7h 11m 10s, breaking the 'ordinary' record which had been standing since 1878 (7h 15m 18s; F. Appleyard, London Bicycle Club, in a race from Bath to London). This new record was set in a race organized by Hillman, Herbert and Cooper, the Coventry manufacturers of well-known 'Premier' bicycles and tricycles, specifically 'for the purpose of giving a public trial to their new safety bicycle, the Kangaroo'. According to *Wheeling*:

> that trial has succeeded beyond their most sanguine expectations. Even those who were most conversant with the merits of the little machine could not have believed that a 36 inch wheel could be driven for 100 miles along an undulating, and in many places rough and loose, road at an average rate of 14 miles an hour...The good people of Maidenhead had evidently got wind of the affair, as the streets were thronged, and murmurs of astonishment were heard on all sides at the marvellous rate at which the men were travelling.[21]

Other reports of riders of the 'Kangaroo' were equally positive. 'We regard the Kangaroo as being a thoroughly sound and reliable little mount', reported the *Cyclists' Touring Club Gazette*, 'likely to win its way more and more into popular favour, particularly among those who value their necks too highly to risk them upon the ordinary bicycle'. A correspondent wrote that he had 'ridden it since the end of January, often riding down hills at night in a most reckless manner, and I have not had one tumble...I think I should have quite come to grief on an ordinary machine'.[22]

These races were the scene not only of technological experimentation, but of athletic achievement and a Bohemian life-style, in which riders had to be well supported to have a chance of excelling on the road. The participants appear either to have been mostly middle-class young men, able to free themselves of other responsibilities, or men who arranged in one way or another (either openly or secretly) for financial support and gifts of equipment from the bicycle industry. Weather was crucial, and fast times could not be achieved following heavy rain. For J.H. Adams' Land's End to John O'Groats ride in 1884, Tom Moore of *Bicycling News* agreed 'to act during the trip as guide, philosopher and friend, taking business arrangements of the affair entirely in his hands'.[23] At the 24 hour race for riders of Rudge's 'Coventry Rotary' tricycle in 1885, the arrangements were 'the most complete, generous and perfect on record in connection with any such competition'. The winner, J.H. Adams, after riding more than 200 miles, reached Norman's Cross Hotel, near Peterborough, 'in very sorry order, having to be lifted from his machine'.[24] Respectable behaviour was also important, however, in order not to attract negative attention, particularly from the police; at the 'Kangaroo' record ride in 1884 already mentioned, 'the route was kept as secret as possible in order to prevent any interference on the part of the authorities', and at the North Road C.C. 24 hour race in 1887, 'at Biggleswade the cavalcade was reported to be led by two bicyclists with bare legs, who would have been disqualified if they had been identified'.[25]

4. The rear-driven 'Rover safety' and the first 'safety' races

The 'Kangaroo', first introduced in 1884, was a short-lived and successful attempt to overcome the limitations and dangers of the high-wheel bicycle. According to Mecredy, writing in 1890, the popularity of the 'Kangaroo':

> lasted for about a year and then, when all the makers were turning out large numbers, the 'Rover' type of safety burst on the public, and its popularity waned rapidly; indeed, it is hardly ridden at all now, and its manufacture has been quite discontinued, whereas the rear-driving type of safety has been found to be so speedy, as well as safe from liability to headers, that it has almost monopolized the public taste, successive improvements having resulted in the manufacture and use of this type far exceeding that of the 'ordinary' or tall bicycle.[26]

'Many novelties are again introduced', reported the *Cyclists' Touring Club Gazette* of the winter trade show, the Stanley Show, in February 1885, '...the most observable speciality is the safety bicycle, which every maker worthy of the name now considers it a religious duty to add to his stock'. The 'safety' bicycles shown there were of the 'Kangaroo' type, but among the 'novelties' was Starley and Sutton's 'Rover', which was introduced to the public for the first time.[27]

In April 1885, Starley and Sutton were advertising their 'Rover' as being 'as safe as any Tricycle and a better Hill-climber than any Bicycle or Tricycle yet made'.[28] Starley himself confirmed that better mechanical efficiency - hence in an athletic sense, a better application of power resulting in greater speed - *as well as* improved safety, was specifically intended in the design of the 'Rover':

> The Rover is absolutely the outcome of a determination to obtain advantage previously unknown in a bicycle. We felt confident that a large percentage of unused power could be utilized if the rider were properly placed, particularly with regard to hill-climbing. In this we were not mistaken, as the enormous success of the Rover undoubtedly proves. Being a very safe bicycle, we were induced to call it the Rover Safety, and have debated the matter on many occasions as to the advisability of dropping the word, which we usually have done in our advertisements.[29]

In another passage, addressing a later meeting of the Society of Arts, Starley said of the 'Rover':

> The main principles which guided me in making this machine were to place the rider at the proper distance from the ground; to connect the cranks with the driving wheel in such a way that the gearing could be varied as desired; to place the seat in the right position in relation to the pedals, and constructed so that the saddle could be either laterally or vertically adjusted at will; to place the handles

> in such a position in relation to the seat that the rider could exert the greatest force upon the pedals with the least amount of fatigue; and to make them adjustable also.[30]

'The 'Rover' was a phenomenon and merits careful critical attention, because it was with this machine, and others like it which followed it quickly onto the market, that the design and configuration of the modern rear-driven bicycle first became thoroughly evident, and the role of sport in this process of design selection should once again be emphasized. Racing was used to demonstrate its capabilities and potential, and successful results were then used in advertising and marketing it.

On 26 Sept 1885, George Smith broke his previous 'Kangaroo' record on the 'Rover' by the relatively small increment of 6 minutes, riding 100 miles in 7h 5m 16s, in a race specifically 'promoted by Messrs. Starley and Sutton to advertise their speedy 'Rover Safety' bicycle...Though fine, the day was hardly very favourable, the men receiving no assistance from the wind, while the roads for a good part of the distance were certainly not first class'. Road record rides were critically dependent on good conditions; recent rains producing muddy roads would slow the riders severely. The first prize was a gold watch worth 50 guineas, the second a racing 'Rover', while gold and silver medals went to all those finishing within 8 and 9 hours respectively. Even though publicity was the aim of the race, because of the frequently expressed opposition to road racing, 'the route had been studiously kept secret, so that there was no crowd at either the start or the finish'.[31]

H.O. Duncan wrote that 'taking due advantage of this success, Starley's firm availed itself of every opportunity of launching the machine upon the market, and the 'Rover' became a wonderful commercial proposition'.[32] Other accounts confirm the dramatic impact of Starley and Sutton's 'Rover safety':

> Even in their wildest flights of fancy Messrs Starley and Sutton could not have imagined the effect their Dwarf Safety - the Rover - would have upon the trade when they exhibited it at the Stanley Show of 1885. At that time riders were firmly wedded to the Kangaroo type, but the progress of the Rover in 1885, more particularly in the 100 miles Road Race, quickly turned the tide in its favour, and last year nearly every maker began making it. The natural outcome followed, an all-round improvement in this class of machine, and today it is the most popular in the market; even the ordinary seems to be getting into the background by reason of the extraordinary number of rear-driving Dwarf Safeties which are coming into use...An entire revision of the speed rates may be confidently looked

> for in the coming season, more particularly in dwarf bicycles. The marvellously light and highly-finished machines of today are the best part of 100 yards in a mile faster than the machines of last year.[33]

The 'Rover' was in competition with other rival designs of rear-driven 'safety' bicycles, particularly the Rudge 'Bicyclette'.[34] Duncan, a distinguished athlete and one of the most active competitors on the European scene, and an agent in France for the Rudge company, appears to have played a crucial role in using and publicizing the new Rudge 'Bicyclette safety' bicycle in France. At the end of 1885, 'he entered successfully into negotiations for the agency and received a sample machine at Montpellier', which he used in March 1886 to set a road record from Montpellier to Paris. *Wheeling* reported that this 700-mile, 6-day, ride was 'to show the wheeling division, and the public generally in the "land of frogs" what a "steely steed" is really capable of, from a practical point of view'.[35] In St. Etienne, en route, the machine was seen by 'a clever young cycle engineer named Gauthier' who promptly 'constructed a similar machine in his workshop', evidently the first such 'safety' machine made in France.[36]

Duncan's account suggests that the subsequent development of the 'safety' in France was as rapid there as in Britain, with French makers quickly supplying the home market and St. Etienne becoming an important bicycle manufacturing centre. In the summer of 1886, at international races at Auch, Toulouse and Mont de Marsan (all in the south of France), leading high-wheel cyclists Duncan, De Civry and Terront complained about a Belgian competitor, Eole, using a Rudge 'Bicyclette'. Judges initially found in favour of Eole's participation, but in a number of races the competitors on high-wheel bicycles refused to compete against the 'safety'. Their objections were directed not so much at the speed of the new machine as at the practical danger of the two very different styles and heights of machines being included in the same race. A 'Union' of professional riders was discussed, and those professional riders out on the lucrative European circuit appear to have been defending their professional reputations, and their very considerable investment in equipment (and the high-wheel style of racing), against the new 'safety'.[37]

Subsequently the Union Vélocipédique de France ruled that high bicycles, 'safeties' and tricycles should be separated in competition. This separation in competition on the track certainly succeeded in buying time for the high-wheel bicycle, whose competitive life was

thereby prolonged by about three years, until 1889. Duncan later wrote that 'this decision was a happy one for the high bicycle as it practically gave this machine a new lease of life which was maintained until the introduction of the Dunlop pneumatic tyre'.[38]

Advertising subsequently issued by Starley and Sutton in 1885 emphasized the speed of the 'Rover' just as much as its safety (see Figs. 6. 5. and 6. 6.) - 'The Rover safety holds the World's Road Records for 50 and 100 miles - The Fastest and Safest Machine ever made', announced an advertisement in November 1885.[39] Further advertisements in 1885 asked the public, 'Have you tried the 'Rover Safety'? If not, do so at once. Pronounced by experts the FASTEST CYCLE ever yet made'. Following his record ride, George Smith testified not only to the safety of the 'Rover' but to its speed: 'I am now thoroughly convinced the 'Rover Safety' is the fastest machine ever made...I am also convinced that all track records will be lowered upon it; nothing can live with it either upon the road or path'. Another racer, George Gatehouse, testified that 'the pace to be got out of it is extraordinary, and I have no hesitation in saying that it is the fastest 'safety' I have tried, and faster than an ordinary bicycle on the road'. In an attempt to convince buyers that the speed of their new bicycle was a significant selling point, Starley and Sutton published an illustration of a confident 'Rover' rider beating all the other designs of bicycles in a sprint.[40] (see Fig. 6. 7.) It is argued here that the dominant impulse behind the 'Rover safety' was the search for a safer machine than the ordinary bicycle, and it is clear that the margin of speed superiority in the new design was at the time a surprise.

However, this energetic participation of manufacturers in sponsoring promotional races and advertising the results was criticized by advocates of 'pure' amateurism, and the performances were referred to as being 'under the cloud of trade promotion', and having 'the taint of maker's amateurism', and in another reaction as 'a scandal to the sport'.[41]

George Smith's new 'Rover' record lasted only a month and on 20 October was again broken, in another taxing race promoted by Hillman, Herbert and Cooper. Edward Hale (Gainsboro' C.C.) rode 100 miles on a 'Kangaroo' in 6h 39m 5s, an improvement of 25 minutes (see Fig. 5. 8.). According to the *Wheeling* report, 'nearly all the competitors (of whom there were eleven) rode light racing Kangaroos, highly geared and averaging in weight about 33 lbs apiece. The Kangaroo Safety bicycle, in once more topping the record at

100 miles in such a decided fashion, has regained its lost laurels'.[42] However, it was more or less a last gasp for the 'Kangaroo', which disappeared from the record lists thereafter. Like nearly every other manufacturer, Hillman, Herbert and Cooper, the makers of the 'Kangaroo', also launched a rear-driven safety bicycle in 1886: 'While contending that no form of safety bicycle can equal the 'Kangaroo,' Messrs. Hillman and Co. recognize the existence of a demand for rear-driving safety bicycles of the 'Rover' type, and have accordingly perfected a machine... the 'Premier' safety... a fast at the same time as a safe bicycle'.[43]

Thus, as rival versions of the 'safety' bicycle entered the market-place, the leading contenders attempted to get an edge of speed over their rivals with slightly differing designs. But the general functional and performance claims of the rear-wheel chain-driven, 'safety' bicycle with equal-sized wheels were powerfully asserted over the 'ordinary' bicycle and proven in practice in competitive sport. An advertisement from January 1887 showed a club rider successfully navigating mud and snow on his 'Rover' safety while a high-wheel rider falls off and a tricycle rider lags behind (see Fig. 6. 9.).[44] This may have been an imagined scenario, but it expressed a truth proven in the reality of the marketplace.

Contemporary evidence amply demonstrates that the potential of the 'Rover safety' bicycle design was evaluated not only in terms of safety, but in terms of other athletic qualities: speed, comfort, vibration and hill-climbing ability. In Henry Sturmey's 1885 *Indispensable Handbook to the Safety Bicycle*, the 'Rover' was described as follows:

> ...by the use of two large wheels, and the placing of the rider between them, vibration over rough roads is saved, and by placing the rider over and almost in front of his work, the machine is made to go with great ease, and climb hills well. It is both fast and safe, and when used to the steering, possesses quite a number of before unseen merits.

Subsequently, in fact, increased vibration under certain road conditions was the most significant negative factor widely experienced with the 'Rover safety' and commented upon, a fact which stimulated the search both for suspension and for softer, 'cushion' tyres. Reflecting on the competition within the industry for a successful 'safety' bicycle, Henry Sturmey added:

> Whether the present rage for safety bicycles will last or no I cannot say, but I am inclined to think that it will be in a few seasons a case of 'the survival of the fittest' – that one or two makes which in the course of time prove themselves to

> be good, and to possess the best combination of real safety, with speed, ease and elegance, will remain, and good business be done; but that very many of those hastily flung together to catch the market at present will disappear rapidly.[45]

Two years later, in another edition of Sturmey's *Indispensable Handbook* series, the 'Rover' is referred to as 'the pioneer of this now universally popular style of machine. It led the way and others followed, and the makers have the benefit of a longer experience than any other. It is a thoroughly reliable and very strong roadster, and will be built to order either as a light roadster or racer at same price'. Henry Sturmey recognized the profound technological shift that had occurred, although at that moment he was reluctant to admit that it would become permanently popular among 'the young and active', and could not have forseen the rapidity with which the ordinary bicycle would be outmoded in the racing world:

> Since the appearance of the last edition, the modern safety has arisen and taken a firm hold on the popular fancy as being a happy medium between the bicycle and the more cumbersome tricycle. The front-driven dwarf machine, or Kangaroo-pattern, has come and very nearly gone... Its success was phenomenal, and it served its purpose well by preparing the popular mind for the reception of the rear-driver, which now holds premier position in popularity. The sudden and surprising demand for these machines has caused many to exclaim that the days of the ordinary bicycle are numbered, but in this opinion I cannot concur. The ordinary bicycle for the young and active is the most delightful form of cycle to possess.[46]

An analysis of all types of bicycles and tricycles shown by manufacturers at the London Stanley Show in February 1887 shows 313 different tricycles and 320 different bicycles. Of the 320 bicycles, the breakdown of types was described as follows: 'Ordinary, 148; Rovers, 108; other rear drivers, 5; Kangaroos, 22; other front drivers, 29; children's, 4; Dicycles, 4'. Starley and Sutton were the leading makers of the 'Rover type' with 11 models, followed by Hillman, Herbert and Cooper, with 6 models.[47]

As has been mentioned earlier, the essential development of 'safety' bicycle alternatives to the 'ordinary' bicycle appear to have taken place almost exclusively in Great Britian. Both France and the United States took British models, tested in competition on road and track, as their stimulus. In the United States, the *Springfield Wheelmen's Gazette* reported the 'Kangaroo' and 'Rover' safety races of 1884 and 1885.[48] The 'Rover safety' was being advertized by a Boston distributor in March 1886, and the 'Kangaroo', 'the Original Perfect Safety Bicycle, Faster than any Bicycle, Safer than a Tricycle', was offered by A.G.

Spalding by May 1886. In July 1886, Starley and Sutton themselves advertised the 'Rover', which had 'proved itself the fastest cycle in the world', in the *League of American Wheelmen Bulletin.*[49] Races contesting the superiority of the 'safety' and the ordinary bicycle do not appear to have taken place in the United States, although the American industry was quick to react to the design impetus from England with safety bicycles of American make.

The life of the high-wheel bicycle was extended in America by the introduction of an alternative design of high-wheel 'safety' which was never sold in Britain. This was the 'Star' or 'Eagle' design, which reversed the standard procedure of a large front wheel and a small trailing wheel by putting the small wheel at the front and thus diminishing the possibility of a header. The 'Star' design enjoyed brief popularity.[50] But a competitive segregation between high-wheel and the 'Rover' contestants sometimes was briefly created: at an international race meet in Buffalo in October 1888, 5 races were specifically designated for 'Rover' riders.[51]

In 1888, Harry Hewitt Griffin, in one of the leading annual surveys of the bicycle industry, reported, 'Taking the average through the trade, at least six dwarf safeties are now made to one ordinary, some makers having only one order in fifty for an ordinary. We have devoted fully four-fifths of our space to what is undoubtedly the most popular machine of the day', by which he meant the 'safety' bicycle.[52]

In a fast-moving technological development, the high wheel bicycle had essentially become outmoded from a design standpoint. The rear-driven 'safety' was safer, faster, more comfortable, more versatile. In all these aspects, competitive rides were the proving grounds which tested the various innovations.

5. The growth of road racing in the mid-1880s and foundation of the Road Records Association in 1888

Racing on the road grew in popularity following the universal adoption of the pneumatic tyre by 1890-91 and is discussed at length in Chapter 7. More appropriately covered in this chapter, however, is its earlier development. In Britain, road racing on the high-wheel bicycle, and record-breaking on the road specifically staged to test rival designs of the 'safety' bicycle, were described as 'a mania' in the mid-1880s.

Various routes could be used for record attempts, but attention was focused particularly on certain routes such as the Great North Road out of London, a long stretch of road in good condition, upon which fast times were more likely to be realized than anywhere else in Britain. One stretch was described as having 'a splendid smooth gravel surface', another as 'eleven miles of the best road in the world'.[53]

A.J. Wilson, journalist and enthusiast of athletic road riding, wrote that 'the manufacture, and fracture, of cycling road records is a decidedly modern, and almost exclusively English, species of sport'. Wilson made a distinction between track cyclists, who 'are delicately-trained men, so highly strung as to be susceptible to all manner of trifling influences which upset their form', and 'the road-riding crack' who:

> does very little 'training' in the athlete's acceptance of the term, his regimen consisting of hard riding, and plenty of it..., the hardening and inuring of his frame to fatigues and prolonged efforts, and the cultivation of the dogged pluck necessary to persevere against and combat the almost overpowering tendencies to stop and rest, or fall asleep, on a long journey.[54]

From Wilson's description, it is clear that the kind of riding he most admired was *long-distance* road riding.

Road racing, the sole domain of the high-wheel bicycle at the beginning of the 1880s, became the testing ground in the mid-1880s for rival designs of bicycles and tricycles, which were more appropriately and thoroughly evaluated under varied road conditions than on the track. The high-wheel bicycle was a notoriously poor hill-climber and the improved capability of the different alternative machines ('geared-up ordinaries', tricycles and 'safety' bicycles) to climb hills well was a very important consideration in road riding. 50 mile, 100 mile, 12-hour and 24-hour road races were a mechanical and athletic challenge, and a

mainstay of long-distance road riders. Even longer rides, culminating in the ultimate British endurance event, the Land's End to John-O'Groats ('End-to-End') ride, became athletic objectives.

Shorter races were at first paced, massed-start events, but the fast-moving cyclists, grouped together on the road, their numbers increased by the presence of pacers, were frequently objected to and created a public relations problem for the sport. Individual record attempts were less conspicuous. For official recognition, records on both track and road had to be submitted to the Records Committee of the National Cyclists' Union, which, amid a plethora of rules and regulations, had the power 'to decline to accept any claim where they consider that the interests of the sport would not be promoted'. The Committee was at first useful in insisting on rigorous standards of proof for the timing and supervision of road record attempts, whereas earlier records had sometimes been uncritically accepted - on the basis, for example, of postcards mailed from locations along a route. Such records were described as having 'grotesque looseness' by A.J. Wilson, who thought 'the new order of things' was 'infinitely preferable to the old'.[55] But the N.C.U. did not agree to give its sanction to road records for very long.

In reaction to official resistance to road racing within the N.C.U., the North Road Club was formed in October 1885, instigated by A.J. Wilson, specifically for the purpose of 'encouraging and facilitating fast and long-distance riding' (a member had to have ridden 100 miles in a day), and its first official run was in February 1886.[56] The members of the club 'form the bulk of the habitual sojourners at the various hostelries along the route', among which was the Salisbury Arms, Hatfield, 'a coffee-tavern considerably favoured by London clubmen', and the Ongley Arms, Biggleswade, run by bicycle-maker Dan Albone, 'whose cheery nature is proverbial, and who understands the Bohemian and unconventional habits of the record-breaker, and is never so happy as when laying himself out to plan routes and arrange for timekeeping, checking and pacemaking'.[57]

To break a long-distance record, a rider had to count on the right combination of well-organized authentification, pacing assistance, mechanical help, food and changes of clothes, a well-chosen route and good weather conditions. Autumn, for example, was 'recognized as the best time of the year for road riding... because the weather is cooler and the roads usually

less dusty than in summer time'. For a 24-hour ride, a full or near-full moon was desirable for fast night-riding, although 'the roads are always lonely during the night, save when an occasional stray horse is startled out of the road, or a night policeman glances up at the silent cyclist flashing past'. No other factor was so important in record-breaking, however, as the assistance of good pace-makers, who gave shelter from the wind, picked a good course on the road, guided the record-breaker through towns, and 'will be ready to run ahead to obtain refreshments, to open railway gates, to send telegrams, to oil up the machine while the rider is feeding, and in every imaginable manner to aid in saving time and increasing mileage'.[58]

During 1886 and 1887, 18-year-old George P. Mills, of Liverpool's Anfield Bicycle Club, undertook a series of gruelling road rides and set new records at many distances on different kinds of machines, illustrative of the ongoing interest in testing new machines in competition. Mills became, in fact, a prominent 'maker's amateur', and the Anfield club riders gained a 'reputation for endurance and dogged perseverance by the establishment of a stupendous list of diurnal records'. Mills' performances 'have probably received more attention at the hands of the daily press and the public generally than has ever been awarded to anything in cycling of recent years'. His record rides in 1886 were described as 'without doubt the most wonderful feats ever accomplished on cycles, and as an exhibition of human endurance and physical strength, it is doubtful if they have ever been excelled'.[59] 'G.P. Mills has proved himself to be, beyond doubt, far and away the best road rider England, and perhaps the world, has ever seen', commented *Wheel World* at the end of the season; 'Such rides would have been pronounced impossible a couple or three years ago'.[60]

For the sake of clarity, Mills' 1886 rides, all accomplished on solid-tyred machines, are shown in the Table below in chronological order:

1886	Route/Record	Time/Distance
July 5-10	Land's End to John O'Groats	5 days 1h 45m (ordinary bicycle)
Aug. 4	24 hour record	268 miles (ordinary bicycle)
Aug. 15-20	Land's End to John O'Groats	5 days 10h (tricycle)
Sept. 4	1st North Road C.C. 24 hour	227 miles (ordinary bicycle)
Sept. 22	50 mile record	2h 46m 3s (tandem tricycle, with A. J. Wilson)
Oct 2	50 mile record	2h 47m 36s ('Ivel' safety bicycle
Oct 5/6	24 hour record	295 miles ('Ivel' safety bicycle)
1887		
Sept. 2/3	2nd North Road C.C. 24 hour	268 miles ('Ivel' tricycle)
Sept. 24	100 mile record	7h 46m 33s ('Ivel' tricycle)

[Table showing long-distance record road rides of G.P. Mills in 1886 and 1887.]

The second North Road Club 'All-Day Race' in 1887 was contested by 37 riders on a variety of machines (5 ordinary bicycles, 20 'safeties', 10 tricycles and 1 tandem tricycle), including the promoting club's G.P. Mills and S.F. Edge (Anerley B.C.) on tricycles. The route went out of London on the Great North Road to Peterborough, headed east to Norwich and returned to a finishing circuit in Biggleswade. Rain had left the roads 'excessively sticky', and competitors who rode out to the start from London 'arrived in a fearfully splashed condition'. At the start, 'the stables were filled to overflowing with a magnificent show of cycles, safeties predominating', while the athletes feasted on 'Brobdignagian supplies of rump steak and tomatoes'. Starting together at midnight in a group, the riders raced through the night, later encountering better conditions, with 'the full moon shining brightly in a cloudless sky'. The following day the riders were allowed to be paced, and 'pacemakers galore were about', though they were not helped by rain which continued to fall throughout the day. When the 24 hours ran out at midnight on Saturday night, winner G.P. Mills, on a tricycle, once more had a new record, with 268 miles to his credit. Dan Albone, the maker of Mills' 'Ivel' tricycle advertized this ride as 'again proving this machine to be the fastest made'.[61] (see Fig. 6. 10.)

This increased intensity of racing activity on the roads, however, and the publicity surrounding these record rides, did not come without a price. At a National Cyclists' Union Council meeting in December 1886, a resolution was passed by 22 to 12 that 'the Council of the N.C.U. expresses its disapproval of the growing practice of racing on the public roads, and directs the Executive to do its utmost to discourage road racing'. The recent flurry of industry-sponsored 'safety' records described above was evidently fresh in their minds, for one member called them 'scandals' and regretted that 'road records were becoming much more valuable than path records. They were so to makers'.[62]

Once again, in September 1887, the Council emphasized that the N.C.U. did not sanction road racing:

> It should be pointed out that by a resolution of the Council strong disapproval was expressed at the practice of racing on the public highways, and in view of the action which it is extremely probable the authorities may take in the immediate future, the policy of the Union cannot be too widely known. As the matter now stands the rights and privileges of thousands of road riders are jeopardised by the inconsiderate action of a very limited number.[63]

In October 1887, an insignificant club called the West Roads C.C. organized a 25 mile 'open' handicap race with a field of more than 70 riders plus pace-makers in a prominent cycling location, the Ripley Road, which 'showed a great want of common sense on the part of the officials', and resulted in 'over 70 cyclists at a time tearing through country villages'. The race, 'one of the worst managed races it has ever been our fate to witness', brought attention from the police and a harsh editorial reaction from *Wheeling*:

> The time has come for a change. Road racing is a danger to every good interest of cycling. It is ruining path racing, it is annihilating the old club gatherings, it is changing the spirit of the road, it is infuriating public opinion, and finally it is paving the way for restrictive legislation, which will press hardly upon thousands of cyclists who never competed in a race of any sort in their lives... We are not so bigotted or narrow-minded as not to see the charm of road racing. We should like well to take part in it ourselves, but the sentiment is purely selfish. No reasonable man can doubt that the practice is unfair to the public... the greatest happiness of the greatest number demands the suppression of road racing.[64]

That the road races being principally objected to were the commercially instigated events described above was shown by the fact that *Wheeling* suggested a penalty of the forfeiture of amateur status for riders taking part in them.

Both Harry Etherington and Lacy Hillier ('We are at last agreed on one subject!') tabled a motion with the N.C.U. suggesting that any riders taking part in a road race of less than 100 miles would risk suspension. The N.C.U., effectively powerless to actually ban road racing, issued further warnings during 1887 and decided that it would no longer recognize road records of any kind, which it had started to do in 1885; only track records would be recognized. This was a serious and contentious rift within the bicycle racing community, which would have far-reaching repercussions.

The immediate result was the foundation in April/May 1888 of a new organization, the Road Records Association, following a meeting called by A.J. Wilson of the North Road C.C., a club which had been formed specifically to encourage road racing. The stated aims of the Road Records Association were 'to check and verify the genuineness of claims to "best performances on record" accomplished by cyclists on the road, and to prevent the publication of fictitious or unchecked records'.[65]

The foundation of the Road Records Association, the third national body created in early British cycling, was in a sense a secession from the N.C.U., although A.J. Wilson stressed that the new organization would not be hostile to the older national body and agreed to accept N.C.U. road records established and recognized between 1885 and 1888. The creation of the new organization, on the other hand, *did* allow the N.C.U. to distance itself strategically from a racing activity which had become a public relations problem. The Road Records Association was also progressive in one important sense, that its events were 'open', and records *could* be supported by the industry, in effect condoning professionalism. But the withdrawal of N.C.U. support for such an important branch of the sport of cycling as road racing, which can be seen as a failure to defend a progressive, expanding aspect of bicycle racing, also had profound and negative consequences for the future of the sport in Britain, which will be further explored in the following chapter.

The absence of organized opposition to racing on public roads led in France, Belgium, Italy and Germany to the foundation during the early 1890s of the first massed-start 'classics' of bicycle racing - the beginnings of modern road racing - whereas the promoters of road racing in Britain was obliged to adopt a different tactic, the organization of inconspicuous early morning time trials and individual place-to-place record attempts in order to avoid

public criticism and police interference. In France and Belgium road racing was presented to the public as an epic sporting battle played out in geographical terrain well known to spectators, with heroic contestants worthy of admiration and with whom spectators were invited to identify. A working-class victor was all the more worthy on account of his humble origins.

British officials, in contrast, were fearful that the conspicuous presence of the lower middle-class and working-class riders racing bicycles would bring disrepute to the sport and hostility to non-racing cyclists. Other popular sports such as golf, tennis, rowing or cricket were easily integrated into a middle-class life-style and behavioural expectations, but competitive cycling appears from its earliest days to have attracted a considerable number of working-class and lower-middle class riders.

As has previously been noted, the public nature of a sport which took place in public spaces, and in which strangers 'scorched' through towns and villages, meant that the potential for inter-class friction and disputes over the rights of different categories of road-user were vastly increased.[66]

6. Competition and the revolution of the pneumatic tyre

The advantages of the rear-driven 'safety' bicycle were equally apparent for racing, for recreational use on the road, and for utility riding.

The advantages could be summarized as follows. The 'safety' bicycle had a lower centre of gravity and proved to be safer because it could not tilt forward and more practical because the foot could be put to the ground for starting and stopping. The riding position was at the same time both comfortable and efficient, it overcame the inherent problem of the high-wheel bicycle, that of both pedalling and steering the front wheel, which involved contradictory forces. The weight of the rider was better distributed between the two wheels and better both for hill-climbing and descending. And, lastly, with the chain-drive a machine could be geared up or down to suit the rider's needs and the demands of the landscape.

The only really serious disadvantage on rough and stony roads was the increased vibration from the two nearly equal-sized wheels, which were much smaller than the big driving wheel of the 'ordinary', an issue which immediately stimulated increased attention to the tyres and experimentation with various kinds of sprung frames, chief among which was the Linley and Biggs' 'Whippet'. Various kinds of 'suspension', 'cushion' and hollow tyres (non-pneumatic) and the introduction of the pneumatic tyre followed quickly after the successful introduction of the rear-driven safety.

The pneumatic tyre became a key factor in the bicycle racing and recreational boom of the next decade, as well as being crucial in the subsequent development of motor-driven vehicles.[67] Perhaps no other previous advance within bicycle technology had had such a wide-ranging impact and enjoyed such an explosive growth as the invention of the pneumatic tyre.

How exactly should we seek to explain the close chronological proximity of the rise of the 'safety' bicycle and the subsequent introduction of the pneumatic tyre? What is the more precise social and technological relationship between these two landmarks of bicycle technology? Should it be seen as a simple chronological progression - the success of the 'Rover safety' and subsequent designs of 'safety' bicycle created a new problem (vibration) and immediately stimulated its solution? The intense inventive developments, rival patents

and litigation within the pneumatic tyre industry provide a further fascinating field of study in socio-technological evolution in the 1890 - 1893 period. Once the pneumatic principle had been accepted, many details of the design and fixing of the detachable tyre, rim and valve remained to be worked out and put onto the market. The users, the testers, the consumers, were of course the hundreds of thousands of racing and recreational cyclists.[68]

In the 1890 edition of his *The Art and Pastime of Cycling*, Irish journalist Richard.J. Mecredy summarized the impact and the advantages of the pneumatic tyre:

> Perhaps nothing in the history of cycling has created such a revolutionary sensation as the Pneumatic Tyre. Invented late in 1888, it was tested quietly for nearly a twelvemonth in and about Belfast, before being launched upon the British and foreign cycle markets; and its success in 1889-1890 was so phenomenal that it must be regarded as a distinctive feature of the age... The advantages which the Pneumatic Tyre have been proved to possess are many. Comfort to the rider, perhaps, ranks first in importance...Increased speed is another advantage which appeals to every cyclist. Both on road and path, on macadam and gravel, on cinders and grass, Pneumatic tyred machines have been proved to be faster than solid tyred. Personally we estimate the difference to be from half a mile to three miles an hour, according to the nature of the road. The rougher the road the greater the advantage.

The pneumatic tyre had the huge advange of helping to overcome vibration:

> Few people have any conception of the wearying effect of vibration...Pneumatic tyres almost double the powers of the average tourist on bad roads. As the roads get better the advantage becomes less, until on a surface like that of the Great North road, it is at its minimum.[69]

An advertisement from the same book, for The Pneumatic Tyre and Booth's Cycle Agency (Dunlop), in Dublin, proclaimed: 'It is now an acknowledged fact that no Solid or Cushion Tyred Machine can compete with a Pneumatic for speed'. The advertisement also quoted a significant passage from *Scottish Sport*, 'It is clear that before a year the solid tyre will no longer be fitted to racing machines' (see Fig. 6. 11.).

So great were the proven advantages of the pneumatic tyre for racing that less than two years after its introduction, the solid tyre was seen as an unacceptable disadvantage. The implication for competition and recreational riding were immense.

In the 1893 (third) edition of the same book, Mecredy confirmed the optimistic predictions he had made in 1890:

> In the second edition of this work, we concluded the present chapter with the remark that the pneumatic tyre (then a complete novelty) 'promises to effect wonders', and it is scarcely needful to say how abundantly that prophecy has been fulfilled. The pneumatic tyre has thoroughly revolutionized the cycling trade within two seasons; and bearing in mind this invention alone, he would be a bold man who would essay to prognosticate what evolution is in store for cycling. At the present time, it may be safely said that all classes of cycles have attained to a pitch of perfection not surpassed in any other department of mechanical science.[70]

There is evidently a strong element of self-interested pride in bicycle industry achievements in this passage, but it serves to illustrate how one person centrally involved in progressive bicycle technology saw himself. Mecredy, whose relation Alexander Mecredy was making bicycles in Dublin, and who was himself a record-setting amateur road cyclist, was working as editor of *The Irish Cyclist* in Dublin, from where the extraordinary technological and economic developments around the young pneumatic tyre industry were emerging. Richard Mecredy's perception of the bicycle industry as being on the cutting edge of technological change was therefore that of an experienced insider, close to the developments he was describing. After all, pneumatic tyre technology would certainly have a radical global impact in the future.

W.J. Grew, in *The Cycle Industry*, published in 1921, also wrote of the impact the first pneumatic tyres had on both the industry and on racing, and of Mecredy's proximity to the crucial events:

> I saw one of the first of these very crude tyres made by the Dunlop Tyre and Booth's Cycle Agency, Dublin, on a tricycle ridden to Coventry by Mr. R.J. Mecredy, the editor of the Irish cycling and motoring papers. ... The tyres were quite unknown, and when the tricycle was left outside a hotel (not in the centre of the city) for ten minutes, a crowd of 400 or 500 people were found pushing each other to obtain a sight of it. ... Within a few months everybody in the city knew all about pneumatic tyres. The Du Cros brothers, an athletic family of Dublin, commenced to race on bicycles fitted with them, and very soon handicappers had to give racing cyclists on solid tyres a considerable start if riders of pneumatic tyred machines were entered. Within a year of the commencement of the serious manufacture of pneumatic tyres no racing man of any pretensions troubled to compete on anything else.[71]

The essential facts of the history of the invention of the pneumatic tyre in 1887-88 by John Boyd Dunlop, a Belfast veterinery surgeon of Scottish origin, are reliably documented in a number of different places. The most unusual feature of Dunlop's initial involvement was, perhaps, that initially he had no contact with the bicycle industry, and that pneumatic tyre

experiments did not begin within the industry, conducted for example by the manufacturers of solid tyres, as might have been expected. Dunlop, who was not even a cyclist, fitted the first embryonic pneumatic tyres to his son's tricycle, and soon after had experimental bicycles built by Belfast bicycle agents and makers, R.W. Edlin and Finlay Sinclair. Dunlop took out his first patent on the idea on 23 July, 1888 and it was registered on 7 December, 1888.[72] Early in 1889, Edlin and Dunlop ordered new, large bicycle frame castings, appropriate for the wide tyres, from a Glasgow castings company. These were used to make twelve pneumatic-tyred bicycles and six tricycles. Mecredy reported that he saw these bicycles in the process of being assembled at the Edlin works in February 1889.[73]

No sooner were the first pneumatic-tyred bicycles completed than they began to be used in local competitions. The first appearance of a bicycle fitted with pneumatic tyres at a race is reliably documented to 18 May, 1889. W. Hume (Belfast Cruisers C.C.) appeared on an Edlin 'safety' bicycle fitted with the new tyres, weighing only 23 lbs, at a Queen's College, Belfast, Sports Day, where he won all the four races in which he competed, beating Alfred, Willie and Harvey du Cros, who were all riding solid-tyred 'ordinary' bicycles. According to Arthur du Cros, the machine 'was hailed with a roar of laughter and derision from the crowd, because of its unsightly appearance...But to the stupefaction of the onlookers the ugly interloper outpaced all rivals so decisively that their derision was turned to hysterical applause'.[74] This race was also the first occasion on which J.B. Dunlop met Harvey du Cros, the father of the beaten du Cros brothers. Bartleet claims that Hume's convincing victories had an immediate repercussion. The Du Cros brothers, realizing that they did not stand a chance against Hume, did not wait until the conclusion of the race meeting and returned immediately to Dublin with their father, Harvey du Cros. Arthur du Cros, who had already abandoned the 'ordinary' bicycle and was racing on a solid-tyred 'safety', was pitted against Hume on 1 June, 1889, in the 5 mile Championship of Ireland, held at the North of Ireland Cricket Club Sports, and on that occasion won on solid tyres, with Hume, on pneumatics, coming in second. Soon after, Arthur du Cros borrowed a pneumatic-tyred bicycle from Dunlop himself, and on 5 September, 1889 won all four races in which he competed in Cork.[75]

W. Hume was the first rider to compete in England on pneumatics. He appeared at the Liverpool Police Sports on 20 July, 1889, where he won the 1 and 3 mile handicaps. 'To say

that the tyres caused a sensation is to put it mildly', wrote H.W. Bartleet; 'a majority of the public simply roared with laughter, and only a few of the experts realized the possibilities of the air tyre'. Bartleet quotes from the reminiscence of a spectator of the races, who confirmed that 'the first appearance of Hume created contemptuous laughter, which was turned to amazement and then to applause when he made common hacks of his opponents'. Hume himself remembered that 'the spectators at Liverpool were very hard to keep away from my machine; everyone wanted to see the old Irish home-made bicycle. Even the handicapper, when he saw it first, said that if he had known I was going to ride a machine like that he would have put me on a longer mark: he changed his mind before the day was finished'. Bartleet recounts that Hume's bicycle was displayed in the window of a bicycle shop in Lime Street, Liverpool, and 'attracted such a crowd of curious sightseers that they overflowed the pavement on to the roadway and had to be moved on by the police'.[76] Later that summer, however, according to Du Cros, pneumatic safeties were banned from a race meeting in London, a pattern of opposition which was directed briefly at the 'superior speed qualities of the air tyre'.[77]

The 'Irish Brigade' (B.W. Pigott, Arthur du Cros, K.N. Stadnicki, R.J. Mecredy, Harvey du Cros, Jr. and F.F. MacCabe) visited England in 1890 and won a large numbers of races on Dunlop tyres. Among them was a clean sweep by Mecredy at the Paddington, London track of the four N.C.U. national championships, at 1 mile, 5 mile, 25 mile and 50 mile distances, as well as the establishment of new competition records at five distances, the ¼ mile, 1 mile, 5 miles and 10 mile records set by Mecredy and the ½ mile by Arthur du Cros.[78] They also competed in Paris. 'Its racing successes', asserted Du Cros, 'riveted public attention upon it, and convinced the world of its outstanding qualities'.[79]

Two of the earliest photographs published in the press of pneumatic tyres being used in actual competition at the Dublin University Bicycle Club races were published in *The Irish Cyclist* of 16 July 1890. In one, Harvey Du Cros is shown beating four other riders, all of whom are riding on pneumatic tyres.

During September and October, 1889, the first Dunlop company, known as The Pneumatic Tyre and Booth's Cycle Agency, Ltd., in Dublin, which incorporated the Edlin company, was created. The first board meeting was held in Dublin on 30 November, 1889, with

Harvey du Cros as Chairman. The other board members were J.B. Dunlop; Richard Booth of Booth's Brothers; Richard Mecredy, editor of the *Irish Cyclist*; Frederick W. Wood, and John Griffiths, of Booth's Brothers. Subsequent events saw legal challenges to the validity of the pneumatic patent taken out by Dunlop's original company. In January, 1891, in a speedy and conspicuous recognition of the international commercial repercussions of the pneumatic tyre, Harvey du Cros visited Chicago to set up Dunlop tyre branches; a Coventry Dunlop factory and a London retail outlet managed by A.J. Wilson, were also established in 1891. In 1894, the Pneumatic Tyre and Booth's Cycle Agency became the Pneumatic Tyre Co., and this in turn became the Dunlop Pneumatic Tyre Co. in September 1895, though Dunlop himself had resigned from the company in May of the same year.

The bases of the Dunlop commercial empire were thus laid in a few short years entirely within the bicycle industry, and Dunlop was completely dependent on bicycle racing to prove the viability and superiority of its products. Other companies, notable among which were the North British Rubber Company, the Macintosh Company, the Preston Davies Tyre and Valve Company, Smith's Company, the Palmer Tyre and others, engaged in fierce competition to develop viable tyres for this huge new market, putting a sudden demand on the import of high quality rubber from colonial outposts abroad.[80]

Not all new tyres were pneumatics, however, and for a brief period 'cushion' tyres (tyres with a hollow, though not inflated interior) were put on the market. Tyre manufacturers rapidly became as important as bicycle makers in the sponsorship of record rides, and from 1891 onwards, the pages of the cycling press were crammed with advertisements touting the superiority of different makes of tyres, tested in competition, over their rivals (see Fig. 6. 12.). The ambitions of tyre makers to sign up leading champions to break records to publicize their products became a leading cause of the increasing professionalization within the sport, a subject which will be further discussed in Chapter 10.

The various impacts of the introduction of the pneumatic tyre into bicycle racing are hard to over-exaggerate, as are the contributions which competition made to the testing, development and perfecting of the tyre manufacturers' emerging technologies. An article by Harry Hewitt Griffin in *Cycling* in 1891, which reported a lecture given at the Stanley Show by E.R. Shipton, Secretary of the C.T.C., gave many hints of the unfolding

technical complexities involved in the new tyre technology when the need for a light pneumatic tyre for track racing was analyzed:

> Happily, racing cyclists are mostly men to whom expense is a mere nothing, therefore those who are anxious to bring down the bicycle record... will doubtless go in for something as follows: a) a much lighter frame than at present. b) a large but very thin skin bladder. c) light silk covering instead of heavy canvas. d) much lighter outer rubber, exceedingly thin except the point of contact with the ground. Built thus, a safety might well be got well inside 20 lbs, and an immense improvement in speed rates would be certain... Thanks to the rapid development of the tyre question, we now feel competent to forecast what is wanted and what conditions must be fulfilled by tyres if they are to be of practical use. Only inflated tyres need serious consideration in connection with anything approaching the perfect cycle. With these imperative conditions are demanded (sic). They may be roughly summarised as:
>
> 1. Simplicity of construction.
> 2. Easy of repair.
> 3. Readily inflated and leakage reduced to a minimum.
> 4. Quick means of releasing air, so as to be kept slack when not in use.
> 5. Reliable, proof as far as possible against cuts, punctures, etc.
> 6. Cheapness.
> 7. Ample supply by the trade and manufacturers.
>
> Any type or types of tyre fulfilling these requirements will be in universal demand, and ere long anything else will be considered antiquated.[81]

It can be readily appreciated from this example of the kind of discourse which surrounded the development of the pneumatic tyre in 1891 that the same issues which necessarily had to be addressed in the manufacture of racing bicycles in the 1880s – strength, reliability, lightness, efficiency, simplicity, which were all aspects of athletic performance, and contributed towards athletic success – had also to be taken into consideration in producing a viable tyre for racing and serious riding of all kinds.

The days of the high wheel bicycle were numbered as the best tool to achieve maximum speed in racing. 'An ordinary bicycle race is certainly one of the prettiest contests that a sports-loving crowd can witness', wrote the editor of *Cycling* in May 1891, but:

> the ordinary is the machine of the past, and the safety is the machine of the present time... The safety bicycle is essentially a speed machine, and the still greater qualifying advantage it possesses lies in its adaptability to all sizes of riders. The absolute necessity to a speedy ordinaryist is height, and consequently a fast wheel; but a safetyist may be short and sturdy, or tall and slim, as nature may have moulded him, and he can still find in the dwarf a machine quite plastic to his requirements, upon which he may accomplish speed performances that he could never approach upon the necessarily small-wheeled ordinary he must ride'[82]

The crucial advantage of the Rover-style 'safety' design was identified here in this passage: it was adaptable to riders of different sizes, and could be geared up or down depending on road conditions. Multiple gearing was therefore inherent in its drive mechanism.

Through the later 1880s, the British, European and American national track championships and road races were still dominated by the high-wheel bicycle, but it became increasingly apparent that the 'safety' was faster and that the dissimilar machines could not be safely raced against each other side by side, even though their relative speed under similar conditions was still compulsively compared. The difference in speed between the solid-tyred 'ordinary' and the solid-tyred 'safety' was dramatically emphasized when the 'safety' bicycle was fitted with pneumatic tyres, inspite of the initial scepticism and hilarity which greeted the fat earliest pneumatics. The easily demonstrated increased comfort of the pneumatic tyre was a benefit which radiated outward from competition and increasingly impacted the recreational and utility rider. Thus, *a group of advantages* marked the decisive socio-technological 'victory' of the 'safety' over the 'ordinary' bicycle.

From 1890 to 1892, a short period of competitive overlap, the National Cyclists' Union ran concurrent 'ordinary' bicycle and 'safety' bicycle championships on the track in England. In 1890, as we have already mentioned, Richard Mecredy (Dublin University B.C.) swept the 1, 5, 25 and 50 mile 'safety' championships using pneumatic tyres, while F.J. Osmond (Brixton Ramblers) won all the 'ordinary' races at the same distances, clinging to the older machine with solid tyres. In 1892, with the pneumatic tyre firmly established and visiting American Arthur Zimmerman winning three of the four amateur 'safety' bicycle championships, J.H. Adams (Speedwell B.C.) won all the 'ordinary' championships. In spite of short-lived attempts to 'rescue' the high-wheel bicycle from competitive extinction by fitting it with pneumatic tyres, from the early 1890s onwards the outmoded high-wheel bicycle was no longer in serious contention in the championship stakes and by 1893 official N.C.U. 'ordinary' bicycle championships on the track had been abandoned.

During 1893, new world records were set on the pneumatic safety bicycle at every distance on the track from ¼ mile to 24 hours. Commenting on the 1893 English records listed above and the 1893 world record figures (see table below), James Blair, an N.C.U. official, wrote:

> The record season, just closed, has been a remarkable one. Thanks to the improved surface at Herne Hill and tandem safety pacing, we are able to show up much better than last season, when only one World's path record stood to England's credit. The Americans still lead in the shorter distances. We must admit that in sprinting the Yankees can show us the way, but in long distance riding they do not appear to have any riders of promise. All World's safety records have been lowered. Turning to English path records we find all safety times and distances have been beaten at Herne Hill. The Ordinary Bicycle Records remain unchanged. All Tricycle Records, with one exception, have gone by the board. All the old Tandem Safety figures have been obliterated.[83]

Long-distance records on the *road* during this period were similarly much improved. By 1893, Frank Shorland had ridden 195 miles in 12 hours and 370 miles in 24 hours, and in a gruelling 1894 Land's End to John O'Groats ride, G.P. Mills' reduced his 1886 record of 5days 1hour 45mins on the ordinary bicycle to 3days 5hours 49mins on a pneumatic 'safety'.

The improvements inherent in 'safety' bicycle design and the adoption of the pneumatic tyre stimulated competition, and records fell constantly. The improvement in times and distances achieved led to the expression of a kind of euphoria within the sport and industry of cycling, the result of accelerating change and the seemingly limitless competitive possibilities. 'In the sport of cycling no feature is so marked as the rapid progress in lowering previous bests on record...there is practically no limit to the improvement and future development of the cycle', wrote the editors in the first issue of *Cycling* in 1891:

> The hollow tyre has opened up a wide field of future possibilities in record breaking. A year ago when the big tyres made their initial appearance before the English cycling public, the wiseacres sagely shook their heads, and even if they had some slight belief in their utility for road riding or for rough grass courses, they never imagined for a moment that on the fastest tracks in the world the riders of hollow-tyred machines would carry all before them, and pulverise every existing record.[84]

Four years later, in a review of the Stanley Show of 1895, where a record number of 2,690 different bicycles and tricycles was shown by 212 manufacturers, the always precise chronicler of technical information, H.H. Griffin, wrote that:

> after the chaos brought about by the safety form of bicycle...the 20 pneumatic bicycles shown in 1890 acted as a torch of enlightenment, and set alight the conflagration which has practically consumed every other type of tyre. From all solids in 1889, and .064 cushions in 1890, cushions jumped to 54% in 1891, pneumatics being only 14%, and it was not until the autumn show of 1891 that the pneumatic asserted itself - 39¾ % to 32½ % cushions; by 1893 pneumatics were

85%, cushions 8%, and solids 1%.

Griffin went on to express his opinion that 'the concentration of taste and attention upon the rear driver is at last universal. Since 1891 only 5 ordinaries have been shown, not one since 1893, and geared ordinaries have been extinct for the same time'. Reviewing the 1896 Stanley Show, Griffin wrote that 'in no other form of manufacture has so vast a revolution swept over the country'.[85]

Another persistent and accurate chronicler of technological developments, Henry Sturmey, noted the expanded business opportunities presented by the 'safety' bicycle and the pneumatic tyre, 'which in the course of one or two seasons drove the high machine out of the market'. But he noted that the concentration on the pneumatic 'safety' also impacted further improvement of the tricycle, 'the makers' attention being entirely devoted to the improvement of the safety, to the utter neglect of the till then much considered tricycle, that form of machine too, despite its many advantages, lost its hold on popular favour, and left the rear-driven safety of today complete master of the field for the time being'. The principal explanations for the relative decline of tricycles may certainly be advanced as their unwieldiness, their weight and size (very difficult to store in small houses with narrow front doors) as well as their high cost, but Sturmey's suggestion here is that the technological and stylistic changes successfully implemented in the 'safety' bicycle had also become expressions of fashion and taste.[86]

7. Summary and conclusions

The tricycle:
Although development of the tricycle was heavily directed at the utility market, the tricycle provided another opportunity for the competitive testing of rival makes and designs, and leading high-wheel riders were soon presented with a tricycle alternative, or an additional category of competition, in their racing and record-breaking attempts.

Thus, it would be a mistake to view the high-wheel bicycle as the only source of cycling sport in the mid-1880s, for the development of tricycles saw a ferment of technological experimentation and was responsible for a huge expansion within the bicycle industry.

Particularly notable in this experimentation was the development of chain technology which was essential for the introduction of the 'safety' bicycle. At the annual trade show, the Stanley Show, in London in 1883, 289 different tricycle models were exhibited as opposed to 233 bicycles.[87]

Experiments with 'dwarf safeties':
Various experimental designs of 'safety' were introduced and tested competitively on English roads. Among these were the 'Facile' and the 'Kangaroo'.

Superiority of the rear-driven 'safety':
With the introduction of the rear-driven Rover 'safety', the configuration of the modern bicycle slips into focus. It resolved problems of safety and speed, although not that of increased comfort, and vibration immediately became a significant unresolved issue.

By the later 1880s, the 'ordinary' bicycle, the 'geared-up ordinaries' and the various kinds of tricycles had been joined by the rear-driven 'safety' bicycle, and there was speed competition between all these different categories of cycles on both road and track. Consequently the number and variety of events and records increased. But the speed superiority of the 'safety' is demonstrated in the record statistics (see below).

The gearing-up capability of the 'safety' bicycle introduced a levelling effect among competitors of different heights, so that 'adaptability' became one of its crucial merits, in addition to increased safety and greater speed.

By 1885, 'safeties' were already the fastest on the road when they were ridden in competition. But only towards the end of the 1880s did the 'safety' bicycle emerge as definitively the fastest bicycle for recreational and utility use, the basic design of which would win universal acceptance into the 1890s.

The revolution of the pneumatic tyre:
With vibration a new and challenging issue, the Dublin-based pneumatic tyre made by Dunlop Tyres and Booth's Cycle Agency in 1888 was introduced into competition on the track from mid-1889 onwards. Its speed potential was immediately confirmed, and first demonstrated in England in July 1889.

Overall conclusions:
The introduction of the 'safety' bicycle, closely followed by the introduction of the pneumatic tyre and the associated improvements in pneumatic technology (detachability, repairability, efficient valves), can be seen to have had a dramatic impact on bicycle racing, as well as on recreational and utilitarian cycling.

Racing tested and proved the technological changes which were subsequently introduced into the wider consumer market. At first unreliable, the pneumatic tyre was rapidly improved and its impact was reflected in speed increases in every department of the sport, on road and track, in championship events and in competition and world records, as well as in an expansion of the range and popularity of recreational and touring cycling.

In three respects, the sport may be said to have arrived at an identifiable point of maturity and 'modernity'. The developments discussed in this chapter brought the bicycle to the verge of a commercial and consumer 'boom' which would profoundly affect all patterns of bicycle usage, competitive, recreational and utilitarian. Although it is impossible to draw precise chronological boundaries, the unrelenting changes in the industry and sport in the

years 1885 to 1892 which have been explored in this chapter can be said to mark the end of the era of 'early' bicycle racing for a number of inter-related reasons:

1. The rear-driven 'safety' bicycle had successfully outmoded and pushed aside the high-wheeler and various other experimental 'safeties' as it proved itself superior in safety, speed, efficiency and adaptability to riders of different sizes. The design of the bicycle, as it would be largely conceived for the next century, was defined.
2. The pneumatic tyre had effected a technological revolution in sweeping aside the solid tyre.
3. The tricycle declined almost to the point of unviability as a serious racing machine by about 1890.

Statistical evidence of records for safety bicycles and pneumatic-tyred bicycles between 1885 and 1893:

Evidence of the results of this technological revolution in bicycle design and in the sport of cycling can be seen in the following two tables. The first shows the amateur competition track records recognized by the N.C.U. during these crucial years, where the moment of the proven speed superiority of the pneumatic-tyred 'safety' bicycle can be identified in the 1890 figures, and the ordinary bicycle figures can be seen remaining the same while the record times for the 'safety' were all progressively lowered in 1890, 1892 and 1893. The second shows that by 1893, <u>all</u> world records were held by riders on pneumatic-tyred bicycles.

1885

	1 mile	5 miles	25 miles	50 miles
Ordinary bicycle	2m 39 2/5s	14m 18s	1h 16m 41 3/5s	2h 43m 58 3/5s
Safety bicycle	2m 55 4/5s	No race	No race	No race

1889

	1 mile	5 miles	25 miles	50 miles
Ordinary bicycle	2m 31 4/5s	13m 55s	1h 13m 49 3/5s	2h 40m 33 2/5s
Safety bicycle	2m 37s	13m 58 4/5s	No race	No race

1890

	1 mile	5 miles	25 miles	50 miles
Ordinary bicycle	2m 28 4/5s	13m 55s	1h 13 49 3/5s	2h 33m 05 2/5s
Safety bicycle – Solid tyres	2m 34 4/5s	13m 43 3/5s	1h 14m 37 1/5s	2h 41m 47s
Safety bicycle – pneumatic	2m 26 4/5s	13m 16 2/5s	No race	No race

1892

	1 mile	5 miles	25 miles	50 miles	100 miles
Ordinary bicycle	2m 28 4/5s	13m 44 1/5s	1h 12m 48 3/5s	2h 33m 37 2/5	5h 50m 5 2/5s
Safety bicycle – pneumatic	2m 12 3/5s	12m 16 1/5s	1h 5m 55 2/5s	2h 17m 1 4/5s	5h 4m 18 3/5s

1893

	1 mile	5 miles	25 miles	50 miles	100 miles
Ordinary bicycle	2m 28 4/5s	13m 44 1/5s	1h 12m 48 3/5s	2h 33m 37 2/5s	5h 50m 5 2/5s
Safety bicycle – pneumatic	2m 4 1/5s	11m 33 1/5s	59m 6 4/5s	2h 5m 45 4/5s	4h 29m 39 1/5s

[Tables comparing selected 'ordinary' and 'safety' bicycle competition records on the track recognized by the National Cyclists' Union between 1885 and 1893, compiled from *Wheeling*, 21 Oct. 1885; *The Wheel*, 28 June 1889; *The Wheel*, 26 Aug. 1890; *Cycling*, 19 Nov. 1892 and *Cycling*, 18 Nov. 1893. Some of the later records were paced.]

Record	Time/Distance	Holder	Place	Date
¼ mile (fly ing start)	24 2/5s	J.S.Johnson	Independence, Iowa	1 Nov. 1893
¼ mile	28s	Ditto	Ditto	Ditto
½ mile	59 2/5s	Ditto	Ditto	Ditto
¾ mile	1m 30 3/5s	H.C. Tyler	Springfield, Mass.	5 Oct. 1893
1 mile	2m 0 2/5s	Ditto	Ditto	11 Oct. 1893
5 miles	11m 6 1/5s	L.S. Meintjes	Ditto	11 Sept. 1893
10 miles	23m 4 3/5s	L.S. Meintjes	Ditto	14 Sept. 1893
25 miles	57m 40 3/5s	L.S. Meintjes	Ditto	Ditto
50 miles	2h 5m 45 4/5s	J.W. Stocks	Herne Hill	30 Aug. 1893
100 miles	4h 29m 39 1/5s	A.V. Linton	Ditto	21 Oct. 1893
1 hour	26 miles 107 yds	L.S. Meintjes	Springfield, Mass.	14 Sept. 1893
6 hours	127 miles 130 yds	H. Desgranges	Buffalo, Paris	3 Oct. 1893
12 hours	240 miles 690 yds	C.Wridgeway	Herne Hill	7 Oct. 1893
24 hours	426 miles 440 yds	F.W. Shorland	Ditto	21-22 July 1893

[Table showing world records on the track at all distances, established on the pneumatic-tyred safety bicycle during 1893 season, recognized by the National Cyclists' Union and the League of American Wheelmen. Source: *Cycling*, 18 Nov. 1893.]

Notes to Chapter Six

[1] Since the essential design progressions examined in this chapter took place first in Great Britain, most of the comment here is directed at Britain except where otherwise noted. In general, it appears safe to assert that there was an outward flow of new technological ideas from Britain to France, Germany and the United States, although American mass-production techniques may well have been more advanced than the British. In spite of the attention given to it by Bijker (see Chapter 1, Note 19), this exhaustively documented period has not otherwise been chosen by historians of technology for specialized attention. Recently, Paul Rosen (*Framing Technology*, 2002) has concentrated on two periods of cycle history in the 20th century to examine aspects of the economy, design and production of bicycles and their impact on technological development. The 1885-1892 period would repay similar intensive critical study.

[2] "Advertising Road Rides", *Wheeling*, 16 Sept. 1885, an editorial probably by editor Harry Etherington.

[3] The 'Xtraordinary' had the dimensions of an 'ordinary' bicycle but threw the weight of the rider further behind the front axle, thereby increasing stability and decreasing the possibility of 'headers'. The American-made 'Eagle' or 'Star' 'safety' attempted to solve the same problem by reversing the wheels of the ordinary, and putting the small wheel in front. The new style of front-wheel-driven smaller-front-wheel 'safety' bicycles were for a short time referred to as 'dwarf safeties' because they were much lower to the ground than the high-wheel, 'ordinary' bicycle. For further discussion of the rise of the safety bicycle, see Andrew Ritchie, *King of the Road*, Chapter 6, 'The Search for Safety'.

[4] The first tricycle to be made and marketed was Haynes and Jefferis' 'Coventry' Tricycle, advertised in *Bicycling Journal*, 23 March 1877, but sophisticated earlier experimentation had taken place, particularly machines made in Paris by English maker William Jackson, upon one of which he competed in the 1869 Paris-Rouen (see Nick Clayton, "William Jackson, A Forgotten Pioneer of the Modern Tricycle", *Proceedings of the 9th Cycling History Conference*, 1999). The quadricycle velocipedes of Willard Sawyer were extremely finely and lightly built, with speed and athletic performance in mind; see Andrew Ritchie, *King of the Road*, pp.38-45. It can be argued, in wider consideration of the progress of cycle evolution, that concern with three- and four-wheeled cycles was a central preoccupation of human-powered vehicle makers from

early in the 19th century, spanning the emergence of the two-wheeled velocipede, the high-wheel bicycle and the 'safety' bicycle, in effect leading directly to motorized tricycles and the first automobiles. What is suggested here is that the tricycle activity of the 1880s was not a technological byway, as is usually suggested, but a main road. The chain technology developed for tricycles made possible the successful 'geared-up ordinaries' and in the later 1880s the emergence of the 'safety' bicycle.

[5] "Resume for 1880", in Lacy Hillier and Harry Etherington, *Icycles, The Christmas Annual of the Wheel World*, 1880, p.16.

[6] Henry Sturmey, *Tricyclists' Indispensable Annual and Handbook (a Guide to the Pastime, Record of the Sport, and Complete Cyclopedia on the Subject)*, 4th Edition, 1884.

[7] See *The Ironmonger* (exact date unknown) quoted in *The Cyclist*, 10 Feb. 1886, p.395: 'At the first blush a trade which turns out only two classes of machines, one with two wheels and the other with three, might seem incapable of much variety, yet there is in reality hardly any other industry which presents as varied a series of products and so much good workmanship of a fine description. The different makers vie with each other so keenly that the patterns in use are counted by the hundred, and every season brings its crop of novelties and more or less marked improvements. The bicycle is still a favourite with young and active men, and its construction is always being altered and improved... It is in respect of the tricycle, however, that the modern cycling geniuses find their great field, that machine having a much wider constituency than its two-wheeled rival. Of tricycles there seems to be literally no end, and the ingenuity displayed in accomplishing new combinations and variations is almost astonishing... For all these numerous varieties there appears to be a demand, and, no matter how excellent the novelties of one season may have been, there is an apparently insatiable call for the super-excellent products of the new year... The modern cycle is a splendid specimen of modern workmanship, and probably embodies more skill - certainly more patented inventions - than any other single mechanical production of the time being. The industry is one of which we may well be proud. It virtually originated with ourselves, has been developed by us, and, so far as can be seen, is likely to remain in our own hands in every branch of the business requiring even moderately good work'.

[8] *Bicycling World*, 19 Nov. 1880. The United States was less enamoured of the tricycle than Britain, where it was uniquely popular.

[9] *Bicycling News*, 31 May 1878.

[10] Quoted in *The Boneshaker*, #8, Summer 1957. There is extended discussion of the tricycle in Andrew Ritchie, *King of the Road*, Chap. 5, "Tricycling and 'Sociable' Cycling". *The Tricyclist*, a periodical devoted to exclusively to tricycling matters, was published from 1882 to 1885.

[11] See Anon., "The True History of the Tricycle Union", *Wheel World*, June, 1883 and A.J. Wilson, "A complete and impartial history of the Tricycle Union", *Wheel World*, Jan. 1885, pp. 315-318. Racing was one of the most important issues in the organization of the independent Tricycle Association because the N.C.U. had refused in 1882 to promote a 50 mile tricycle road race, which it considered illegal.

[12] "The Tricycle for American Women", *Outing and The Wheelman*, March 1885, pp.423-426.

[13] "Tricycling for Ladies", G. Lacy Hillier, Badminton *Cycling*, 2nd Edition, 1889, p.266-70. See also Miss F.J. Erskine's *Tricycling for Ladies*, first published in 1885.

[14] H.W. Bartleet, *Bartleet's Bicycle Book*, p.133.

[15] Roy Green, *100 Years of Cycling Roads Records*. The Land's End to John o'Groats marathon, from south-west to north-east extremity of Great Britain, was to continue to be the ultimate test of endurance in bicycle and tricycle racing from the 1880s onwards.

[16] G. Lacy Hillier, "Editorial", *The Tricyclist*, Vol 1, No.1, 30 June 1882.

[17] The strength of this design was a reasonable wheel-size with the rider's weight and pedalling pressure located behind the centre-point of the front wheel, giving road performers much greater safety at speed. "Land's End to John O'Groats on a Facile", *Wheeling*, 4 June 1884, p.70. The history of 'End-to-End' record rides is covered in Alan J. Ray, *Cycling: Land's End to John o'Groats* and Roy Green, *100 Years of Cycling Road Records*.

[18] *Wheeling*, 4 June 1884 and 30 July 1884; an advertisement publicizing the 'Facile' appeared in *The Cyclist*, 4 June 1884.

[19] R.J.Mecredy and Gerald Stoney, *The Art and Pastime of Cycling*, Second Edition, 1890, p.22.

[20] "Progress and Invention", *Wheel World*, March 1886, pp.133-135. The same article refers to an 1879 attempt at constructing a rear-driven 'safety' bicycle, the Rudge 'Bicyclette', which 'lacked the perfection which is possible, in 1886, as the results of tricycle-making experience'. The chronology of chain technology is a crucial aspect of the emergence of the safety bicycle, and cannot be extensively explored here. Advertisements from 1886 confirm the significance of contemporary chain developments: Frank Simons, a company in Birmingham, advertised 'Morgan's Patent Roller Chain, for Tricycles and Safety Bicycles. Over 100 firms are now using it. Champion racers use no other'; W. Bown, also in Birmingham, advertised 'Bown's New Patent Lower Chain Wheel Bearings – The Requirement of the Times for all Safety Bicycles' (see *Wheeling*, 14 April and 29 Sept. 1886). See also Nick Clayton, "Hans Renold and the Birth of the Bicycle Chain", *Proceedings of the 3rd Bicycle History Conference* (Neckarsulm,1992).

[21] "The Kangaroo 100 Miles Road Ride", *Wheeling*, 1 October 1884, p.276.

[22] *Cyclists' Touring Club Monthly Gazette*, April 1885.

[23] *Wheeling*, 4 June 1884.

[24] "The 'Coventry Rotary' Race - Adams Beats the 24 Hours Record", *Wheeling*, 30 Sept. 1885, pp.369-70.

[25] "The Kangaroo 100 Miles Road Ride", *Wheeling*, 1 October 1884, p.276, and "The North Road Club's All-Day Race", *Wheeling*, 7 Sept. 1887, pp.347-48.

[26] Mecredy and Stoney, op.cit., pp. 22-23.

[27] *C.T.C.Monthly Gazette*, Feb. 1885.

[28] *C.T.C. Monthly Gazette*, April 1885. The 'Rover' illustrated in this advertisement was the short-lived first design, with a steering rod connecting the handlebars to the front wheel, a feature which was quickly substituted with direct steering in a second design before the end of 1885.

[29] Details of the introduction of the 'Rover safety' are discussed in John Pinkerton and Derek Roberts, *A History of Rover Cycles*. The Starley letter is quoted on p.36, but the source for it is not given.

[30] W.K. Starley, "The Evolution of the Cycle", *Journal of the Society of Arts*, 20 May 1898, pp.601-16.

[31] "The 'Rover Safety' Race - Wonderful Record", *Wheeling*, 30 September 1885, p.371. It is worth noting the original significance of the brand-name 'Rover', based on the verb 'to rove' or to move around freely far from home, a suggestion of independence and mobility – because years of use of the word as a brand-name for the British car manufacturer have almost smothered its original meaning.

[32] H.O. Duncan, *World on Wheels*, p.307.

[33] "Stanley Show Supplement", *Wheeling*, 2 Feb. 1887, p.265.

[34] The use of the word 'Bicyclette' for this machine was acquired from a previous machine of the same name made by H.J. Lawson. The French-sounding brand-name was in fact English in origin, and appears to have been used in England in the period 1880 – 1886 in a generic sense to refer to the idea of a small-wheeled, rear-driven bicycle. As rival brands of 'safety' bicycle entered the French marketplace, the appropriately French-sounding word transferred into everyday usage and became 'bicyclette' with a small 'b'.

[35] This ride is reported in H.O. Duncan, *The World on Wheels* (p. 307); *Véloce-Sport*, 15 April 1886 (p. 147); "Across France on a Rudge Bicyclette". *Wheeling*, 24 March 1886; "Continental Cycling Clippings", *The Cyclist*, 24 March 1886; "Across France on a Safety", *The Cyclist*, 31 March 1886; *Bicycling News*, 9 April 1886; "Johnny Crapaud A-wheel – A Chat with H.O. Duncan", *Bicycling News*, 23 April 1886.

[36] This important meeting for the French bicycle industry is discussed in André Vant, *L'Industrie du Cycle dans la Région Stéphanoise* (Musée des Arts et Métiers, St. Etienne, 1993).

[37] The creation of a professional cyclists' 'Union' or 'Syndicat' was mentioned in *Véloce-Sport*, 22 July 1886.

[38] H.O. Duncan, op. cit., p.307. Further research is needed in French sources to establish a detailed chronology of the introduction of the 'safety' in France, but the main outlines as given in Duncan and the other French sources cited here appear to be reliable. Possibly there are rival French claims for French precedence in 'safety' designs.

[39] *C.T.C. Monthly Gazette*, Nov. 1885.

[40] Advertisements quoted from *Wheeling*, 26 August 1885 and 7 October 1885; the illustration of the 'Rover' safety racing was in *Wheeling*, 5 May 1886.

[41] "British Correspondence", *Springfield Wheelmen's Gazette*, Nov. 1885; "The Maker's-Amateur Question", *Wheeling*, 4 March 1885, p. 279.

[42] *Wheeling*, 28 October 1885; see also "The 'Kangaroo' Race", *The Cyclist*, 28 Oct. 1885, pp. 59-61.

[43] "Progress and Invention", *Wheel World*, Nov. 1886.

[44] *The Cyclist*, Special Show Supplement, 26 Jan. 1887.

[45] Henry Sturmey, *Indispensable Guide to the Safety Bicycle*, 1885, 'Introductory Notes' and description of 'Rover', pp.70-71. Sturmey's choice of the four words, 'safety, speed, ease and elegance' can be seen as an expression of the dominant considerations in bicycle design. But that acceptance of the 'safety' was by no means universal at the time is shown in a comment from a columnist in *Wheeling*, 15 June 1887: 'Why is it, I wonder, that men will persist in racing on Safety machines...Safety machines are not adapted for path racing...The time is not far distant when the real racing men will make an energetic protest against these duffers on dwarfs, and the N.C.U. will have to legislate and prevent them riding except in Safety races. They will be no loss, for, as I have said before, no really good man rides one'. The writer's opinions resulted in 'a perfect avalanche of correspondence'. (*Wheeling*, 22 June 1887).

[46] Henry Sturmey, *Indispensable Bicyclist's Handbook, A Complete Cyclopedia upon the Subject of the Bicycle and Safety Bicycle and Their Construction*, 1887, "Introductory Notes" and description of 'Rover' on pp.326-28. At least 35 different makes of 'Rover'-type safeties were illustrated here.

[47] "Analysis of Cycles at the Stanley Show, 1887", *Wheeling*, 9 Feb. 1887, p.291.

[48] "British Cycling in 1884", *Springfield Wheelmen's Gazette*, Dec. 1884 and "British Correspondence", Nov. 1885

[49] Underwood advertisement, *L.A.W. Bulletin*, 12 March 1886; Spalding advertisement, *L.A.W. Bulletin*, 21 May 1886; Starley and Sutton advertisement, *L.A.W. Bulletin*, 9 July 1886.

[50] Arthur Zimmerman began his career on a 'Star' bicycle (see Chapter 7).

[51] *Outing*, Oct. 1888, p.88.

[52] H.H. Griffin, *Bicycles and Tricycles of the Year 1888*.

[53] All quotations from A.J. Wilson ('Faed'), "Record-breaking on the North Road", *Wheel World*, Oct. 1886, pp.442-46 and Nov. 1886, pp.503-09.

[54] A.J. Wilson, "How Cycling Road Records Are Made in England", *Outing*, July 1889, pp.300-05 and Sept. 1889, pp.435-39.

[55] Rule 1 of Records Committee of the National Cyclists Union stated in 1886 that - 'The N.C.U. will adjudicate upon path and road records claimed by amateurs within the meaning of the definition and rules, but it shall be in the discretion of the Records Committee to decline to accept any claim where they consider that the interests of the sport would not be promoted thereby'; quoted in A.J. Wilson, op. cit., p.442 and p.444.

[56] S. H. Moxham, *Fifty Years of Road Riding (1885-1935) – A History of the North Road Cycling Club*, p.11.

[57] A.J. Wilson, *Wheel World*, Oct. 1886, p.442 and p.443.

[58] A.J. Wilson, op. cit.

[59] "Long-distance riding in the Liverpool district during 1886", *Wheeling*, 10 Nov. 1886.

[60] "How the Wheel World Wags", *Wheel World*, Nov. 1886., p. 522-23.

[61] "The North Road Club's All-Day race", *Wheeling*, 7 Sept. 1887, p.347 and advertisement, 21 Sept. 1887.

[62] "National Cyclists' Union - Full Report of Council Meeting", *Wheeling*, 15 Dec. 1886.

[63] *Wheeling*, 28 Sept. 1887, p.393.

[64] "Road Racing. A Climax Reached", Editorial in *Wheeling*, 5 Oct. 1887.

[65] Roy Green, *100 Years of Cycling Road Records*. The 14 clubs represented at the inaugural meeting of the R.R.A., were: North Road C.C., Anfield B.C., Bath Road Club, Anerley B.C., Polytechnic C.C., Catford C.C., North London C.C., Stanley B.C., Stoke Newington C.C., City of London C.C., Biggleswade and District C.C., Kingsdale C.C., Carleton C.C. and Pioneer C.C.

[66] See also the discussion in Chapter 8. The plethora of evidence of the existence of cycling clubs throughout Britain gives an interesting opportunity to carry out a social and class analysis of cycling in the period 1880 to about 1900, but conclusions about cycling's class orientation should necessarily remain speculative at present. How much did the cost of a bicycle affect the ability of lower income levels to participate in cycling? To what extent did working-class people embrace cycling because of lack of other opportunities for sport? Did they get sucked into cycling as a sport because they first used a bicycle for utilitarian purposes? Was there in fact more of a spread in appeal across the middle- and working-classes than might be supposed? Once again, Lowerson's assertion that cycling was 'more distinctly pan-class as a participatory recreation than any other late Victorian boom sport' should be borne in mind. He sees

cycling from the 1880s as 'spreading downwards' socially, although he acknowledges the brief mid-1890s flirtation of the fashionable upper classes with cycling, when it spread briefly upwards. He also correctly identifies one of the principal problems in analysing cycling as 'a tension between the recreational and athletic values'. See John Lowerson, *Sport and the English middle classes, 1870 – 1914*, pp.116-21, and David Rubinstein, "Cycling in the 1890s", Victorian Studies (Indiana University), Autumn 1977, Vol. 21, #1.

[67] As late as 1892-93, the Persil Flexible Wheel Tire Co. Syndicate Ltd was attempting to provide an alternative to the pneumatic tyre with an elaborate sprung metal wheel, which 'the Company hopes to fit to cabs, omnibuses, perambulators, and all sorts of carriages'. This attempt to provide a sprung solution to the problem of vibration, which now looks so improbable as to be almost a joke, underlines the fact that in the early 1890s the absolute historical dominance of the pneumatic tyre was not as yet assured. (see 'The Persil Flexible Wheel', *The Boneshaker*, Spring 2001; "Roues suspendues 'Persil'", *Véloce-Sport*, 17 Aug. 1893). Another such sprung wheel was made by Eastham and Haworth, Leyland (see *Wheeling*, 4 Jan. 1893.)

[68] The best detailed technical, chronological and legal account of the development of the pneumatic tyre in Britain is Sir Arthur du Cros, *Wheels of Fortune – A Salute to Pioneers* (Chapman and Hall, London, 1938). Early American pneumatic developments are discussed in *The Cyclist* (May, 1890, p.54), which said: 'There is no little curiosity amongst those interested in cycling to see a wheel on this side of the ocean fitted with the Pneumatic Tire that has caused so much discussion in England. It is the invention of Mr. J.B. Dunlop....There is no doubt but what this invention is even yet in its experimental stage, although a number of racing men and others are using wheels with pneumatic tires in England. If it proves anything like a substantial success it will no doubt make its appearance in this country during the present season, and if its great advantages as a speed-maker are true, a progressive rider may catch the other napping by entering the races with a pneumatic tired wheel'.

[69] R.J. Mecredy and Gerald Stoney , *The Art and Pastime of Cycling*, 2nd Edition, 1890, pp.229-31, 'The Pneumatic Tyre'.

[70] Mecredy and Stoney, op.cit., Third Edition, 1893.

[71] W.J. Grew, *The Cycle Industry*, p.53.

[72] Knowledge of a previous patent taken out by R.W. Thomson, from 1845, was denied by Dunlop: 'Oh yes, I heard of Thomson's old patent several month's ago', he told *The Wheelman and Irish Athletic and Cycling News* (21 Oct. 1890), 'but was quite unaware of it at the time I patented my own invention. Thomson's patent, however, differs very materially from my own, and as far as I can understand, was a complete failure'.

[73] It is important to emphasize that Dunlop's initial work on the pneumatic principle was subsequently dependent upon the development of the detachable tyre principle (Welch, 1890; Bartlett, 1890 and others), the design of a rim which would allow detachability (Westwood, 1892-3), the development of an effective valve (Woods, 1891), and the design of a strong, pliable cord case for the rubber tyre, all of which were necessary for the universal adoption of the 'clincher' tyre. Facts contained in this general account of the beginnings of the pneumatic tyre are taken from: *The History of the Pneumatic Tyre by J.B. Dunlop* (published after his death by his daughter Mrs Jean McClintock, Dublin, 1924); Sir Arthur du Cros, *Wheels of Fortune – A Salute to Pioneers* (Chapman and Hall, London, 1938); Francis J.J. Glynn, *The History of the Clincher Tyre and Rim* (North British Rubber Co., Edinburgh, c.1900); H.W. Bartleet, 'The First Race on Pneumatic Tyres – How the Air Tyre Jumped into Fame', *Bartleet's Bicycle Book* (London, 1931), pp.121-29, reprinted from *Cycling*, 28 Oct. 1920). See also: H.D.Higman, "The Founding of the Dunlop Tyre Company", *Proceedings of the 5th International Cycle History Conference, September 1994*, pp. 91-94.

[74] Du Cros, op. cit., Chapter 5, "Speed the Incentive", p. 51.

[75] An excellent account of the impact of Harvey du Cros, an enthusiastic athlete and cyclist, upon his six sons, who were all very close in age, is given in Chapter Seven, "We Were Seven", of Du Cros, op. cit., pp.70-78.

[76] *Bartleet's Bicycle Book*, op.cit., p.126.

[77] Du Cros, op. cit, p. 53.

[78] Record times for these distances were as follows: ¼ mile – 36 3/5s; ½ mile – 1m 11s; 1 mile – 2m 26 4/5s; 5 miles – 13m 16 2/5a; 10 miles – 27m 28 4/5s.

[79] Du Cros, op. cit, p. 57.

[80] This sudden increased demand for rubber also had a huge impact on the international rubber market. In *King Leopold's Ghost – A Story of Greed, Terror, and Heroism in Colonial Africa* (Houghton Mifflin, New York, 1998, p.159), Adam Hochschild writes of

the appalling horrors committed by Belgian traders in the Congo in their greed for rubber during the rubber boom, a perspective on the 1890s middle-class bicycle boom in Western Europe which has not previously been explored: 'The industrial world rapidly developed an appetite not just for rubber tires, but for hoses, tubing, gaskets, and the like, and for rubber insulation for the telegraph, telephone, and electrical wiring now rapidly encompassing the globe. Suddenly factories could not get enough of the magical commodity and its price rose throughout the 1890s. Nowhere did the boom have a more drastic impact on people's lives than in the equatorial rain forest...'. Hochschild thus makes it abundantly evident that the sport and recreational pleasures indulged in by the middle-classes of the developed nations were bought at the expense of colonial exploitation and suffering.

[81] H. Hewitt Griffin, "The Tiring Tyre Problem", *Cycling*, 31 Jan. and 7 Feb. 1891.

[82] "Safety or Ordinary – Why is the safety so popular?" *Cycling*, 23 May 1891, p.288.

[83] "Records of the Year Up-to-date", *Cycling*, 18 Nov. 1893.

[84] "The Records of '91", *Cycling*, 24 Jan. 1891, p.11.

[85] H.H. Griffin, "Show Statistics for 1895 and 1896", *Cycle Census of 19th Annual Stanley Show*. 'Cushions' were various kinds of experimental suspension tyres with an air-filled chamber, though not fully pneumatic. They were soon superceded.

[86] Henry Sturmey, 'Introduction' to G.D. Leechman, *Safety Cycling*.

[87] H.W. Bartleet, op. cit., p.133.

Chapter Seven

The foundations of bicycle racing on the road in Britain, France and the United States: sport as business, and contested public space, in the 1890s

1. Outline: differences of approach to road competition in Britain and France

The close proximity of Britain and the continent of Europe had, between about 1870 and the early 1890s, offered a convenient opportunity for international cycling competition, but different cultural approaches and competitive standards, particularly the differing interpretation of the amateur rule, limited regular exchanges between Britain and France, the two European countries with the biggest bicycle industries and the greatest enthusiasm for cycling as a sport.[1]

No strict distinction was made by the Union Vélocipédique de France between amateur and professional cyclists, and in France racing for cash prizes was considered normal and acceptable. No barrier existed, therefore, to professional exchanges between British and French professionals. But a British amateur who raced in France risked his amateur status and could be declared a professional by the National Cyclists' Union because he had raced against other 'professionals'. It was safer for British amateur riders to stay at home. Similarly, a French rider who wanted to compete in England was automatically suspect and likely to be excluded from amateur events.[2]

The Union Vélocipédique de France was founded in February, 1881, 'to promote all forms of cycling', and French championships on the track produced leading champions such as Frédéric de Civry, Paul Médinger, Georges Cassignard, Jules Dubois, H.O. Duncan, Henri Fournier, Charles Terront and others.[3] In the large, still largely agricultural country, racing was most popular in Paris and the north-east, and in the south-west, with Bordeaux and its club, the Véloce Club Bordelais, as an active centre.

Road racing, with which this chapter is concerned, increased in popularity in both France, England and the United States in the late 1880s and early 1890s, and emerged during those years as a distinct and increasingly specialized branch of the sport. The characteristic feature of road racing was that it encountered the geography of the natural environment, hills, wind, rain, heat and cold, and thus posed the challenge of endurance and speed over varied terrain. Its most controversial feature was that it took place and was contested in public space, and had necessarily to share that space with other road users. Road and track racing were not mutually exclusive, but whereas track riders had tended to train for relatively short distances

(20 miles was considered a long-distance race on the track until the mid-1890s), road riders were usually endurance athletes.

Because of the differing social conditions in England and France, however, road racing developed in different directions. A French journalist, writing in 1885, frankly admitted the superior strength and numbers of the English high-wheel riders: 'The English are strongest in the sheer numbers of their outstanding champions; compared with the four or five first-class racers we have, they could easily have about twenty at the starting line'.[4] In England, as has been noted in the previous chapter, road racing was organized by clubs, with an emphasis on long-distance time trials such as those promoted on the Great North Road by the North Road Cycling Club (founded in October 1885) or the Anfield Bicycle Club. But the National Cyclists' Union did not promote or sanction road events or championships.[5]

Over a period of many years, the English road sport was influenced by opposition both from the general public and from certain sections within the cycling community and questions were raised about its public image and its respectability. But in France road racing in the early 1890s – on the pneumatic-tyred 'safety', of course - appears to have expanded not only *without* serious objections as to its propriety and desirability, but *with* the support of local civic leaders and the open financial backing of the press and the bicycle industry, which both, of course, profited from it.[6] In the United States, a tension similar to that in England existed between proponents and opponents of road racing on public highways.

The British sport was confronting a major turning point in the early 1890s. While French interest in racing in centres such as Paris and Bordeaux was flowering, promoted by strong sporting and commercial interests, the British sport was going through a period of public criticism and self-examination. Strong opinions were expressed, as we have seen in the previous chapter, about the desirability of organized 'scorching' on public roads. Racing was criticized as bringing disrepute to cycling and, it was suggested, should be severely restricted or even banned. The opposition came from two directions, both from outside and inside the sport. Public complaints and direct intervention by the police were realities which promoting clubs had to contend with, while there was constant pressure from within the National Cyclists' Union to preserve what many N.C.U. committee members saw as the

integrity and respectability of British amateurism, which meant resisting the active, open financial involvement and support of the bicycle industry.

In the United States, road racing enjoyed popularity in the 1880s and 1890s in and around the major cities, but the peak of the enthusiasm in the mid- and later-1890s appears to have been short-lived.[7] Around major cities, such as New York, Boston and Chicago, road racing was promoted by clubs and local newspapers on the relatively good urban and suburban roads, resulting in some races, for example, the Chicago and Pullman races (Chicago), the Martin (Buffalo) and the Irvington-Millburn (New Jersey), which were held annually and referred to as 'classics'.[8] A small group of long-distance riders, affiliated to the Century Road Club of America, established city-to-city records between, for example, Chicago and New York, Boston and New York, and other cities.

While commercial interests and a surge of enthusiasm within the clubs in a city such as Chicago promoted and encouraged enthusiasm for a local road race, the long distances involved and the bad road conditions in general discouraged city-to-city races. Opposition to the use of public roads for racing was also a significant factor. Commercial sponsorship was directed more profitably into track racing, where action and excitement for spectators was contained within an accessible arena and gate money successfully collected. Thus, for a variety of reasons, place-to-place road races were not successfully established as a permanent part of the sporting calendar in the United States, as they were in continental Europe.

This chapter, therefore, analyses how road racing developed differently in the three countries examined, and describes how differences of opinion about the use of public roads for sport were encountered in Britain, France and the United States. It offers some suggestions as to why contrasting attitudes towards the uses of public space occurred, and how cultural differences contributed to creating varied reactions to road racing. And it particularly explores the involvement of the bicycle industry and the press in the energetic expansion of road racing in France and the resistance to that involvement in Britain.[9]

Summary of Chapter 7

Section 2 (Cycling as business and athletic celebration: the foundations of modern road racing in France) explores the French road races of the early 1890s, such as the Bordeaux-Paris and Paris-Brest-Paris races of 1891, and the establishment of a tradition of long-distance road races sponsored by newspapers and promoted by bicycle and pneumatic tyre manufacturers. A new class of manager/entrepreneur was involved, typified by H.O. Duncan, to organize and promote these events and orchestrate the publicity resulting from them. Such races tested the limits of human endurance, and publicized the bicycle as the agent of constantly increasing speed and human-powered mobility.

Section 3 (British opposition to organized road racing and Lacy Hillier's defence of amateurism against the 'New Professionalism') concentrates on differences between British and French ideas about the organization of cycling competitions on public roads. The amateur ideal tended to discourage the open support of the bicycle industry in sponsoring racing, an ideal fostered by N.C.U. official and committee-man George Lacy Hillier, whose attitudes are explored here. The fact that road racing took place in public space created a public relations problem for the sport. In essence, though, the demands of efficient, structured promotion of modern sports events tended to encourage a drift towards professionalism and the involvement of the industry.

Section 4 (Road racing in the United States in the 1890s: a brief surge of popularity) asserts that there were many similarities with the European scene in club and industry interest in road racing in the United States in the 1880s and 1890s, and that it went through a surge of popularity in the 1890s, particularly on the outskirts of major cities. But bad road conditions and longer distances between cities tended to discourage the foundation of a tradition of place-to-place road racing. The public image of the sport was of similar concern.

2. Cycling as business and athletic celebration: the foundations of modern professional road racing in France

> Racing has always been, and still is, the best school of instruction for bicycle makers... What is certainly true is that all the improvements which have been made in bicycles in the last ten years have come from racing....Makers had the most to gain in making efforts for the sake of the racers, and even today improvements can only really be tried, adopted or rejected, by the people who do the most cycling, the racers themselves. One could very well claim that the velodromes are the universities of cycling.[10]

Nowhere was the emergence of modern continental road racing better exemplified than in the heated contests which took place from 1891 onwards over the well-maintained 580 kms between Bordeaux and Paris, a race which became one of the most important events of the French cycling season during the 1890s.

The date of the first edition of this marathon single-day race has been widely recognized in French accounts as marking the beginning of modern road racing.[11] What have not been so well recognized are the commercial factors – in particular the recent introduction of the pneumatic tyre, and the associated general expansion of the entire bicycle industry – which stimulated the growth of road racing at this precise moment.

The first Bordeaux-Paris road race, promoted by the well-established cycling paper *Véloce-Sport,* which had offices in both cities, was held on 23/24 May 1891. It was advertised as an amateur event specifically to encourage the participation of British amateurs, and was reported in *Cycling* as 'nothing less than an International Road Championship of a most unmistakeable order'. The race resulted in a conspicuous victory over their French rivals for a group of British long-distance road riders who had gained their strength and experience in 12 hour and 24 hour time trials on English roads, particularly those held on the Great North Road. G.P. Mills (1st in 26h 35m), M.A. Holbein (2nd in 27h 50m), S.F. Edge (3rd in 30h 13m) and J.E.L. Bates (4th in 30h 13m) all finished ahead of the best-placed French riders, Jiel-Laval (5th in 32h 15m) and Coulliboef (6th in 35h 18m). According to the editors of *Cycling* (in hyperbole typical of many accounts of the period), 'never in the whole history of cycling has so much excitement been created as by the marvellous performance of the British contingent'.[12]

Twenty-eight riders started the race, with twenty-five of them riding on pneumatic 'safety' bicycles. Georges Thomas, president of the Union Vélocipédique de France, and Hubert Delisle, president of the Véloce Club Bordelais, officiated at the send-off (see Fig. 7. 1.) Over the superb roads, with their long, rolling hills, the British riders excelled. Unexpectedly, they rode non-stop through the night, ignoring a scheduled rest stop at a hotel, arriving in Paris early the following morning. Lacy Hillier, editor of *Bicycling News*, wrote that the British success 'gave a very great stimulus to this class of sport since it afforded French bicyclists a standard, whereby they could judge of their own quality. They were then hopelessly out of the race, and the experience showed that they had much to do before they could expect to successfully compete with English bicyclists'.[13] Crowds gathered along the route and in the towns through which it passed, attesting to the power of cycling competitions on the road to attract and excite the general public. French journalist Victor Breyer recollected much later that:

> this race was an eye-opener for the masses. The press, which previous to the event had hardly given it a notice, came out with big headlines after the event, Mills and his comrades being lionized and hallowed as heroes. That human beings had been capable of riding nearly 400 miles on their frail machines, almost without a dismount, filled everybody with admiration. It came as a tremendous revelation.[14]

The race was also a test of the strength and efficiency of the machines and pneumatic tyres used by the riders, whose manufacturers and agents were keenly interested in the result.[15]

H.O. Duncan, the agent for the Humber Co. in France, heavily involved in the promotion of the race, wrote that 'to successfully manage a cycle business at this period, one had to be a journalist and a sportsman as well as a business man. As the best method of advertising was the winning of important races, I selected quite a "stable" of the best French amateur and professional riders'. Duncan added that 'in order to persuade the English champions to come over to compete, the contest was open to amateurs only', an official nicety necessary to prevent their getting into trouble with the N.C.U. for having competed in France in a race involving 'professionals'.[16] However, these 'amateur' riders did not compete without financial and logistical support from the industry, including pacing provided by professionals. Mills was riding a Humber bicycle and was managed by Duncan, and his victory was an undoubted publicity coup, for 'in every town and village vast crowds blocked the way, and pacemakers had to dismount from their machines and fairly fight their way

through'. Duncan was also involved in supporting and feeding Holbein, as a second string to Mills.

The pacing for the British contingent was minutely organized, 'plans of campaign were earnestly discussed and drawn up, pacemakers allotted their respective stretches'. Mills was met at Vendôme at 11.25 p.m. by professional Charles Terront, 'the old crusted veteran, who accompanied him to the finish, Fournier (ex-French champion) bringing Holbein along an hour later'. Mills was 'taken along', as *Cycling* put it, over the entire course by a total of at least eight pace-makers. Terront, who was not competing himself because he was a professional, in fact paced Mills for about 90 miles, a huge help from such a strong rider, and a significant factor in Mills' victory. Second-placed Holbein was also paced by at least twelve riders, including strong and experienced Frank Shorland. All this support was organized by the canny Duncan, who knew the continental cycling scene better than any of his British contemporaries. The experience gained by riders, pacers and helpers at Bordeaux-Paris in May was extremely valuable for the next major road competition, Paris-Brest-Paris, in September.[17]

Cyclists who excelled in such an early long-distance road competition could do so only with direction and logistical support from a 'manager'. In this respect, Duncan was a pioneer in the role of the modern *directeur sportif*, directing, planning and executing the victories of his athletes, as well as the post-victory publicity. In 1897, Duncan wrote of 'the managers, that is to say directors or administrators' who had 'in the last few years come to the fore and seemed sure to occupy an important role in the sport'. He described them as 'a new kind of man'.[18] As agent in Paris for the English Humber bicycle company, Duncan managed his riders to gain maximum publicity from their victories, which were then advertised in the press as demonstrating the superior quality of the bicycles and tyres used in competition. (see Fig. 7. 2.) Duncan later described his concern that his employers in London, the Humber company, would question the costs he had incurred in backing Terront's win in Paris-Brest-Paris, and the volatile nature of the manager's job was underlined when Duncan switched his allegiance from Humber to the Rudge Cycle Company, taking his rider Terront with him.

Duncan's pioneering promotional methods were soon adopted by others, and became a crucial component of the rapid commercial expansion of the sport in the 1890s. Outstanding athletic achievements, record times and distances, sensational exploits, were increasingly utilized as an effective advertising tool for the bicycle industry. In addition, the racing was often sponsored, promoted and reported over a period of days by newspapers.. The promotion of sporting events sold more papers and also brought advertising revenue from manufacturers.

'From a cycling trade point of view', wrote Duncan, 'perhaps the most important bicycle race ever organized was the first great road race from Paris to Brest and back, a distance of 1,200 kilometres...This wonderful contest was announced on the front page in leading articles and aroused considerable interest not only in France but throughout the world. It practically meant a fortune for the cycle firm who should be successful'. The race was promoted by Pierre Giffard, the editor of *Le Petit Journal*, one of the leading French daily newspapers. Veteran professional Charles Terront was selected by Duncan as his most-favoured competitor.[19] Terront's ride, during which he covered 1,200 kilometres in 72 hours with hardly a break, was widely reported and made him famous. He overcame fatigue and lack of sleep and fought an epic battle with second-placed Jiel-Laval, who was forced to take a sleeping break near to Paris while Terront rode surreptitiously by him. As the two leading riders approached Paris, thousands lined the roads to greet them. The story of this race, which Terront described as 'one of the most fantastic adventures of my entire life', was told in his *Mémoires*, hastily ghost-written by journalist Baudry de Saunier and published in 1893. 'I was invited to eighteen banquets after this. My portrait was published in nearly every French newspaper, and it was because of this widely publicized event that I became so well-known in France', wrote Terront.[20]

Terront, a 34 year-old veteran, was 'in his prime for such terrible trials of endurance', reported *Cycling*, and was riding a Humber bicycle with 'pneumatic tires of a French make' (Michelins), fitted with Harrison Carter's gear-casing, 'now indispensable to long-distance riders' for the protection it gave against the dust and mud of the rural roads. *Cycling*, supercilious and chauvinist, described the competitors leaving Paris as 'a pantomime...we verily do not believe there were more than half-a-dozen riders who knew exactly the task they had in hand, the majority taking matters in the most easy fashion...Were such a crew to

appear at the starting-point of the North Road Hundred, we believe the Britishers would forthwith go and bury themselves in shame. We looked upon the whole procession in disgust'. *Cycling* also complained about the fact that there was a regulation restricting riders to the use of only one machine, which was inspected and 'sealed' (the French word 'poinçonné' was used) and had to be repaired in the case of puncture, breakdown or accident rather than being substituted; 'instead of it being a race of men, it is a race of machines'.[21] But the offices of sponsor *Le Petit Journal* were surrounded all day by thousands of people, and 'the contest will undoubtedly be a splendid thing for the cycle trade in France next year'.[22]

While it reported Paris-Brest-Paris as a superlative performance by Terront, *Cycling* did not discuss Duncan's role as manager or comment on the relationship between Duncan and the industry which had made Terront's victory possible. The paper did, however, publish an editorial complaining about 'cycle competitions involving unreasonable physical exertion. It has ever been our opinion that such unnatural strains on the human frame should cease to be tolerated, and that a race should be limited to somewhere about 200 miles. This is quite as much as most men can stand without passing through periods when they are ghastly to behold'. Longer distances were bound to cause injury, either mental or physical, or both, thought *Cycling*, in a reaction to endurance events which pinpointed precisely why they were successful publicity vehicles. Because they set new standards and broke new athletic ground, they elicited both wild acclamation and negative criticism.[23]

Searching for more sensational challenges, in March 1893 Duncan capitalized on Terront's fame by pitting him against Jean Corre in a 1000 km race on the track at the Palais des Machines in Paris, where Terront rode a Rudge bicycle again equipped with Michelin tyres, covering 653 kms in the first 25 hours without stopping, and finishing the 1000 kms in 41h 58m 52 4/5s, an average speed of 23.819 kph, with Corre only 9 kms behind him. Once again, it was the focus of intense publicity: *Véloce-Sport* wrote that the French press had given the event 'attention unknown until now in our sport', and the public mobbed the Paris office of *Véloce-Sport* for the results of the race.[24] (see Fig. 7. 3.)

Later in 1893, Duncan organized Terront's ride from St. Petersburg to Paris, a distance of 3,000 kms in 14 days, which was claimed to have been accomplished on Clincher pneumatic

tyres without a single repair. The difficulties of coordinating this dramatic ride were described in a hastily published book, and a publicity photograph of Duncan as the suave, all-knowing manager/promoter of Terront's athletic feats was widely circulated (see Fig. 7. 4). Arriving in Paris from Russia, Terront was immediately challenged by Cody ('the King of the Cowboys of the Wild West') to a horse-versus-bicycle match, but was unavailable since his wife was dangerously ill. Duncan, however, accepted the challenge on behalf of Danish rider Charles Meyer in Terront's place.[25] Duncan soon presided over another highly publicized Terront performance, a ride from Rome to Paris.

As exponents of such dramatic, endurance feats, able to create 'noise' in the press, Duncan and Terront were an unrivalled team at the time, and indeed as was suggested by an image from Rudge publicity in 1894, their exploits had global implications (see Fig. 7. 5.). Such 'gigantic' feats are further discussed in Chapter 10.

With these much-publicized endurance events on the road, 1891 can be identified as the first year of prominent place-to-place races, sponsored by publicity-conscious newspapers and used as testing grounds by manufacturers. 1891 was the first year in which pneumatic-tyred bicycles appeared on the market, adding about 25% to the cost of a bicycle, a huge marketing opportunity for the industry. A second Bordeaux-Paris race was run in 1892 without any British competitors, and Terront and Jiel-Laval declined to participate. Conditions were ideal, with warm, sunny weather and a friendly tail-wind pushing the fifty-four riders who left Bordeaux towards Paris. 'The proprietors of *Le Vélocе-Sport* had done everything they possibly could to attend to the requirements of the competitors, and these latter had profited by their experience of last year in providing themselves with plenty of pacemakers and efficient aid in case of accident'.[26] The winner, Stéphane, finished in 25h 37m, beating G.P. Mills' 1891 time by 58 minutes, an average speed of 14 mph for 572 kms (357½ miles), with Vigneaux second. The victory was used to advertise the products of bicycle-maker Clément and tyre manufacturer Dunlop. (see Fig. 7. 6.)

At the 1893 Bordeaux-Paris race - the well-promoted race had quickly acquired a 'classic' status - a distinction was made was between one category of riders, 'coureurs de vitesse' (approximately translated as 'speed riders'), who wore white jerseys, and a second category, 'routiers' (translated as 'road men'), who wore black, a distinction approximating to a self-

assessed level of expectations, based on age, experience and athletic merit, but no distinction was made between amateur and professional. The brand names of the bicycles and the tyres of all the competitors were listed on the start sheet. The contest was 'a Homeric struggle between two men, Cottereau and Stéphane, neither of whom could drop the other, the long race being declared a dead heat (after an appeal) because of confusion caused by crowds of riders and pace-makers at the finish and the inexact marking of the finishing line.[27]

By 1897, Bordeaux-Paris had become 'a firm annual fixture in the cycling world, and may be said to constitute the cyclist's blue riband...No other event excites so much interest on the part of the general public, while each machine and tire maker strives to have his particular representative well to the front'. The race was a match between Rivierre and the Dutch long-distance rider, Cordang, and was won in record time by Rivierre, riding a Humber bicycle with a Simpson lever chain. Cordang had two pacing tandems or triplets with him at all times and a total of 180 men 'to help him along the road', while Rivierre had 60 pace-makers and Frederic (third) had 150. Rivierre was also assisted and paced by automobiles, introducing a problematic new element into road racing, whether to allow pacing by motor-vehicles in long-distance bicycle races.[28]

Many other long place-to-place races were initiated in the mid-1890s, tests of the strength and stamina of a new kind of super-endurance athlete and of the speed and reliability of the newly developed pneumatic-tyred bicycles. Tyre manufacturers were particularly aggressive in their participation in these contests (see Figs. 7. 6. and 7. 7.). In the 1892 Paris - Clermont-Ferrand race, the Michelin brothers 'themselves scattered thousands of nails on the road, with the specific intention of causing punctures to their pneumatics and thus to prove that they could be easily repaired. The Clément company, whose riders Stéphane and Vigneaux were on Dunlop pneumatics, claimed that the nails had been scattered to puncture their Dunlops'.[29]

Another prominent, much-publicized event was the Paris - Brussels race, held in August 1893 in accordance with 'the international amateur rules of the National Cyclists' Union' and sponsored by *La Bicyclette.* It was won by Henri André, who covered the more than 400 kms in just under 20 hours. The race was endorsed by the King of Belgium, Leopold the Second, who donated a special prize to the winner and had Pierre de Coubertin as one of the

Presidents of its organizing committee. Special arrangements were made at the French-Belgian frontier to alleviate customs regulations. The French and Belgian people, said *La Bicyclette*, were united 'in the same love of sport' and the event had 'done more for the good relations between the two countries than the best efforts of twenty diplomats'. The road race was coordinated with a track racing festival at the Brussels Velodrome, timed implicitly as a European counter-attraction to the American-oriented International Cyclists' Association's World Championships taking place at the same time in Chicago (see Chapter 8). 'Can it be said that French amateurism only includes shy and incapable people in its ranks', asked *La Bicyclette*, 'that, in contrast to what occurs in our neighbours' country, professionalism in our country has drained away the vital forces, the vigour of our sports-loving young people?'[30] 20,000 people were reported at the start in Paris, while 80,000 were reported lining the roads at the finish in Brussels.[31]

In August 1894, a 'great road race from Lyons to Paris and back, distance 646 miles, resulted in an easy win for Rivierre, who covered the distance in 53h 17m 30s'.[32] In 1896, two textile industrialists from Roubaix, Théo Vienne and Maurice Perez, collaborated with *Le Vélo* in Paris in organizing a race from Paris to Roubaix across the rough roads of north-east France, a race which survives until today as the oldest and most prestigious on the European cycling calendar. The race was won by German cyclist Josef Fischer, who had previously won races between Moscow and St. Petersburg (1893) and between Trieste and Vienna (1895).[33]

Table 6A, below, shows the principal place-to-place road races inaugurated between 1891 and 1896, a period which was foundational in the establishment of the modern tradition of European road racing:

Date	**Itinerary**	**Distance**	**Sponsor/Winner**
May 1891	1st Bordeaux - Paris	587 kms	Sponsored by *Véloce-Sport*
? 1891	Angers – Tours - Angers	224 kms	Won by Charron and Fournier
? 1891	Paris - Dieppe - Paris	357 kms	Won by Vigneux
Sept. 1891	1st Paris - Brest - Paris	1200 kms	Sponsored by *Le Petit Journal*
May 1892	2nd Bordeaux - Paris	587 kms	Sponsored by *Véloce-Sport*
May 1892	Basle – Strasbourg		

? 1892	Geneva - Berne		Won by Masi
June 1892	Paris - Clermont-Ferrand		Sponsored by Michelin, won by Henri Farman
June 1892	Liège - Bastogne - Liège	155 miles	Won by Léon Houa
? 1892	Lyon - Montelimar – Lyon	525 kms	Won by Marius Allard
July 1892	Paris - Nantes - Paris	1004 kms	Sponsored by *La Revue des Sports*, won by Allard
May 1893	Paris - Beauvais - Paris		Sponsored by *La Bicyclette*
May 1893	Paris - Rouen		Sponsored by *La Bicyclette*
May 1893	Paris – Trouville		Sponsored by *La Bicyclette*
May 1893	3rd Bordeaux - Paris	587 kms	Sponsored by *Véloce-Sport*, won by Cottereau
June 1893	2nd Liège - Bastogne - Liège	155 miles	Won by Léon Houa [34]
June 1893	Vienna - Berlin	582 kms	Winner Josef Fischer, sponsored by Opel and Michelin
July 1893	Paris - Ostend		Won by Dubois
July 1893	Paris - Bruxelles	404 kms	Sponsored by *La Bicyclette*, won by André
Sept. 1893	Paris - Luchon	30 kms	Sponsored by the Luchon Casino
Oct. 1893	Saint Petersburg - Paris	3000 kms	Terront, sponsored by Rudge and Clincher
May 1894	4th Bordeaux - Paris	587 kms	Won by Lucien Lesna
May 1894	Rome - Paris		Won by Terront
? 1894	Milan - Turin	530 kms	Won by Pavie
? 1894	Milan - Munich		Won by Fischer
? 1894	Trieste - Vienna		Won by Fischer
Aug. 1894	Lyon - Paris - Lyon	646 miles	Won by Rivierre
May 1895	5th Bordeaux - Paris		Won by Charles Meyer
April 1896	Paris - Roubaix	280 kms	Sponsored by *Le Vélo*; won by Josef Fischer
May 1896	6th Bordeaux - Paris		Won by Linton and Rivierre

[Table 7.A., showing the expansion of European road races between 1891 and 1896, with approximate distances, sponsorship (where known) and winners.] [35]

The nature of these cycling competitions was that most were sponsored by the bicycle industry and the cycling or local newspaper press, and run on a place-to-place basis in order to activate the interest of a local spectator audience. But press coverage also sought to create a wider interest. If a local rider could win in the destination city, as occurred for example when Maurice Garin won the Paris - Roubaix race in 1897 and 1898, additional local publicty could be generated.[36] Many of the races listed above were continued on an annual basis. Bordeaux-Paris, which became the most prominent road race on the calendar, saw dramatic increases in speed as the techniques of pacing a strong rider were better understood and practiced. In 1897, 1898 and 1899, the race was paced by automobiles, resulting in the extraordinary ride of 594 kms in 16 h 35 m (35.79 kmh) by Constant Huret in 1899, before subsequently reverting to human pace. Leading riders in this race, Gaston Rivierre, Maurice Garin, Constant Huret, Josef Fischer, Lucien Lesna and Hippolyte Aucouturier were among those who contested the first Tours de France from 1903 on. For the sake of comparison, and to show the development of cycling speeds on the road, the winners of the annual Bordeaux - Paris race are shown below, with times and average speeds:

1891	G.P. Mills (GB)	572 km in 26:34:37 (21.531 kph)	(human-paced)
1892	A. Stephane (F)	572 km in 25:37:00 (22.329 kph)	(human-paced)
1893	Louis Cottereau (F)	572 km in 26:04:52 (21.923 kph)	(human-paced)
1894	Lucien Lesna (F)	572 km in 25:11:07 (23.506 kph)	(human-paced)
1895	Charles Meyer (Dk)	592 km in 25:30:00 (23.216 kph)	(human-paced)
1896	= Arthur Linton (GB)	592 km in 24:12:15 (27.809 kph)	(human-paced)
	= Gaston Rivierre (F)		
1897	Gaston Rivierre (F)	592 km in 20:36:46 (28.720 kph)	(automobile-paced)
1898	Gaston Rivierre (F)	592 km in 20:39:01 (28.688 kph)	(automobile-paced)
1899	Constant Huret (F)	594 km in 16:35:47 (35.791 kph)	(automobile-paced)
1900	Josef Fischer (D)	594 km in 21:57:57 (27.042 kph)	(human-paced)
1901	Lucien Lesna (F)	594 km in 21:53:40 (27.130 kph)	(human-paced)
1902	Edouard Wattelier (F)	575 km in 22:43:01 (25.312 kph)	(unpaced)
	Maurice Garin (F)	575 km in 18:41:20 (30.767 kph)	(human-paced)
1903	Hippolyte Aucouturier (F)	575 km in 20:03:50 (28.658 kph)	(human-paced)

[Table 7.B showing the first 12 years of the Bordeaux - Paris road race, with winners, times, average speeds, and interaction with pacers, including automobile pace between 1897 and 1899.]

These place-to-place races established in the 1890s, with a pattern of promotion by newspapers and sponsorship of riders by equipment manufacturers, laid the promotional and organizational foundations for the later development of the Tour de France, which are further explored in Chapter 10.

The writer and critic Baudry de Saunier, present at many of the prominent Parisian races which he reported, was one of the most perceptive critics of the expansive bicycle racing scene in France. He wrote: 'I did not exaggerate when I suggested earlier that cycling constitutes a revolution in human locomotion. A revolution in social relationships, a revolution in habits, a revolution in business – cycling, which some short-sighted people still make fun of, will effect all these upheavals'.[37] In his *L'Art de la Bicyclette*, published in 1896, reflecting on recent developments in France, Baudry de Saunier stressed a point which has been constantly emphasized here, that bicycle racing was the primary testing ground for bicycle technology, a fact which was heavily underlined in the advertising issued throughout Europe after an international ride such as Terront's St. Petersburg - Paris marathon.

De Saunier's comments are particularly relevant to the growth of the demand for pneumatic tyres and the participation of tyre manufacturers in bicycle racing in the early 1890s. But as a wider statement about the relationship between the sport and the industry, particularly the comment about velodromes as 'the universities of cycling', these comments recognize the central theme of this dissertation – the impact of the sport on the developing technology:

> Since the very beginning of cycling, racing has had the important function of showing, through remarkable performances, the economy, the ease and speed of a new type of transportation. Racing has always been, and still is, the best school of instruction for bicycle makers...What is certainly true is that all the improvements which have been made in bicycles in the last ten years have come from racing. Without the racing and the riders, it is a pretty good bet that the stiff, light machines, cushioned so well with the pneumatic tyres we use today, would still have been much more like the primitive and heavy machines of 1880. Makers had the most to gain in making efforts for the sake of the racers, and even today improvements can only really be tried, adopted or rejected, by the people who do the most cycling, the racers themselves. One could very well claim that the velodromes are the universities of cycling. We all benefit from the mechanical research and speed tests which are being carried out on a daily basis.[38]

The opening of a new track in Paris, the Velodrome Buffalo, in 1892 caused *La Bicyclette* to comment on 'new proposals for magnificent struggles and gripping matches' which were occurring; in quick succession, the paper noted, '24 hour records, international races, long-distance and sprint races follow each other, more and more of an attraction to people interested in cycling'.[39]

In perhaps the most important critical and theoretical French text written in the early 1890s, a period of rapid sport-expansion, Baudry de Saunier hinted at the profound impact of cycling on public awareness and habits when he wrote:

> I did not exaggerate at all when I suggested earlier that cycling constitutes a revolution in human locomotion. A revolution in social relationships, a revolution in habits and customs, a revolution in business – cycling, which some short-sighted people still make fun of, will succeed in effecting some convulsive changes...But ultimately cycling is more than a revolution of commerce and special products. In our age, when it is necessary to get through life on the basis of courage and will, the marvellous exercise teaches initiative, endurance and obstinacy. Its most wonderful quality, in the end, is a moral one.[40]

Within this scenario, the roads of France (and to a lesser extent, perhaps, the velodromes as well) became public space within which sport was openly commercially motivated but also had an idealistic social value, the races were an expression of the human and moral value of physical and athletic striving. In the 1893 Bordeaux-Paris, wrote Davin de Champlos in *La Bicyclette*, 'The riders, both winners and losers, have given us a wonderful example of courage, endurance and tenacity'.[41]

The same values were expressed in the annual Tour de France, founded in 1903, where roads were completely closed to normal traffic while the race passed, as they still are today (see further discussion of the Tour de France in Chapter 10).[42] The roads of Britain, in marked contrast, were a territory to be *defended against* the dangers and risks of fast cycling in the interests of safety, propriety, class exclusivity, the non-cycling road-user and those more sedate touring and utilitarian cyclists who did not want to be identified with the 'scorchers'. The contrasting British approach and opposition to racing on the road is described and discussed in the next section.

3. British opposition to organized road racing and Lacy Hillier's defence of amateurism against the 'New Professionalism'

As we have seen, the extraordinary technological promise of the 'safety' bicycle and the pneumatic tyre gave manufacturers the need to test and prove them under real road conditions as well as on the track. The commercial pressure to promote long-distance road racing increased, and subsequently the public appetite for it was whetted as feats of endurance were publicized.

The industry needed the sport and was anxious to provide materiel and funds for it. Testing the limits of human endurance and mechanical strength and reliability on road and track had long been a priority in bicycle racing, for example in the early Six Day Races organized in the late 1870s by Harry Etherington and in the trials of various 'safety' bicycles in the mid-1880s, which have been discussed in previous chapters. The more extraordinary the performance, the greater its publicity value. Riders themselves liked the challenge and the surprises of a long road race on the generally sparsely inhabited roads of the period. 'Road racing is so free, so unartificial, it has the ring of reality about it', wrote the editors of *Cycling* in 1894; road racing was 'the most liked and enjoyed...of all forms of cycling sport...in spite of an opposition that few sports have ever had to undergo'.[43]

But road racing in Britain was controversial because the sport was on prominent display in the public arena. The problematic nature of a sporting event organized to take place in shared public space was later summarized by Lacy Hillier in an essay on 'Cycle Racing', published in 1911. Speaking of the races held over the Great North Road and other roads in the early 1890s, Hillier wrote:

> The attention attracted by these contests, and the very full reports published by the sporting as well as the cycling press, caused the popularity of this phase of the pastime to grow exceedingly. The winner of a big road race not only secured great credit to himself, but gave a widespread advertisement to the machine he rode, and as a natural consequence the trade appeared upon the scene, the friendly character of the assemblies gradually disappeared, things became more business-like, pacing was supplied, tandems and often larger multicycles swooped down in shoals upon the highways, and some riders unquestionably allowed themselves to be subsidised by the makers of the machines they rode.[44]

In short, commercial pressures challenged Hillier's conception of an amateur ideal and amateur cycling interests had a public relations - an image - problem on their hands in England.

In spite of the long connection that the bicycle industry had with the promotion of racing, it was the desire of advocates of 'pure' amateurism, such as Hillier, to disassociate themselves as much as possible from the commercial and publicity aspects of cycling, an endeavour which was an uphill battle given the economic realities of the bicycle industry. The continental public, as has already been described in Section 2, accepted bicycle racing without much objection as a commercial spectacle in the 1890s, while a larger proportion of the more class-conscious English road users and residents viewed bicycle racing on public roads as a lower-class activity which tended to bring disrepute to other cyclists and created danger and conflict with horses and other vehicles on the roads (see Fig. 7. 8.).

The more crowded nature of English roads, the population density of residential and industrial areas, possibly made this reaction more prevalent than in predominantly rural France. Public opinion hinted at a stricter regulation of cyclists in general. *Cycling* commented in 1892 that 'the general opinion of the pedestrian section seems to be that the wheelman should be taxed and placed under strict restraint, especially in large towns... Should such restrictions be made... they will have been caused by the imbecility and reckless disregard for propriety shown by the rowdy few'.[45] 'Rowdy', of course, was not an objectively measurable category of behaviour, but tended to have class implications.

The relationship between cyclists, particularly racing cyclists, and other categories of road-users had always been problematic, and since about 1887 the more controversial question of organized road racing had been aired from time to time in the cycling and general press, particularly in *Bicycling News,* the journal which Lacy Hillier himelf edited. The interaction between cyclists and horses had long been a major issue, as was the crowded state of the urban streets through which fast-moving cyclists inevitably had to pass. *Bicycling News'* editorials invariably reflected Lacy Hillier's articulate, pro-amateur perspective, and were intensely aware of the public's reactions to the sport. Cyclists racing on the road came into direct, unmediated contact with the general public. The riders had to deal with whatever conditions they met on the roads. They might encounter sympathetic spectators willing to

applaud them, or just as likely, a shepherd driving a flock of sheep or an aristocratic carriage-driver impatiently navigating a narrow country lane.

An 1887 Lacy Hillier editorial issued a warning against the possible prosecution of cyclists following a Catford Cycling Club open road race:

> We once again raise our voice in emphatic protest against this style of competition, which is absolutely certain, sooner or later, to bring us into serious trouble with the authorities. A member of the Gainsborough C.C. told us that he saw four police-constables on the look-out on the road near Horley, and we once again reiterate our words of warning...When seventy or eighty cyclists are summoned for furious driving, and the authorities seek to put checks upon our speed upon the road, the main body of wheelmen will regret that individual clubs should have been permitted to inflict such injury upon the sport as a whole.[46]

In December 1887, the National Cyclists' Union adopted a motion which expressed 'disapproval of the growing practice of racing on the public roads', and directed the Executive 'to do its utmost to discourage road racing'.[47] At a special meeting in March 1888, the Council of the N.C.U. voted to no longer recognize road records officially.[48] The controversy continued throughout 1888 and the break-away Road Records Association (whose formation has already been described in Chapter 6) was constituted by May. Its 'Regulations' were directed at the recognition of individual record-breaking attempts rather than encouraging massed-start racing. Even though the new organization was begun in opposition to the National Cyclists' Union policies, the wording of its first byelaw showed that the R.R.A., too, was keenly aware of the possible negative impact of road racing upon public opinion:

> The Road Records Association will adjudicate upon cycling road records claimed by amateurs eligible to compete under N.C.U. rules, and also upon cycling road records claimed by professionals, but it shall be in the discretion of the committee to decline to accept any claim where they consider that the interests of the sport would not be promoted thereby.[49]

Tension between cyclists and police evidently remained high at the time. An Editorial in *The Cyclist*, probably written by editor Henry Sturmey, stated in Aug. 1888 that: 'From all sides our correspondents report activity on the part of the police'. It expressed the fear that compulsory measures would be taken, 'to enforce that respect for the wishes, comfort, and safety of the rest of the community which the advocates of road racing refused on their own accord to concede...if cyclists don't regulate their road riding themselves it will be done for them, and that, too, in a manner at once unpleasant to those immediately interested and

detrimental to the pastime at large'. "Furious driving", it was pointed out, was illegal, but 'a properly conducted affair over a route blessed with little traffic, and through no towns or populous villages, would, if properly introduced, receive the sanction of the authorities'. But such a race would, of course, be deprived of most of its potential audience - the population living along the route.[50]

Exchanges of editorials and the opinions of correspondents continued in the English cycling press throughout 1889. 'It seems advisable to check the present craze for road-races', wrote Hillier in *Bicycling News*:

> for the magnitude of the evil must soon cause the authorities to take action, and that action will be stringent...Personally, we think a road-race a most interesting affair, and were it possible to promote such contests without infringing the rights of other citizens we should be just as warm in support of, as we are now in opposition to, this form of the sport. The roads were not made for cycle-racing, or for the use of cyclists alone, and the comfort and convenience of other users of the highways must be considered'.[51]

The possibility that cyclists might have to proceed at 6 mph with a red warning flag in front of them, and suffer imprisonment for 'furious riding', was held out as a threat. Lacy Hillier's argument was that racing, the recreational cyclist road-user and the bicycle industry would all suffer if the sport did not regulate itself: 'We address ourselves to the road-rider as opposed to the road-racers, to the tourists, to the steady users of the cycle for health and business; we invite their cooperation, and we also invite the cooperation of the C.T.C., whose interests must be seriously menaced by any prospect of official restrictive legislation'.[52]

A.J.Wilson, the President of the North Road Cycling Club, which promoted a 24-hour road competition, one of the best-known road races in Britain, disagreed with Lacy Hillier. He responded that:

> it is possible to promote road-races without infringing the rights of other citizens, and my club has repeatedly proved the possibility by organizing road-races at which not a breath of complaint has been possible. I challenge you to refer to a solitary instance in which the rights of any citizens have been interfered with by any of the open road-races promoted by the North Road Cycling Club...We go far away into secluded parts of the country, where we know that there is no danger; and we fix our routes so as to avoid the possibility of endangering or scandalizing the inhabitants of towns.[53]

Lacy Hillier was adamant, however: 'We conceive it to be our duty to the sport, and to all concerned in its welfare and prosperity, to continue to warn the cycling world at large of the dangers to which a certain section are exposing the steady users of the wheel. We have long foreseen the trouble ahead, and we shall go on warning all concerned until the action of the ruling body of our sport - or the outside authorities - do away with road-racing altogether'.[54] Hillier seemed unable to conceive of well promoted, properly planned and publicized road racing, supported perhaps by the industry (with whom he was unwilling to cooperate), as a public sporting spectacle presented for the general public's enjoyment.

Thus, while French road racing expanded in the early 1890s in both its organizational capabilities and its popularity, and became a public celebration of a new kind of athletic prowess and endurance, the attitude towards road racing in Britain was becoming increasingly hostile. Why would a promoter put energy into organizing a big public cycling spectacle, a massed-start Edinburgh to London road race on the model of Bordeaux - Paris, for example, when it would probably be opposed by certain sections of the press and by certain editors and officials within the sport? Without careful prior agreements, such a race might well have been stopped by the police in one of the cities through which it passed, hardly a sound financial or publicity investment. The crowded state of Britain's Midland and Northern cities made a quick daytime passage through them problematic, while much of France was still primarily rural. Probably, also, a further manifestation of class divisions in Britain can be seen here. In spite of the presence of a few influential and articulate aristocratic and upper middle-class representatives in the top levels of cycling's governing bodies and club institutions, leading newspapers in general recognized bicycle racing as a predominantly middle-class and working-class sport and appear not to have understood the potential value of bicycle racing as a publicity vehicle. This was very different from the eagerness of the French and continental press to promote and report road racing, which has been described above.

The ongoing ideological tension between amateurism and professionalism also played a crucial role in this decisive phase in the evolution of road racing in Britain, isolating British riders from the freely developing continental professionalism. British 'amateurs' had not been penalized for competing against the French in 1891 in the first Bordeaux-Paris race because it was officially announced as an 'amateur' event. But the French 'amateur',

according to an editorial by Lacy Hillier in *Bicycling News*, was 'a sort of hybrid creation, and though he would scorn to make a living by his prowess, he would not object to make a money bet upon his skill, or to accept money as the prize in a race'. The N.C.U., according to Hillier, could not and would not accept the Union Vélocipédique's definitions because:

> they would only weaken their own...they would practically recognize an element of professionalism in the amateur ranks...Under any circumstances, the condition of racing in France would disqualify the majority of amateurs from running in that capacity in England...The Union Vélocipédique de France can only do one thing, and that is to remodel their rules upon those of the N.C.U.[55]

The imperious posture of Hillier, as an outspoken defender of amateurism within the N.C.U., is noteworthy, as is his conviction that *his* definition of sport was that which should govern in international competition. The *Irish Cycling News* characterized Hillier in the following terms:

> Always heard before he is seen, Mr. H. discourses on every topic, and lays down the law in tones rather suggestive of bombast; he speaks to no one in particular but at everybody in general. Mr. George Lacy Hillier is a man of good physique; a fine, athletic, well-knit figure, topped by a face of rather Mephistophelian cast. The moustachios have an aspect of soldatesque ferocity; they are waxed furiously, and stick out in a bold, defiant way, as becomes an integral portion of the amateur champion of 1881...But with all his peculiarities, Mr. Hillier has much to recommend him. He is almost an insanely enthusiastic sportsman; he believes himself to be the guardian angel of English cycling; he has done a good deal for it, and he ever strives according to his lights, to purify racing and lift it above suspicion.[56]

And in a later scathing attack on Hillier in *La Bicyclette*, Paul Hamelle asked, 'What else is the theory of amateurism but a system of prejudice, born of error, supported by lies...Blessed by the N.C.U., Hillier has made amateurism his credo, an article of faith outside of which there is only shame and misery for the obstinate sinner...From the heights of his intolerant dogmatism, he goes on passing opinions on people and events, making judgements which the facts hasten to contradict, without questioning his serene belief in his infallibility'. Hillier was 'a high priest without any believers, who expends his substantial power blowing on dead ashes, a naïve supporter of lost causes who is to be encountered inevitably opposed to any novelty... barring the road to progress and crying out to anyone whom he sees from far off, "Halt! Who goes there? No entry!" Progress will pass through nevertheless. G. L. H. will at least have had the consolation of having sometimes stood in its way!'[57]

What exactly were those amateur ideals, which Hillier defended so passionately within the National Cyclists' Union and in the press, and for which he claimed the right to be a moral spokesman, showing an 'almost insane enthusiasm'? In a *Bicycling News* Editorial entitled simply "Sport", Hillier spelled out his beliefs:

> What is sport?...Everything depends on the sportsman, is all the answer that can be given. Sport is amusement solely, but different amusements please different minds...The essence of sport is relaxation. Sport is when we disport ourselves from labour and our usual daily work. Any pursuit followed regularly as a means of livelihood is no longer a sport...the paid athlete is not a sportsman whether he be runner, cricketer or cyclist; these pursuits are trades for the professionals, not sports for them at all. They must be followed for pleasure to be sports...The sportsman, then, is the man who has an amusement which may cost him something, but which must not bring him in anything, for an amusement which brings him in anything is not a sport but a business. Business men are not sportsmen in their own line of business; all of which is no quibbling paradox, but strictly and literally true. The best sport, then, is the one which gives the most amusement, affords the greatest relaxation, and enables us to carry ourselves away from labour and our usual daily work most readily. And in this last condition lies the secret of the supremacy of cycling. Most sports amuse us only at holiday time...The cyclist can have his bit of fun at any time.[58]

Sport, then, was 'an amusement', 'a relaxation', and 'followed for pleasure'; it should not be 'a means of livelihood', 'a trade', or 'a business'; 'the paid athlete' was 'not a sportsman'. The rift between Hillier's ideals and the current economic reality of commercial bicycle racing interests could hardly have been more dramatically illustrated than in this prominent editorial.[59]

During the winter of 1891-92, the N.C.U., asserting its ideological and bureaucratic control of the sport, voted to prohibit British amateurs from racing in France because the Union Vélocipédique de France would not yield to pressure to fall into line with the N.C.U.'s definition of amateurism, as the governing bodies of Germany, Austria and Holland had already done. *Bicycling News* published a leading article from its 'Paris correspondent' entitled "The Amateur Question in France", which examined the repercussions of the ruling. 'More broad-minded' people involved in cycling were disappointed with the N.C.U., said the article, because:

> this prohibition will isolate completely the cyclists in France from their brethren elsewhere. No one can pretend that this will help forward the cause of sport upon that side of the Channel, for competition is the soul of cycling, as it is of business...The fact that France has declined to accept the advances of the N.C.U. shows that there is a very big Chauvinist party who will suffer any inconvenience rather than submit to the masterful spirit of perfidious Albion...The creation of a

> logical amateur standard would work wonders for cycling, which already has taken first rank in the sports of the country.[60]

This ripple in the constant waves of arguments about amateurism and professionalism came immediately prior to the 1892 formation of the first international governing body of the sport, the International Cyclists' Association, whose rules and standards confirmed (as will be further explained in Chapter 8) the essentials of the amateur definitions insisted on by the National Cyclists' Union and the League of American Wheelmen. Its foundation represented the bureaucratic and organizational victory of British, American and German conceptions of cycling competition over French customs, leaving the Union Vélocipédique de France outside the newly-formed coalition. But if the newly-formed International Cyclists' Association thus made a play to exert its control over international amateur racing, the French certainly had not fallen behind in the professional sport, or suffered very much from the exclusion of many of their 'amateurs' from Anglo-American competition.

The early 1890s thus appear to have marked a turning point in the organization of British bicycle racing. The articulate and powerful voice of Lacy Hillier is once again heard in an 1892 *Bicycling News* editorial. 'The fate of road racing appears to be decided', he wrote, 'Each day news reaches us that some club or other has decided to abandon its programme of road events, and in future to hold its speed competitions on the path. It is a matter for congratulation that the clubs themselves are taking the initiative instead of waiting until the scandal has been made the subject of legislative action, either in the Council Chamber of the National Cyclists' Union or in the Houses of Parliament'. It was better for the sport, argued Lacy Hillier, for it to police itself than for others to have to do it; road racing was 'a scandal', it was 'necessary for the welfare of the pastime of cycling that it should cease'.[61]

From 1892 onwards, road races continued to be organized by the road clubs, the North Road, Bath Road, the Anerley and the Catford clubs, as well as the Road Records Association. These were large, active and popular clubs. But police presence and threats of action also increased. Incidents involving 'scorchers' and other road-users were given high-profile coverage, and the police were frequently reported watching cyclists on the road. At meetings of the National Cyclists' Union, Lacy Hillier and the anti-road racing faction continued their campaign, while relations between the cycling community and the police remained strained.

The issue was hotly debated in the cycling press. 'Every week for the last month or so has made it more apparent that if road-racing is not absolutely doomed, it is in great danger', thought the editor of *Wheeling* in September 1894.[62] In the same month, *Cycling* reported that 'with due deference to the police authority', and with regard 'to the interest of all road riding cyclists', the leading Manchester clubs had either cancelled or transferred to the track their long-distance road championships.[63] Six weeks later, a *Cycling* editorial aligned itself with the anti-road racing faction:

> Road racing in particular, and speed riding on the highway in general, are entirely responsible for the existing police tyranny, and at the present time all classes of the wheeling community are subject to stringent, unjust, and intolerant treatment at the hands of police and magistrates. Prejudice against cyclists is rampant and increasing, and the few who race on the road are almost entirely responsible for it. Road racing, when looked at from this point of view, can only be indulged in for the future by the most selfish and inconsiderate of wheelmen. The thoughtful and unselfish cyclist must see that the interests of a vast community are at stake, and he will set his behaviour right, moderate his pace on the highway, and generally endeavour to put himself right with the public.[64]

At an N.C.U. council meeting held in Manchester in June 1895, 'the proposal for the suppression of road-racing made by Mr.Hickson (West Riding) was rejected'.[65] But two years later, the N.C.U. London centre meeting decided to support a proposition 'to abolish road races and record time trials on the road by suspending all licensed riders taking part therein', which was voted on and carried at an N.C.U. quarterly meeting, where it was resolved 'that no licensed rider may take part in any race or paced record attempt upon the road'.[66]

The N.C.U.'s opposition to road racing was thus exerted over a period extending from the later 1880s through to the late 1890s, rather than being directed through one specific act of Union legislation. But the N.C.U., though influential, had no right to stop any races held outside its jurisdiction, and could exert actual control only through its refusal to promote road racing and its ability to exclude offenders from its own sponsored track events and championships. The reaction from the road racing interests was predictably strong. *The Times* reported that 'the stringent road-racing resolution recently passed by the National Cyclists' Union seems to have created much dissatisfaction among some of the big road clubs of the union, and there are rumours that such important clubs as the North Road, the

Bath Road, and the Anerley, among others, contemplate immediate withdrawal from the union".[67]

At a general meeting of the North Road Club held in London a few weeks later, the club, by a large majority, withdrew from its affiliation with the N.C.U. and declared that 'notwithstanding the recent legislation of the union on the subject of road-racing, the club do continue to pursue its present policy'. Not surprisingly, the sport of road racing in Britain suffered drastically. Fragmentation was the result of the N.C.U.'s pushing through such radical opposition to a vibrant branch of the sport, and the national organization was already severely divided between southern and northern members.[68]

The long-term effect of this protracted conflict within the sport of cycling in Britain was to change the nature of road racing and to push it increasingly underground. No large place-to-place competitions on the emerging French model were promoted; no British 'classics' now exist with roots in the 1890s, such as, for example, Edinburgh - London or York - London, the British equivalent of Bordeaux - Paris. British professional road racing, which with its outstanding early performers certainly had had the potential to become a national sport, was nipped in the bud largely by N.C.U. officials who were primarily interested in the protection of the amateur ideal, whose decisions were defined by the compulsion to categorize and limit, as a primary definition of athletic merit, the economic affiliations of leading competitive cyclists.

Place-to-place routes were thus mostly tackled by single, unpaced, amateur cyclists riding under the auspices of the Road Records Association, formed in April 1888 as a response to the N.C.U.'s opposition to road racing.[69] New regulations were drawn up mandating an acceptable, black costume for racing cyclists on public roads – no short trousers or short sleeves were to be worn. Road racing would subsequently take place surreptitiously, without spectators or advertizing. Long-distance races, such as the Cuca Cocoa 24-hour Race which was promoted in London between 1892 and 1896 by Lacy Hillier's own club, the London County Cycling and Athletic Club, increasingly took place on the track.

Bicycle manufacturers were not the only makers of consumer products to appreciate the selling potential of bicycle racing as a mass-spectator sport. The manufacturer of another

popular product, the Cuca Cocoa company, sponsored these high-profile long-distance races.[70] The 'Cuca Cocoa' Challenge 24-hour track races in London (and the subsequent, similar Parisian 'Bol d'Or' 24-hour race) attracted thousands of spectators, and these paced, world record attempts became the most taxing tests of endurance in cycling, more intense even than road rides, unrelenting in their speed and the physical demands they placed upon the riders. Teams of tandems, triplets and quadruplets were used to pace the individual competitors, who switched from one team to another to maintain their high pace. 'It was in these historic contests', said *The Hub*, 'that the art of pacemaking was first scientifically cultivated'.[71] As night fell, the track was illuminated, bands played at intervals and food and drink had to be provided for both competitors and spectators.[72]

Holbein, Edge and Bates, competitors from the 1892 Bordeaux-Paris, were on the starting line of the 1892 Cuca Challenge at Herne Hill track, a race won by Frank Shorland, with a record 413 miles 1615 yds in 24 hours.[73] Shorland went on to win two further Cuca Challenge races, setting a world record of 460 miles 1296 yards in 1894 at the Herne Hill track in London (see Chapter 10 for further discussion of such 'gigantic' cycling events).[74]

These long-distance competitions were novel and controversial and generated public debate about what limits, if any, should be set on sports events. They were criticized by *Cycling* as 'involving unreasonable physical exertion...It has ever been our opinion that such unnatural strains on the human frame should cease to be tolerated, and that a race should be limited to somewhere about 200 miles'; such 'unnatural competitions' were 'brutalizing' and 'proportionately injurious'. Even H.O. Duncan had told the press, after directing his man Terront's win in the recent Paris - Brest - Paris race that he 'hoped never to take part in such a horrible affair again'.[75]

During the 1893 Cuca Cocoa race in London, where he acted as Judge for his promoting club, the London County Cycling and Athletic Club, Lacy Hillier was involved in an international controversy concerning timing.[76] When he was asked by Shorland what the world record for 12 hours was, then held by French rider Jules Dubois, Hillier replied within earshot of French riders and spectators that Shorland should pay no attention whatsoever to the record, that it was 'a record timed with a cheap watch held by the maker of the bicycle' Dubois had been riding. He had on previous occasions made similar comments about

American records. If this was perhaps Hillier's supercilious sense of humour, it was not appreciated. The important journal, *Véloce-Sport*, in mid-August carried a leading article by Emile Mousset protesting Hillier's behaviour. He himself had directed the race when Dubois broke the record, wrote Mousset, and it had been timed by three independent time-keepers with first-rate watches, and the manufacturer had had absolutely nothing to do with the timing. French journalists had never questioned records set in England, he wrote, and it was extremely disappointing to see an English figure who occupied one of the highest offices in the sport not extending the same courtesy to his French colleagues.[77]

Lacy Hillier was not easily persuaded to the contrary. In a September 1894 article, "Timing and Timers. Comparative articles on timing at home and abroad", he once again questioned the professional integrity and honesty of foreign time-keepers:

> Why should we, in this country, be called upon to accept, without question, the records made upon foreign tracks, when we ourselves insist upon the most exhaustive tests and the most absolute precautions before the times are accepted?...I know, as regards English records, made under N.C.U. rules, that the timekeepers are men of reputation, that their watches have undergone an exhaustive test, that the tracks upon which they are made are of standard measurements, and that, in all cases, every precaution is taken to ensure accuracy; and I prefer to accept these records and to stand by them rather than to accept records accomplished upon tracks of dubious measurement, clocked by excitable, not to say Chauvinistic, timekeepers with watches of doubtful accuracy.

Perhaps it was the writer himself who needed to be reminded of the implications of the word 'Chauvinistic'.[78]

Lacy Hillier (see Fig. 7. 9.), frequently mentioned in this chapter, was one of the leading personalities of British cycling in the 1890s, a dominant, assertive and ambitious personality around whom ebbed and flowed many of the social tensions and economic contradictions within the sport, and who undoubtedly had considerable influence on the future direction of cycling. In addition to his roles as President of the London County Cycling and Athletic Club, director of the Herne Hill track, and editor of one of the most influential weekly cycling papers, he played a significant role as a committee member of the National Cyclists' Union, in the formation of the International Cyclists' Association and the creation of the first official amateur World Championships. Yet Hillier remained resolutely committed to British-style amateurism as a moral crusade, and appears to have refused to show the international respect which the expanding sport needed. In a speech at the fourth annual

dinner of the London C.C.and A.C., held in London in March 1896, Lacy Hillier, by then one of the most influential figures in world cycling, 'dealt with the past season's work of the club and laid down their future policy. He strongly urged the cause of the true amateur. The London County Club were determined to uphold it in every sense... He exhorted the club members to rally round the executive, for the work they had in hand would benefit the large class interested in one of the best of physical recreations'.[79]

Lacy Hillier, with his imperious and assertive presence, was a complex personality.[80] As journalist, N.C.U. official and Judge, club President, track director and stock broker, he had his fingers in many pies. Although he was the most outspoken advocate of amateurism, he himself nevertheless had an economic interest in the bicycle industry, and as a stock-broker participated in the financial launching of various bicycle companies during the 'boom' of the mid-1890s and he also promoted racing events for his club, the London County Cycling and Athletic Club Ltd., where profit was crucial. In his mind, there was no conflict of interest here, although an 'amateur' rider who accepted equipment or expenses from the bicycle trade might be suspended from competition for the offence.

In a letter published in *Wheeling* in 1894, the arch-professional H.O. Duncan suggested that Hillier, for all his protestations on behalf of 'pure' amateurism, was far from pure himself: 'I have witnessed many a cycle and Herne Hill company's prospectus, with Mr. Hillier's name down as "broker"; but I suppose this does not count, being in his business capacity – yet he cannot deny having made money out of the trade and sport... ', a suggestion which Hillier later dismissed as 'slanderous'.[81] The issue was again thoroughly aired by the publication in *Wheeling* of a challenging anonymous letter (from 'Rational') entitled 'Is Amateurism Possible?', to which Hillier responded: 'Is Amateurism Possible? – Yes!'[82]

The question Hillier was being challenged on was precisely the difficulty of defining the line between the hypothetically 'pure' amateur and a competitor who made some financial gain from some aspect or other of the bicycle trade and industry. In response to Duncan's challenge, Hillier responded that his business life was his own affair, and had nothing to do with his constantly expressed views about 'pure amateurism' within the sport:
'If..."Rational's" example is to be followed, and a man's private business is to be dragged in as he drags in mine, honorary officials will soon be as extinct as the dodo. Let "Rational"

seek the rules of amateurism...and see if they deal with the financial officers of limited companies'. Yet, surely, it was blatantly clear that it was also 'a man's private business' which was being investigated when an N.C.U. committee suspected and ruled on a suspect rider's 'professionalism', for accepting equipment from a manufacturer, for instance. The question being addressed was a crucial one. Could not Hillier, a man who was given a 1 or 2 guinea fee to act as judge at race meetings, who promoted large, successful, commercially-backed events for his club, the London County Cycling and Athletic Club, and earned his living working as a stock-broker in a City firm which frequently handled bicycle industry accounts, justifiably be labelled a 'professional', to the same extent as the 'maker's amateurs' whose status Hillier was always ready to question, whose private affairs were investigated, and who were suspended and sometimes expelled from the amateur ranks by the N.C.U.'s racing committee?

In essence, this debate between Duncan, Hillier and 'Rational' penetrated to the core of the two contrasting ideas current in the mid-1890s about what constituted 'sport' in the bicycle racing world, the traditional, club-based, non-business-oriented, amateur sport, or what was frequently referred to as 'the New Professionalism', the newer, promotionally-oriented, sport. Hillier's own success in July 1894 with the Cuca Cocoa 24-hour race promoted by his own club demonstrated that, in the new realm of mass-spectator sport, excellent riders, good organization, good promotion and a good business head were all necessary components, and had little to do with traditional concepts of amateur (and amateurish) events. Hillier himself, although he clung tenaciously to his amateur ideals, was obliged to provide an efficient, professionally-organized, modern event, and with the London County Cycling and Athletic Club Ltd., had created a limited company to protect himself against personal liability, a far cry from the amateur clubs of ten years earlier.

Hillier's opposition to the 'New Professionalism' sought to counteract the inevitable movement towards modern, commercial sport, and the pressures of the advertising money of bicycle and tyre manufacturers. But 'the trade' was always knocking at the door. Only a few weeks after the 3rd Cuca Cocoa Cup race of July 1894, the Herne Hill track opened its doors to an important professional meeting, organized by 'the Buffalo C.C. of Paris', starring Americans Zimmerman, Wheeler, Banker and other European professionals who were touring Britain. A *Wheeling* Editorial commented that:

> the New Professionalism may be said to have been on its trial in England last week... We think that professionalism has come well through the ordeal. We still believe that it is possible to have a school of honest, decent, professional riders... The very fact that the proprietors of that track – who are keenly alive to the necessity of keeping it above reproach – saw no reason to shut their doors against professionals is proof that there is a vast difference between the old and new order of things... professional racing has as good a right to claim public support as any amateurism that we have ever known. The advent of the professional at Herne Hill is a vindication of an article written by us some month's ago, in which we said that... the proprietors of race tracks would ultimately agree with us.[83]

The same issue of *Wheeling* poked fun at Hillier, who had chosen not to be present for the professional racing at his own 'home base', because he could not bear 'to see the horrible scene at Burbage Road' (the location of Herne Hill Track, in south London), and 'could not bring himself to look on his last and greatest love in the embrace of professionalism... It was certainly hard lines on Hillier after all his solemn protestations that never would Herne Hill be profaned by the foot of the pro... Seeing that the current was too strong for him, he was wise to keep out of it'.

Professional cyclists, stolidly proletarian in Britain, were initially discriminated against and without proper representation until the new professional class of managers, like 'Choppy' Warburton and H.O. Duncan, saw the new opportunities to promote them. But an ideological amateur like Hillier would never openly recognize the inevitability or the integrity of professionalism, or the legitimacy of the participation of the bicycle industry in the sport.

4. Road racing in the United States in the 1890s: a brief surge of popularity

In spite of reports of roads which were frequently appalling in the United States, the good roads on the outskirts of Eastern and Mid-Western cities such as Boston, New York, Buffalo, Chicago, Milwaukee, St. Louis, Toledo and Indianapolis made road racing an attractive possibility.[84]

Just as in Britain, road racing on the high-wheel bicycle was a popular club-based activity by the late 1880s, which attracted crowds of spectators and enthusiastic reports in the daily press, and this interest increased as the boom of the mid-1890s occurred. Around Chicago, for example, there were good out-and-home short-distance possibilities, but place-to-place races were also held, over shorter and longer routes: an Irvington – Millburn race (New Jersey) and the Buffalo - Erie race (New York) were examples. Wide open spaces and the flat roads in the Mid-West meant that speeds were fast given a good road surface, but road racing on the outskirts of cities also held the possibility of conflict with other road-users and, just as in Britain, public opposition became a significant issue.

But it was clear that road racing was a momentary sensation which attracted large crowds and was both a new kind of athletic event and an opportunity to advertize and sell cycling-related products. There is abundant evidence in the United States that road racing was promoted by local newspapers and bicycle manufacturers to stimulate bicycle sales. Further research would be productive in charting the rise and decline of American road racing as an expression of modern urban sport in the 1880s and 1890s. Individual riders, such as Thomas Stevens and George Nellis, also saw the vast distances in the United States as a challenge to be overcome, and the hazards and adventures of a trans-continental ride made good reading in published accounts.[85] Press accounts from the same period also contain frequent reports of lone coast-to-coast rides, although these were not *per se* races.

As has been briefly described in Chapter 4, road racing on the high-wheel bicycle was a tough and difficult sport, practised by youthful male club members in the 1880s.[86] A large number of high-wheel bicycle road records was accomplished and reported in the press, although authenticating the results was always a difficult issue. The League of American Wheelmen initially had no hesitation in sanctioning road racing and approving records, and

only later was a debate begun within the L.A.W. over the image of road racing. 'The Road Race is becoming a popular institution', wrote the editor of *Bicycling World* in 1885, 'We do not... get as good time, nor is there the excitement that there is in a race where the riders are in sight the whole distance, but we get a test of machines built for service and under conditions that they are likely to meet with in ordinary use; and we get a test of the abilities of the riders on the roads'. At the same time, the newspaper recognized that 'the thing is in violation of the law and can only be pursued under the indulgence of the authorities', and that 'in the hands of irresponsible men, a deal of injury will be done'.[87]

When L.D. Munger, a Detroit rider, set a record of 211½ miles in 24 hours over New England roads in August 1885, he took great pains to establish its authenticity. 'Pace-makers accompanied him the whole distance and he was never alone', reported *Bicycling World*; 'The distance was measured by a Butcher cyclometer, which had previously been tested at the machine shop of the Butcher Cyclometer Co. Postals were mailed by Munger from all the towns passed through to this office, and they substantiate the presence of Munger in each'. Munger also mailed 'postals' to Abbott Bassett, Chairman of the Racing Board of the L.A.W.[88] A measure of the competition which already existed in the mid-1880s can be seen in the fact that Munger's record-setting margin over the previous holder (F.S. Cook, from California, with 207 miles) was only 4 miles. Road conditions were variable, and at their worst, terrible. Munger had to contend with 'rough and sandy stretches through Essex County', and 'a heavy white mist which rose from the marshes and made it impossible to distinguish objects ten feet distant'.[89] The New England roads appear to have been rougher and sandier than British roads at this time, which perhaps partly explains why Munger's record mileage was more than 50 miles less than the then current British record of 266 miles for 24 hours established by J.H.Adams on 4 October 1884, though the less developed competitive structure may also have been a factor. Early in 1886, Munger again attacked the 24 hour record, on that occasion riding 259¾ miles on an Apollo bicycle, a record that was bettered by S.G. Whittaker in October 1886, with a ride of 300 miles.[90] Distance riding was, therefore, rapidly evolving and speeds improving.

In 1887, the *Springfield Wheelmen's Gazette* thought that 'road racing is by far the most genuine test of rider and wheel that could be devised' at the same time as it asserted that 'the

League will not touch it because it seems to be illegal'. Public reaction was evidently a concern by this time:

> There may be something in that, yet road racing is not essentially criminal, and it can be done legally, if proper steps are taken. Pass a rule that, prior to any road race, a petition shall be circulated among the citizens in the vicinity of the course. Then let the petition be presented to the proper county commissioners, and permission obtained to have the race. Then carry out the race 'decently and in order'.[91]

In June 1887, a St. Louis cycling paper, *The American Wheelman*, promoted "The Clarksville 100 Mile Road Race" which was claimed ambitiously (since no foreign riders were invited or present) as a race 'for the Championship of the World', and "boomed" by the Overman Wheel Company after the victory of its 'Victor' bicycle as 'The Greatest Bicycle Race Ever Run Since Cycling Began'. (see Fig. 7. 10.) A 'World's Championship Cup, solid silver' and a 'light roadster bicycle', together worth $440, were offered for the first prize. Held in conjunction with the annual Meet of the League of American Wheelmen in St. Louis, the promoters ferried riders out to Clarksville on the Mississippi River for the race back to St. Louis, while the St. Louis, Keokuk and Northwestern Railway sold special tickets for the event. 100 miles were ridden by the winner, Robert Neilson, in a time of 6hrs 46m, while the race was a display of different designs of machine, for 'there were bikes of every kind upon the road... all the familiar makes were represented... while tandems, tricycles, safeties, stars, extraordinaries and bicyclettes spun up and down'.[92]

In discussing the public reaction to this race, and to road racing in general, *The American Wheelman* maintained that 'the people not only favor the race, but are so anxious for it that they are willing to spend considerable money putting the road into condition. In fact, we think it will be found as a rule that the inhabitants of a district are much more interested in than opposed to a race'. The solution to public opposition was to 'select a locality where the people are favorably inclined, and do not infringe on the rights of the horsemen'.[93]

It is clear that the questionable legality of road racing did not prevent it surging in popularity throughout the United States during the mid-1890s. Announced in the "Coming Events" section of an Indianapolis cycling paper for April 1892 were road races in Providence, Memphis, Wilmington, St. Louis, Denver, Buffalo, Louisville, Cleveland, Rochester and Brooklyn, as well relay road races (pitting one club against another) from Cleveland to

Buffalo, from Chicago to New York, from Hamilton to Kingston (Ontario), from Chicago to Cincinnati and from Oakland to San Francisco around the San Francisco Bay.[94]

Road racing was evidently not an isolated phenomenon, but was linked to the expansion of club cycling in urban and suburban areas throughout the United States, an indication of interest in a modern technological sport which was accessible to spectators and promotable by local press and commercial concerns. Local races were typically short, 25 miles or so, frequently handicaps with the riders sent off in small groups according to age and ability, and took place on the relatively good roads surrounding or radiating out from the centres of older cities such as Boston, Chicago, Detroit or New York and smaller, expanding cities such as Indianapolis, Cleveland or Toledo, but longer races were also held.

Many newspaper accounts from the period reported thousands of enthusiastic people mobbing the start and finish lines of road races, to such an extent that they impeded the competitors and made judging impossible. At the Chicago Road Race in June 1894, it was reported that:

> the crowd was the largest ever witnessed at an event of a sporting nature in this city. For nineteen miles... the crowd lined each side of the road, in places from 10 to 20 deep... It is estimated that at least 100,000 people were in Lincoln Park, and probably three or four times that many lined the course its entire length... Throughout the country the crowd maintained perfect order without ropes... The course extends through many of the most populated suburbs of Chicago – Edgewater, Argyle, South Evanston, Rogers Park and Evanston – and apparently every resident of these places was on the streets, besides many who went out early in the morning from Chicago.

Accounts of the race printed the names of manufacturers of the bicycles and tyres ridden by the winners, emphasizing the nature of the competition as a test of these products.[95]

A similar enthusiasm greeted the 128 competitors at the 1894 25-mile Martin Road Race in Buffalo, New York, where it was estimated that 20,000 people, 'a pushing, seething mass of human beings' were at the finish, so that 'it required the most strenuous efforts of the police officers to keep the course clear, so eager and determined were the spectators to see all they could see'.[96] (see Fig. 7. 11.) In May 1896, the *Worcester Telegram* estimated that 50,000 people, 'the biggest crowd ever got together by day light in Worcester', had turned out to see the Telegram Trophy Race, 'lining the course from start to finish, climbing the trees to get a better view, bringing the normal business of the town to a standstill'.[97] 'The wheelmen

live in race fever', reported the *Worcester Telegram* in June 1896.[98] In July 1894, 104 riders lined up for the start of the Atalanta Wheelmen's 100 mile handicap in Newark, New Jersey, although the course of the race had to be changed at the last minute because the authorities of nearby Cranford 'would not allow the race to pass through the town as there was an ordinance prohibiting fast riding'.[99]

Chicago, in fact, appears to have had particularly large, enthusiastic crowds, and to have experienced a remarkable, if short-lived, surge of interest in road racing as a popular sport, among both competitors and spectators. At the sixth annual Pullman Race in 1892, the *American Cyclist* reported that:

> every point of vantage along the entire course was occupied. Windows, balconies, doorsteps and housetops were crowded with sightseers, and hundreds of residents displayed the colors of the different cycling clubs represented in the race. Boys were perched in trees and on telegraph poles and lamp-posts...the sidewalks were crowded with a surging mass of humanity'.[100]

At the 1894 race, 'there was no trouble about getting to Pullman to see the finish, for the Illinois Central Railroad ran World's Fair express trains through in a few moments'.[101] In 1895, the *Indianapolis Sentinel* reported that:

> Road racing in Chicago has assumed proportions of wonderful magnitude the past year. Saturday afternoons is the accepted time for the running of 5 to 10 mile club events. It is not at all uncommon for a round dozen of these events to be run off in an afternoon. There are three or four accepted courses, which by silent consent of the authorities are monopolized every weekend... It is not uncommon to see several thousand people present at each of the different finishes.[102]

Some races, for instance the Chicago and Pullman Road Races (Chicago), the Martin (Buffalo, New York) and the Irvington - Millburn (New Jersey), which had already been established as small-scale events in the 1880s, grew quickly in popularity in the 1890s, and were referred to as 'classics'. The Irvington - Millburn (promoted by the Metropolitan Association of Cycling Clubs)[103] attracted 155 entries in 1894, the Chicago more than 400 entries. That organizers of road racing, including American newspapers, were familiar with the news coming out of France and aware of the publicity potential of such events is shown by the report, in 1894, of an ambitious proposal from the *New York World* to organize 'a Great Road Race' from New York to San Francisco, with a prize of 'at least $1,000'.[104]

In spite of this evident initial surge of popularity (indeed, perhaps partly *because* of it), road racing in America also tended to alienate other road users and, just as in England, some

cyclists also saw it as giving the sport a bad name. While public enthusiasm and crowds on Saturday afternoons may have been at first tolerated, on a regular basis they were less acceptable and public resistance to the use of the public spaces for private purposes became more vocal. Accidents occurred, horses were scared, the normal activities of city streets were inconvenienced, rural life was disrupted. As has just been mentioned in the case of Cranford, New Jersey, some communities had passed public safety ordinances prohibiting fast riding. Although both the League of American Wheelmen and the National Cycling Association (a new professional organization) took the position of discouraging group road racing from the mid-1890s, nevertheless the Century Road Club adjudicated place-to-place records by individual riders through the 1890s: in 1896, for example, its Road Records Committee recognized a record from Chicago to New York (5 days 17h 21m), with intervening times to Cleveland, Buffalo and Rochester.[105]

But by the end of 1898, the *New York Evening Journal* wrote of 'the downfall of road racing' in a report headlined, "Cycle Road Racing on the Wane. Too Many Difficulties Confront Those who Race on Thoroughfares":

> Road racing on bicycles no longer possesses the interest it once had...In former years these contests over the public highways were exceedingly popular. Thousands flocked to the scene of the struggle. Riders entered by the hundreds, while manufacturers were eager to offer costly prizes for the publicity...But this year the few road races held excited little rivalry.

The reasons given for the decline were that 'the intense rivalry which prevailed among the clubs no longer exists', and that 'those clubs which once supported racing men generously have abandoned the expensive luxury'. But another factor was 'the local ordinances against speeding over public throroughfares' and 'the dangerous accidents which have resulted'.[106]

Public resistance to the dangers of road racing was, therefore, certainly a factor in limiting its rise to permanent popularity on the sporting calendar in the United States, as was the subsiding of what had been a sporting fad or fashion. But explanations for its decline also need to be sought in the fact that promoters preferred to put their money and energy into staging track events, where spectators could effectively be charged entry fees, crowds controlled and the racing more efficiently and effectively organized. Track surfaces were smoother, distances and times for record-breaking attempts could be more easily and accurately measured on the track and night-time racing could also be held under electric

light. The economic logic of promotion, the need to advertise new products, the desire of promoters to create and market bicycle racing 'stars', these were the factors which appear to have determined that the energy of cycling as a new American sport would be focused on the track rather than on the road. Distances and bad road conditions appear to have worked against the establishment of a rooted tradition of road racing, sustained by the sponsorship of the American bicycle industry or the support of the League of American Wheelmen. Only in a few cases, the Irvington – Millburn race, for example, did road racing become a rooted cycling tradition in the United States.

5. Summary and conclusions

The differing evolution of road racing in England, continental Europe (led principally by France, Belgium and Germany) and the United States can be seen to have had a number of inter-related social and economic causes. In all those locations, bicycle racing on public roads was likely to encounter a certain amount of negative reaction from other categories of road users, but the pressures to accept or reject it varied considerably.[107]

A crucial difference was that the class-bound, amateur-dominated sport bureaucracy in England (based in the National Cyclists' Union) succeeded in exerting a great deal of influence on the conditions under which road racing emerged, resisted the promotional participation of the bicycle industry and accepted as a serious threat to the rights of all cyclists the vocal opposition which was expressed by some towards road racing, whereas in France the national cycling body (the Union Vélocipédique de France) was positively disposed towards 'open' racing, including sponsorship by bicycle and tyre manufacturers and the promotional participation of newspapers and the cycling press, and the sport was integrated into other socially acceptable festivities. The staging of road races in France was accepted, in fact, as a sort of public street theatre, often celebrated on religious festival days, with the start and finish choreographed and minutely organized, and municipal and cycling authorities conspicuously in attendance.

By way of conclusion, it is worth summarizing the essentials of this divergent evolution:

The British dynamic

By 1888 a rift had already occurred within the National Cyclists' Union on the question of road racing, and an alternative body, the Road Records Association, had broken away from it to pursue sponsorship of road racing, although even the R.R.A. drew the line at encouraging massed-start road racing.

The heavily pro-amateur structure and stance of the N.C.U., its constantly demonstrated hostility towards sponsorship by 'the trade' and its declared intention not to endorse road racing or promote official road championships, effectively prevented the expansion of road racing in Britain as a popular sport.

Massed-start races and paced riding, where large groups of riders were on the road together, were seen as undesirable and likely to encourage hostility and bring disrepute to cycling in general. Road racing in general was depicted as a threat to the sport of cycling (see Fig. 7. 12.). The largely working-class and lower middle-class "scorchers" were seen by others as an intrusive presence on public roads; police interference was feared and sometimes occurred (see Fig. 7. 13.).

The R.R.A., consequently, was constrained to adopt a low profile, promoting races which emphasized individual endurance (time and distance trials), with inconspicuous athletes dressed in sombre clothes rather than fielding a large, competitive group of riders. Promotion was muted, but still enabled successful long-distance record-breaking rides to be held and advertized in the press (see Fig. 7. 12).

The relative secrecy under which these kinds of races took place, however, meant that there was little possibility of spectator participation from rural or urban populations, and their avoidance of town centres (where they would be most likely to encounter police attention) discouraged the creation of a sense of civic pride in the sporting event, or the possibility of public admiration for the athletes who raced their bicycles on local roads.

Bicycle racing on the British roads, therefore, did not spread outside the limited club coterie which practiced it and enthused over it, whereas the interest and emotions of French or Belgian spectators were engaged and rewarded. The perceived lower-class status of the majority of bicycle riders appears to have been a factor in discouraging public enthusiasm for bicycle racing on the road.

At a moment when professional bicycle racing on the roads of Great Britain might have been embraced and encouraged, and various kinds of commercial promotion and municipal sponsorship encouraged, amateur idealism and the minimization of the influence of the industry were still the priority of the ruling elites of the N.C.U..

The French dynamic

The situation in France was dramatically different. With a barely developed concept of 'amateurism' (which was viewed by the French as a peculiarly British obsession), and a

tradition of racing for cash within an 'open' structure, the U.V.F. welcomed the participation of the bicycle manufacturing industry.

Manufacturers sponsored races and involved themselves in their promotion, while the names of the brands of bicycle ridden by competitors were openly advertised. Bicycles were inspected and sealed ('*poinconné*') before races to guarantee that the same machine was used throughout, thus ensuring a stricter test of its mechanical and technical capabilities.

Newspapers and the cycling press promoted and reported races to their readership as a way of increasing circulation, presenting the sport as a contest of personalities and a demonstration of speed, physical strength and endurance.

Road racing in France and Belgium blossomed in the early 1890s, with the establishment of place-to-place road races between geographically important and symbolically resonant locations. Bicycle races were held between many of the European capitals and regarded as culturally and politically significant events. In 1892, a race between Paris and Brussels was given the approval of the King of Belgium.

The public were invited to identify with bicycle racers who covered the long distances between Bordeaux and Paris, for example, or Paris and Brussels, and to admire the dust-covered riders either as they passed by on the road or at the 'controls' in town.

Publicity and advertising were at the root of the success of the novel sport: publicity sold bicycles and tyres, and bicycle racing sold newspapers. Companies such Clément and Peugeot were quick to recognize this fact.

Road racing promised a modern, exciting, spectacle. The sport was presented to the public as an epic battle, fought out on the same roads which the general public (still heavily agrarian) knew as their own, and the riders were 'created' as popular, proletarian heros with whose courage and tenacity the public might identify. A new kind of athlete emerged, typified by cyclist Charles Terront, and a new kind of sports manager, typified by H.O. Duncan, took charge of the staging of events and the manipulation of publicity and public opinion (see Fig. 7. 4.).

In addition, and frequently expressed in the press, there was a palpable consciousness of the technological novelty of bicycle racing and an aesthetic commitment to the actual process of competition, to the value of speed, endurance and athletic endeavour as universal human qualities. That these values were supported by the financial sponsorship of the industry and the press was not regarded as diminishing or subtracting from their athletic merit, but rather athlete and manufacturer were regarded as participating in a shared enterprise.

Notes to Chapter 7

[1] I am aware of the significant cycling movements in Belgium, Holland, Germany and Italy, which should not be discounted in a consideration of the wider European scene. My concentration here on England, France and the United States should not be interpreted as meaning that I think that nothing of importance happened in these other countries.

[2] Early racing exchanges between England and France were described in G. de Moncontour, "Les coureurs français en Angleterre" and "Les coureurs anglais en France", *Le Sport Vélocipédique*, 27 March 1885 and 10 April 1885.

[3] Baron Frédéric De Civry (1861-93), ex-champion high-wheel rider, died in Paris on 15 March 1893 at the age of 32. De Civry, born into an impoverished aristocratic family, earned his living as a cyclist on French tracks in the 1880s, and then relied on his connections and business acumen to do what would now be called 'marketing' in Paris, first for Rudge and then for Adolphe Clément, who was his boss at the time of his death. He had been ill with tuberculosis for some time, reported Maurice Martin in *Véloce-Sport*, but that had not prevented him from being involved with racing almost to the end. In 1891, he had supervised Jiel-Laval's training for the first Paris-Brest-Paris, and had looked after the long-distance rider, Stéphane, during his 24 hour record ride at the Velodrome Buffalo in September, 1892. De Civry's career, wrote Martin, had been 'one of the most active and most original a man could have had' (*Véloce-Sport*, 16 and 23 March 1893). De Civry was born in 1861, and had his most successful period as a cyclist between 1880 and 1887, when he was the most popular French champion, a rival and companion of Howell, Terront, Médinger and Duncan. In 1881, he won 33 of 35 races he entered in France and all of the races he entered in England. Of 331 races in which he competed during his 8 year career, he won 290 places (211 first, 61 second and 27 third). He was several times French champion at both short and long distances, and his most outstanding ride was cited as his 50 mile professional World Championship in Leicester, in 1883. De Civry was buried in style in March, 1893. The wreaths on his coffin were from many of the important names in the cycling world, including his employer Adolphe Clément and the Dunlop Company. De Civry's death was symbolic of the passing of an era. He represented the democratic aspect of French sport, a poor Baron successfully

earning his living in bicycle racing, but without class stigma being attached to his professionalism.

[4] "Les coureurs français en Angleterre", *Le Sport Vélocipédique*, 27 March 1885, pp.159-160.

[5] See S.H. Moxham, *Fifty Years of Road Riding (1885-1935), A History of the North Road Cycling Club.*

[6] Among the sources which document the French sport, the following have been especially helpful: L. Baudry de Saunier, *L'Histoire de la Locomotion Terrestre* (Paris, 1935); H.O. Duncan, *Vingt Ans de Cyclisme Pratique - Étude complète du Cyclisme de 1876 à ce jour* (F. Juven, Paris, 1897); G. de Moncontour, *Les Champions Français* (Paris, 1892). The periodicals *Le Sport Vélocipédique* (Official organ of the Union Vélocipédique de France), *Le Véloce-Sport, La Bicyclette* and *La Revue des Sports* are also important primary sources.

[7] No research outside this study has been done into American road racing in the 1890s and the early 20th century, although it was well documented in the daily press and cycling periodicals. It appears to have declined significantly after about 1900, but on the other hand, a small number of massed-start races and long-distance record-breaking individual rides continued. An Elgin-Chicago 'Classic', for example was held between 1926 and 1953. There are also plentiful accounts in the period 1900-1920 of trans-continental rides by young men.

[8] The Irvington-Millburn 25-mile Handicap road race was held continuously between 1889 and 1908 (*Otto Eisele's Cycling Almanac*, 1953)

[9] The large amount of early documentation of the French sport has not been the focus of much serious historical study. I have had only limited access to French archives and this exploration cannot, therefore, pretend to be a comprehensive study of the French sport in this early period.

[10] L. Baudry de Saunier, *L'Art de la Bicyclette* (*The Art of Cycling*), Paris, 1896.

[11] Jean Durry, for example, in his *La Véridique Histoire des Géants de la Route* (1973), gives the title "Le Grand Départ" to the chapter which begins with an account of this race (p.26). Bordeaux-Paris continued unbroken (except for the two World Wars) until it was finally abandoned in 1987. For many years after 1945 it was run as a two-part race, the

riders being paced for the final 200 kilometres into Paris by small motor-cycles called 'dernys'.

[12] *Cycling*, 30 May 1891. It should be pointed out that such use of superlatives was characteristic of partisan journalistic reporting. The affiliations of the riders were: G.P. Mills (Anfield Bicycle Club and North Road Cycling Club); M.A.Holbein (Catford Cycling Club and North Road Cycling Club); S.F.Edge (Surrey Bicycle Club and London County Cycling and Athletic Club) and J.E.L.Bates (Surrey Bicycle Club and London County Cycling and Athletic Club)

[13] *Bicycling News*, 13 February 1892. It is assumed here that Editorials in *Bicycling News* were in general written by Lacy Hillier himself.

[14] Victor Breyer, "How G.P.Mills won the first Bordeaux-Paris", *Cycling*, 19 March 1947.

[15] According to an account in *The Wheel and Cycling Trade Review* (U.S.), 12 June 1891, Mills' ride was far from easy from an equipment point of view: 'The machine he started on, the Humber, was a new one. He had not gone very far when he was knocked off his machine; the framework was twisted...Mills practically rode five different wheels. The first change he made was on to an R and P, which he rode for 30 miles, then he mounted a Humber, but as the tires were not blown out, and the machine did not suit him at all, he exchanged for a Stroud's racer; on this machine he could have gone through, but for the fact that the tire punctured when he had ridden 300 kilometres. He then mounted a Humber roadster, and rode to the end of the journey. He argues that the changes he made were rather disadvantageous than otherwise, because all the machines were of a different height and length of crank'. The article further stated that: 'perhaps no race of such long duration has been ridden with fewer and shorter stoppages...He ate but little solid food, except for the first seventy or eighty miles, though he ate as much fruit as he could get on the journey'.

[16] H.O.Duncan, *World on Wheels* (Paris, 1927), p.351.

[17] *Cycling*, 30 May, 1891.

[18] 'Depuis quelques anneés, une nouvelle classe d'hommes a surgi, qui semble avoir devoir prendre une place importante au soleil du sport. Ces hommes dont les premiers spécimens sont venues d'Amérique s'intitulent un peu pompeusement managers, ce qui veut dire directeurs, administrateurs'. H.O. Duncan, *Vingt Ans de Cyclisme*, p.154.

Others who occupied a similar role were Harry Etherington (GB), Choppy Warburton (GB), Tom Eck (US) and W.J. Morgan (US) who were all Duncan's contemporaries. The modern *directeur sportif* is the manager of a professional cycling team, and takes charge of technical aspects of training and equipment. Duncan's role was an even wider one, in that all aspects of organizing participation in competition and using bicycle racing as a publicity tool for the bicycle industry had to be taken into account.

[19] Duncan, *World on Wheels*, p.357.

[20] See L. Baudry de Saunier, *Les Mémoires de Terront* (with Charles Terront) (Paris, 1893); reprinted with an Introduction by Jacques Seray (Prosport, Paris, 1980). The *Mémoires de Terront* was a publishing sensation. Baudry de Saunier wrote the book in six days, it was immediately rushed into print, and on the strength of Terront's fame and popularity as winner of Paris-Brest-Paris, it sold 3000 copies while the March 1893 1000 km match between Terront and Corre was taking place in Paris. See also Andrew Ritchie, "The Cycling World of Paris in 1893", *The Boneshaker* #143, Spring 1997 and Andrew Ritchie, "Charles Terront and Paris-Brest-Paris in 1891", *The Boneshaker* #150, Summer 1999. Duncan's accounts of Paris-Brest-Paris can be found in *World on Wheels*, pp. 354-357 and in *Vingt Ans de Cyclisme Pratique* (F. Juven, Paris, 1897), pp. 132-3.

[21] This detail offers a revealing insight into the contemporary difference between British and French attitudes towards competition. In British ideological amateurism, only the athlete was openly recognized as being tested and the importance of the machine was recognized but downplayed. In French acceptance of industry sponsorship, a *particular* machine was recognized as being tested as an important component of the overall athletic contest; man and machine should therefore start and finish the race together. This attitude persisted well into the 20th century in France and was applied in the early Tours de France.

[22] "Paris to Brest and back - An extraordinary race", *Cycling*, 12 Sept.1891; "Terront's experiences - How he won the Paris-Brest race", *Cycling*, 26 Sept.1891. Significantly, as a statement about the contemporary relationship between bicycle and automobile technology, the Paris-Brest-Paris route was covered by a gasoline-powered, two cylinder quadricycle, made by Peugeot, which did a total of 2047 kms in 139 hours. This was probably the first time that a motor vehicle had been involved in a bicycle race (see

Baudry de Saunier, *Histoire de la Locomotion Terrestre*, Paris, 1935, p.178; also reported in *La Nature*, 20 Oct. 1891).

[23] "Long-distance Competitions", *Cycling*, 19 September 1891. In fact, such objections to the severely strenuous endurance events which characterized bicycle racing in the 1890s, and the endure physiological stresses which they were thought to impose, are frequently encountered in the popular press and the medical literature of the period. See Chapter 2, 'The Medical Debate' in Christopher Thompson, "The Third Republic on Wheels" (Ph. D. thesis, 1997), and John Hoberman, *Mortal Engines* (1992).

[24] Baudry de Saunier, "Match Terront-Corre", in *Véloce-Sport*, 2 March 1893.

[25] H.O. Duncan and Pierre Lafitte, *En Suivant Terront de St. Petersbourg à Paris* (Flammarion, Paris, 1894); "Match Cody-Meyer", *La Bicyclette*, 27 Oct. 1893..

[26] *Bicycling News*, 21 May 1892.

[27] "Bordeaux-Paris - Victoire de Cottereau et Stéphane, roue dans roue", *Véloce-Sport*, 1 June 1893.

[28] "The Bordeaux-Paris Road Race", *Bearings*, 3 June 1897, p.1898. As is pointed out by Philippe Gaboriau in "The Tour de France and Cycling's Belle Epoque" (in Hugh Dauncey and Geoff Hare, eds., *The Tour de France 1903 – 2003: A Century of Sporting Structures, Meanings and Values*, Frank Cass, 2003), long-distance automobile races were also popular at exactly this moment of time.

[29] *La Bicyclette*, 12 June 1892.

[30] *La Bicyclette*, 25 Aug. 1893.

[31] The organization and running of Paris-Brussels is documented in *La Bicyclette*, 21 July, 28 July, 18 Aug. and 25 Aug. 1893. The willingness of the Leopold the Second, King of Belgium, to be associated with this heavily promoted race was especially significant in light of the monarch's role in the brutal exploitation of the rubber resources in the Belgian Congo. The swelling demand for rubber in a variety of industries – particularly to supply the sudden demand for tubes and tyres for the bicycle industry – led to the genocidal plundering of the native population of the Congo, documented in Adam Hochschild, *King Leopold's Ghost* (Houghton, Mifflin, New York, 1998).

[32] *Wheeling*, 8 Aug. 1894.

[33] See *Journal de Roubaix*, 21 April 1896, documented in Pascal Sergent, *A Century of Paris-Roubaix* (Bromley Books, 1996).

[34] This race, later to become one of the European 'classics', was not repeated until 1912.

[35] A comprehensive account of the development of road racing in France cannot be attempted here. The primary historical documentation has been only sketchily explored, and presents an outstanding opportunity for a study of the emergence of a major modern sport. Some of the information in this list has been taken from Jean Durry, *La Véridique Histoire des Géants de la Route* (1973). Races held earlier in the high-wheel era show that place-to-place races were not a new idea in France, and had in fact been organized almost continuously since the 1869 Paris-Rouen race. Races held included Dijon - Besancon (1870), Paris - Versailles (1871), Lyon - Macon - Lyon (1872), Lyon - Chalons - Lyon and Marseille - Avignon - Marseille (1873). As early as 1876, a 224 kms Angers - Tours - Angers race was won by Tissier, who repeated the victory in 1877. In 1879, an Angers - Le Mans - Angers race was won by Terront. Other races included Rennes - Dinan - Rennes (1880) and Paris - Blois - Tours (1881).

[36] This fact could also, of course, create the conditions for a 'fix', an arrangement for this local rider to win.

[37] Baudry de Saunier, *Le Cyclisme théorique et pratique.*

[38] See L. Baudry de Saunier, *L'Art de la Bicyclette* (*The Art of Cycling*), Paris, 1896. Baudry de Saunier (1865-1938) earned the title of 'the historian of French cycling' as a young man with a series of major works. Associated in the 1890s with the leading French cycling newspaper, *Véloce-Sport*, his 1892 work, *Le Cyclisme Théorique et Pratique*, was described there as 'the greatest literary monument and most interesting defence ever written in honour of cycling'. His 1893 *Mémoires de Terront* was an overnight best-seller (see Note 18). In a significant literary and sporting career, Baudry de Saunier's other cycling publications include the following titles; he also wrote in a similar style about the beginnings of the automobile, and later was editor of *La Revue du Touring Club de France*:

- *Histoire générale de la Vélocipédie* (*The Complete History of Cycling*), Paris, 1891,
- *Le Cyclisme théorique et pratique* (*Theoretical and Practical Cycling*), Paris, 1892,
- *Recettes utiles et procédés vélocipédiques* (*Useful cycling advice and behaviour*), Paris, 1893,
- *Les Mémoires de Terront* (*The Memoirs of Terront*), with C. Terront, Paris, 1893 (reprinted with an Introduction by Jacques Seray, Prosport, Paris, 1980),

- *L'Art de bien monter la Bicyclette* (*The Art of Good Bicycle Riding*), Paris, 1894,
- *L'Art de la Bicyclette* (*The Art of Cycling*), Paris, 1896,
- *Ma petite bicyclette, son anatomie* (*My Sweet Bicycle and Its Structure*), Paris, 1925,
- *Ma petite bicyclette, sa pratique* (*My Sweet Bicycle and Its Use*, Paris, 1925,
- *L'Histoire de la Locomotion Terrestre* (*The History of Land Transportation*), Paris, 1935.

[39] *La Bicyclette*, 28 Aug. 1892.

[40] L. Baudry de Saunier, *Le Cyclisme Théorique et Pratique* (Librairie Illustrée, Paris, 1892), pp.11 and 16.

[41] *La Bicyclette*, 2 June 1893, p.1169. The cultural, moral and spiritual aspects of sport were emphasized in the 'Courses d'Artistes' and the 'Café-Concerts' organized in Parisian cycling circles in the mid-1890s. *La Bicyclette* and *Le Vélo* sponsored a 'Course d'Artistes, Peintres, Sculpteurs et Architectes', 'reserved exclusively for those who can prove convincingly that they are painters, sculptors or architects', a road race held on a 40 km course which included Versailles (*La Bicyclette*, 30 June, 7 and 14 July 1893). Later the 'Café-Concerts' staged a mixture of serious bicycle racing, women's racing, costume competitions and other festivities, a Bohemian celebration of alternative life-styles. Sport was integrated into other cultural activities, rather than separated from them.

[42] See Philippe Gaboriau, *Le Tour de France et Le Vélo – Histoire sociale d'une épopée contemporaine*, L'Harmattan, Paris, 1995 and Paul Boury, *La France du Tour – Un espace sportif à géographie variable*, L'Harmattan, Paris, 1997. In fact, roads in France, Belgium and Italy are routinely closed for the big professional races, and even for unimportant minor races, indicating a general acceptance by authority of the needs of the sport. Such road closures are still not accepted as normal or desirable in Britain, and the pressure to confine the race into one directional lane while the other reverse direction lane remains open has become of itself a serious hazard for a large *peloton* in British road racing.

[43] "The Pleasures of Road Racing", *Cycling*, 22 July 1893, p.8.

[44] G. Lacy Hillier, "Cycle Racing", *The Encyclopaedia of Sport* (London, 1911).

[45] "To Overcome Public Prejudice", *Cycling*, 3 Sept. 1892, p.104.

[46] "Road racing", *Bicycling News*, 21 May 1887.

[47] Quoted in Roy Green, *100 Years of Cycling Road Records* (Road Records Association, 1988).

[48] "The Union and Road Records", Editorial, *The Cyclist*, 14 March 1888, p.521.

[49] "Road Records Association", *The Cyclist*, 9 May 1888, pp.740-1.

[50] "Road Racing", *The Cyclist*, 1 Aug. 1888, pp.1081-2.

[51] "Road-racing", *Bicycling News*, 9 March 1889.

[52] "Concerning Road-racing - A Serious Note of Warning", *Bicycling News*, 16 March 1889.

[53] "Road-racing - A Reply", *Bicycling News*, 16 March 1889.

[54] "More About Road Racing", *Bicycling News*, 23 March 1889.

[55] "English Amateurs in France", *Bicycling News*, 13 February 1892.

[56] *Irish Cycling News*, date unknown, quoted in *American Wheelman*, Oct. 1887.

[57] "Causerie du Jour - George Lacy Hillier", *La Bicyclette*, 16 Oct. 1892 (author's translation).

[58] "Sport", *Bicycling News*, 28 May 1892.

[59] Another of Hillier's statements of faith in the amateur cause can be found in an earlier *Bicycling News* editorial (9 Oct. 1885): 'On the great question of the day – Amateurism – we once and for all record our complete and irreconcilable dissent from the doctrines preached by the disciples of "Get money honestly, if possible, but get money"; we refuse to accept what is called the inevitable, because we cannot believe that the present state of amateurism is the inevitable, and all our efforts shall be directed to the reform of the abuse amateurism suffers from. If straightforward cutting criticism can kill, we hope to be in at the death...'.

[60] "The Amateur Question in France", *Bicycling News*, 23 April 1892. This article was written by 'our Paris correspondent'; could this have been H.O.Duncan?

[61] "The Beginning of the End", *Bicycling News*, 4 June 1892.

[62] "Road-Racing", *Wheeling*, 26 Sept. 1894, p.605.

[63] *Cycling*, 15 September 1894.

[64] *Cycling*, 27 October 1894.

[65] *The Times*, 15 June 1895.

[66] *The Times*, 27 October and 1 November 1897.

[67] *The Times*, 8 November 1897.

[68] *The Times*, 26 November 1897.

[69] The Road Racing Council was established in 1922. In 1937, this body became the Road Time Trials Council, the controlling body of a peculiarly British approach to road racing which for many years defined road racing mainly as time trialling and kept an essentially working-class, club and community-based, sport out of sight and mind by racing on Britain's roads as early as possible on Sunday mornings, when everybody else was still in bed, as it still does today.

[70] A thorough study of sponsorship and advertising in sport in the 1890s would, I think, indicate that bicycle racing during this period played a significantly early and innovative part in utilizing and defining the potential of sport to sell products to consumers. The participation of Cuca Cocoa in long-distance bicycle racing is also interesting as an early commercial expression of the understanding of the need for stimulants in severe athletic effort.

[71] "Famous Racing Trophies - The CUCA Cup", *The Hub*, 31 Oct. 1896, p.501. The use of the term 'scientifically cultivated' here indicates that specific techniques were developed to gain maximum speed both from the pacing-machine and from the method the cyclist used to follow it. Pacing in general terms had been understood in the high-wheel period, but these long races allowed further intense experimentation.

[72] "How a Twenty-Four Hours Contest is Managed", *The Hub*, 26 Dec. 1896, p.315.

[73] "The Great All Day Path-Race", *Cycling*, 30 July 1892.

[74] The CUCA races were sponsored by Messrs. Root and Co. Ltd, proprietors of the Cuca Cocoa and Chocolate Company. "The CUCA Cup Race. Marvellous performance by Shorland", *Wheeling*, 1 August 1894; "The Cuca 24. Shorland breaks World's Records and makes the Cuca Cup his own", *Cycling*, 4 Aug. 1894; "An Historic Race", Editorial in *Wheeling*, 1 August 1894. The winners of the events were as follows: 1892, Shorland, 413m 1615 yds; 1893, Shorland, 426¼ miles; 1894, Shorland, 460m 1296 yds; 1895, George Hunt, 450m 1459 yds; 1896, F.R. Goodwin, 476m 1702 yds.

[75] "Long-Distance Competitions", *Cycling*, 19 Sept. 1891.

[76] *Véloce-Sport*, 3 August 1893.

[77] "International Courtesy", *Véloce-Sport*, 17 August 1893.

[78] "Timing and Timers. Comparative articles on timing at home and abroad. England and America", *Cycling*, 15 Sept. 1894.

[79] *The Times*, 30 March 1896.

[80] *Bicycling World*, 11 Sept 1896. Hillier's dates were 1856 - 1941. He was born in Chichester, started riding the bicycle in 1874, joined the Stanley Bicycle Club in 1878 and was involved in the foundation of both the Bicycle Union and the Bicycle Touring Club the same year. In 1880, he first became involved in cycling journalism as founder and editor, with Harry Etherington, of *Wheel World* (see "George L. Hillier", *Bicycling and Athletic Journal*, 25 March 1880). In 1881, he won the English high-wheel championships at all distances. Later, he was the editor of *The Cyclist*. An obituary commented in 1941, 'One of the greatest figures in cycling history was removed by the death last month of George Lacy Hillier, cycling journalist, author, sports promoter, and active participant in the pastime almost to the end of his days... A fierce controversialist in his younger days, he mellowed into a kindly and dignified old gentleman'. (*C.T.C. Gazette*, March 1941).

[81] "Words from the 'Prophet'", *Wheeling*, 3 Oct. 1894.

[82] 'Rational', "Is Amateurism Possible?" *Wheeling*, 10 October 1894; G.L. Hillier, letter to the Editor, "Is Amateurism Possible? Yes!", *Wheeling*, 17 October 1894.

[83] "Editorial Notes", *Wheeling*, 15 Aug. 1894.

[84] American roads were notoriously unpredictable, and the vast size of the country and greatly differing weather conditions made it difficult for cyclists to chart and publicize conditions. Good roads could in fact be found in surprising places. George Nellis, for example, who crossed the continent on a high-wheel bicycle in 1887, found smooth, hard roads on the prairies near North Platte, Nebraska on which he was able to ride 44 miles in 5½ hours, which he called 'the finest stretch for that distance in the entire United States'. See Kevin J. Hayes, *An American Cycling Odyssey, 1887* (University of Nebraska Press, Lincoln and London, 2002), p.109.

[85] See Hayes, *An American Cycling Odyssey, 1887* and Thomas Stevens, *Around the World on a Bicycle* (Scribner, New York, 1887).

[86] A telling juxtaposition of two club photographs in Glen Norcliffe, *The Ride to Modernity* (Figs. 6.2 and 6.3) illustrates how the exclusively masculine club world of the mid-1880s had broadened by the mid-1890s to include women and younger members. The hard-line road riding clubs (such as the English North Road Cycling Club) remained very much a male preserve, however, throughout the 1890s.

[87] *Bicycling World*, 5 June 1885, p.103.

[88] *Bicycling World*, 7 Aug. 1885.

[89] *Boston Globe*, 1 Aug. 1885.

[90] *L.A.W. Bulletin*, 16 April and 22 Oct. 1886.

[91] *Springfield Wheelmen's Gazette*, April 1887, p.5.

[92] *The American Wheelman*, May and June 1887; *Bicycling World*, 24 June, 1887.

[93] "Is Road Racing Wrong?", *The American Wheelman*, Sept. 1887. It should not be forgotten, of course, that the paper expressing this opinion was evidently pro-cycling.

[94] *The Wheelmen's Gazette* (Indianapolis), April 1892, p.92.

[95] *The Wheel*, 1 June 1894. Even allowing for the element of exaggeration in such an account, it is evident that the crowds were unusually large, the novel event attracting unusual attention. *The Referee* (1 June 1894) reported that the first edition of this race had been run seven years previously, 'promoted by R.D. Garden, manager of the Chicago branch of the Pope company, to boom cycling, which was, of course, then in swaddling clothes'. The entries and actual starters were as follows: 1887 race - 41 entrants, 35 starters; 1888 - 86 entries, 71 starters; 1889 - 123 entries, 67 starters; 1890 - 186 entries, 77 starters; 1891 - 223 entries, starters unknown; 1892 - 387 entries, starters unknown; 1893 – 351 entries, 271 starters; 1894 - 421 entries, 329 starters. The Associated Cycling Clubs of Chicago promoted the event in 1894. The race was run as a handicap, which meant that groups of riders left together at timed intervals, based on previous experience.

[96] *The Wheel and Cycling Trade Review*, 1 June 1894 and *Buffalo Daily Courier*, 31 May 1894.

[97] *Worcester Telegram*, ? May 1896 (exact date unknown).

[98] *Worcester Telegram*, 14 June 1896. No in-depth study of this aspect of American sport history at the turn of the century has as yet been attempted. Road racing was extensively documented in the cycling press and in the urban newspapers of the period, where races often received several pages of coverage. In the absence of the automobile, cycling was a major presence in the urban landscape. The extent of its duration and the reasons for its demise would yield interesting information on patterns of development of sport in the late 19th century.

[99] *New York Times*, 15 July 1894.

[100] *The American Cyclist*, June 1892.

[101] *The Referee*, 1 June 1894.

[102] *Indianapolis Sentinel*, 8 Sept. 1895.

[103] *The Wheel*, 1 June 1894.

[104] *San Francisco Chronicle*, 17 August 1894.

[105] *Bicycling World*, 11 Sept 1896.

[106] *New York Evening Journal*, 7 Nov. 1898.

[107] A much stronger, universal resistance – leading in fact to severe restrictions because of the danger to other road-users – was encountered by motor-racing pioneers. Fatal accidents occurred in many of the long-distance automobile races, Paris - Amsterdam, Paris - Berlin and Paris - Vienna, but the most notorious fatalities occurred in the Paris - Madrid race of 1903, which was ordered to be stopped by the French government at Bordeaux after a terrible first day of carnage. See Chapter 10, "Paris - Madrid", in Charles Jarrott, *Ten Years of Motors and Motor Racing* (London, Grant Richards, 1906) and Chapter 3, Philippe Gaboriau, "The Tour de France and Cycling's Belle Epoque", in Dauncey and Hare, *The Tour de France.*