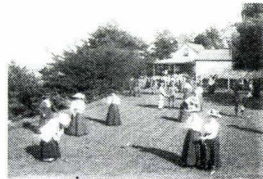
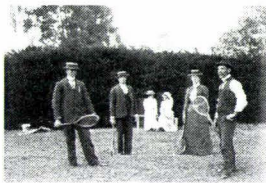


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# An Investigation of European Women's Dress in New Zealand for Selected Sports 1880-1912:

A negotiated position of appearance for increased freedom  
and social acceptance



Alexander Turnbull Library

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A thesis submitted for the degree of Masters of Design  
at Massey University , Wellington, New Zealand

August 2005

## Abstract

New Zealand women increasingly participated in sport towards the end of the nineteenth century. Extended physical opportunities occurred in alignment with progressive social changes reflecting greater public participation and social freedom. An overriding concern of nineteenth century middle class women was to portray outward signs of respectability in public. Consequently, special attention to dress and appearance was instrumental in modifying acceptance for new codes of behaviour.

This investigation of dress worn for selected sports consists of the visual content analysis of photographs, integrated with social historical research. Dress characteristics were recorded in the form of nominal and ordinal measurements of styles and descriptors, with semantic differential scales to measure various aesthetic qualities of fabric and design. These characteristics were derived from garment types and components visible in fashionable dress.

This research contributes to filling a void in detailed photographic analysis of dress for sport within New Zealand, and extends and validates interpretations of social relevance from other literature. Analysis of dress for sport during this period has revealed elements of continuity and change sympathetic to the social circumstances of the period. Consistently, women displayed restraint and respectability to confirm their social identity and to legitimise their involvement in sport. Towards the end of the century, the evidence suggests the majority of women wore dress for sporting activity which borrowed from the dress of the 'new woman', an aesthetic already presented in the public arena. The dress of the 'new woman' for sport signified a redefinition of femininity, an acceptance of combined aesthetics and gendered symbolism, denoting a progressive change to greater physical and social freedom.

## Acknowledgements

I would like to offer sincere thanks to Jacquie Naismith, my supervisor, whose guidance and assistance towards completing this work was invaluable. I also owe thanks to Jane Malthus, who initially inspired this area of research and for her knowledge in her role as technical advisor. Jane's support was appreciated.

Grateful thanks are given to my family, friends and colleagues at Massey University who gave insurmountable support in time and patience throughout the period of study.

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# Chapter I

## Introduction

This investigation of dress in New Zealand involved the content analysis of women's dress worn for selected sports as seen in photographs in the period 1880 to 1912. The primary aim of the research was to extend existing historical dress documentation in New Zealand. An interpretation from a socio-historical perspective validated the significance of appearance management. Women who had the desire and opportunity to participate in sport chose their appearance and in doing so, expressed individual and social assertions.

Clothing and appearance can create and define an identity for the wearer (Kaiser, 1990). Clothing acting as a means of symbolic communication was extremely important in the nineteenth century in conveying information of the wearer's status and social role. Of direct relationship to these ascribed roles were prescribed notions of gender assignment. Contemporary thought confined women to notions associated with Victorian femininity including fragility, compliance and passivity. To accompany these behavioural models, the ideal woman portrayed an ornamental role. The decorous women displayed the feminine aesthetics and social expectations of her period, in turn defining her own identity. Dress played an integral part in defining these spheres of feminine experience.

Strict rules of feminine appearance and appropriate behaviour were reverently adhered to in order to display propriety and decorum for social acceptance. Generally, women's fashionable dress was highly decorative in nature displaying excessive surface embellishment. Body modification created the womanly figures exalted by fashionable taste and aesthetics. Tight corsetry and restrictive fitting bodices inhibited bodily movement. Full-length cumbersome and heavy skirts were created and supported by various structural features extending the body beyond natural parameters which also restricted activity. All aspects of women's dress contributed to the aesthetics of a predominantly inactive role, and that of a decorative and restrained nature. Helene Roberts further described these attributes:

More than identifying each sex, clothing defined the role of the sex. Men were serious(they wore dark colours and little ornamentation), women were frivolous(they wore light pastel colours, ribbon, lace and bows); men were

active(their clothes allowed them movement),women inactive(their clothes inhibited movement), men were strong(their clothes emphasized broad shoulders and chests), women delicate (their clothing accentuated tiny waists sloping shoulders, and a softly rounded silhouette); men were aggressive(their clothing had sharp lines and a clearly defined silhouette), women were submissive(their silhouette was indefinite, their clothing constricting) (Roberts, 1977, p. 555).

These characteristics of dress were seen as conveying codes of gender differentiation relating to social expectations of appearance and behaviour. Roach-Higgins and Eicher (1992, p.4) claimed that "meanings communicated by dress may emanate from its basic type, one of its properties (colour, shape), or a composite of its component types and/or properties".

The recording of the components and properties of dress worn for sport for this research was derived from garment types and characteristics visible in fashionable dress. For this reason, it was considered important in this thesis to give detailed descriptions of fashionable dress from the same archival source as the research. The amount of collated visual and written material in the area of historical dress in New Zealand was found to be very limited with most of the previous documentation providing brief generalised descriptions. The only significant detailed information was derived from actual dress artefacts (Malthus, 1996). Chapter 4 provides detailed descriptions of fashionable dress as seen in selected photographs from New Zealand archives during the sequential time periods to allow a comparative reference.

Fashionable dress codes and changing composites symbolised traditional social expectations and desires for new assertions. Extended physical opportunities occurred in alignment with progressive social changes reflecting greater public participation and social freedom. New Zealand women increasingly participated in sport towards the end of the nineteenth century. However the extent and nature of the involvement was dominated by conventional prescriptions of restricted gender delineation. Predominant ideology created from institutionalised biological and moral premise formed ambivalence to women's participation in physical activity. Women's active involvement in sport upset deeply held stereotypes of women's physical abilities, social role and ideals of feminine aesthetics. Many of the contemporary debates surrounding women and sport revolved around ideological definitions of femininity and incongruity of behaviour and appearance. An

overriding concern of nineteenth century middle class women was to portray outward signs of respectability in public. Consequently, special attention to dress was instrumental in modifying acceptance for new codes of behaviour.

Analysis of dress for the sports of tennis, golf, mountaineering and cycling, revealed elements of continuity and change sympathetic to the social circumstances of the particular sports and the period. Underlying prejudices and restrictions were commonly experienced by women participating in sport during the period. However it was important to highlight some of the circumstances specific to each sport which in turn characterised the dress worn. Chapter 5 is devoted to each sport highlighting contextual information significant to the sport and relationship to dress worn. Selected photographs and descriptions draw attention to research findings.

Generally, women were acutely aware of the reactions they evoked by challenging the prevailing views of femininity. To minimise the public antagonism, women managed their appearance to moderate conventional perceptions. Some women maintained the elaborate codes of dress conforming to the traditional aesthetics and associated codes of feminine identity. Consistently, women displayed restraint and respectability to confirm their social identity and legitimise their involvement in sport. Towards the end of the century, the majority of women wore dress for sporting activity which borrowed from the dress of the 'new woman', an aesthetic already presented in the public arena. This more progressive dress code had similar symbolic meaning which sought to represent ideals of increased freedom, independence and public participation. These alternative properties combined the simpler aesthetics and elements from men's dress alongside traditional 'feminine' dress elements. The dress of the 'new woman' for sport signified a redefinition of femininity, an acceptance of combined aesthetics and gendered symbolism denoting a progressive change to greater physical and social freedom.

## Chapter 2

### Literature Review

Research into women's dress for sport in New Zealand during the period 1880 to 1912 has considered several aspects of dress and its context in this time period. The primary aspect was the identification and description of dress. During this period there were few modifications of dress made for the extended function of physical activity. Investigation of the relationship between fashionable dress and dress worn for sport by women allowed comparative analysis and evaluation. Elizabeth Wilson (1985) described costume as a cultural phenomenon, an aesthetic medium for the expression of ideas, desires and beliefs circulating in society. Investigation of the capacity for dress to communicate a social meaning was essential to allow a meaningful interpretation of dress analysis. Other research has investigated the contextual circumstances of the nature of women's sport and the changing social dynamics of New Zealand society during the designated period. The growth of women's participation in sport was indicative of their assertion for increased freedom in the broader sector of the public arena. It was within this changing social context that the analysis and interpretation was made for this research.

#### **2.1 Women's Dress Characteristics: Victorian and Edwardian dress in a social context**

There is only one publication describing dress worn by women in New Zealand in the late nineteenth century and turn of the century. This may be due to the fact that women's experiences in colonial New Zealand were largely unrecorded. Eve Ebbett (1977) uses a traditional historical methodology to research colonial dress in New Zealand. An assortment of photographs, drawings and associated descriptions from primary and secondary sources denote what New Zealand men and women wore in general terms. A very brief chapter is devoted to sport and recreation. No other publications are specifically devoted to colonial dress or sports dress in New Zealand. Of tremendous value is an unpublished thesis of Jane Malthus (1996) who carried out very detailed artifactual analysis of nineteenth century women's dress from museums throughout New Zealand. Although limited to dresses, Malthus provides the accuracy of quantitative results of defined dress characteristics to investigate the extent of

adaptations and conformity in dress in the context of colonial society. Malthus (1996) concluded that fashionable styles were close to those worn in Europe, although a time differential between the wearing of fashions was difficult to ascertain. Conformity to fashion was more important than adaptation to a colonial lifestyle. It was found that issues of propriety and respectability were paramount. Malthus (1989) again reinforced these findings in her discussion of the public abhorrence to reform dress. These findings created a useful basis of comparison for dress characteristics and related social expectations in dress worn for sport.

In contrast to scant New Zealand sources, there are extensive costume books with detailed descriptions of Victorian and Edwardian fashions published in Britain, Europe and America. The form of this literature is varied in visual material and degree of detail expressed. However, all of this material was useful to allow a cross-referencing of dress types and characteristics for dating purposes. Of particular value was a publication by Severa (1995) which provides a detailed visual analysis of American dress in photography. Severa (1995) presents a chronological collation of photographs during the period 1840 to 1900. The accompanying full descriptions of design detail are technically informed and include the socio-economic context affecting dress worn during the successive periods. Severa uses a refreshing approach more symptomatic of recent research by costume historians illustrating an awareness of the need to portray dress from all sectors of society. Setnik's more recent publication, although not as extensive and visually appealing, also provides a useful detailed analysis of American dress in photographs in the relevant timeframe (Setnik, 2000). There are other British publications which use photographs of Victorian and Edwardian dress as a form of visual material analysis and aid as guides for methodology and design detail comparisons.

Sports dress is commonly addressed as a sub-division of dress description. Cunnington & Mansfield (1969) cover an extensive period from the sixteenth century to nineteenth century on English costume for sport and outdoor recreation. Contemporary comment within the descriptive text is particularly useful. At present, there are no other publications devoted entirely to dress for sport or recreation relevant to the research time period.

To extend the study of dress characteristics it is important to interpret dress as communicating individual and cultural meaning. Dress and communication theory is well documented in international text and clothing and textile journals (Breward, 1995;

Entwhistle, 2000; Kaiser, 1990; Roach-Higgins & Eicher, 1992; Steele, 1985; E. Wilson, 1985). Many writers have conveyed the importance of dress as a form of symbolic communication to convey identities relating to social status and social role. As frequently referenced, nineteenth century fashionable dress reinforced the separate spheres of masculine and feminine experience (Kaiser, 1990; Roberts, 1977; Steele, 1985). Helene Roberts (1977) in her article with the revealing title *The Exquisite Slave: the Role of Clothes in the Making of the Victorian Woman*, attributes garment components and descriptions to signal associated gender codes. She claimed that "not only could clothing transform a person's appearance, it could also influence the actions and attitudes of both the wearer and the viewer" (Roberts, 1977, p. 554). Of particular relevance to this thesis are the theories of gender coding through appearance as they form the basis to the theoretical premise of the dress analysis.

The placement of dress within a changing social context allows a deeper interpretive analysis. The study of New Zealand women's history has grown considerably in the last two decades, resulting in a large volume of literature in social history (Dalley, 2000). This body of work primarily used social science methodologies and allows extensive background reading to socio-cultural issues. This includes books comprising of collections of essays and collected documents pertinent to the lives of European women in the colonial period (Brookes, MacDonald, & Tennant, 1986; Brookes, Tennant, & MacDonald, 1992; MacDonald, Penfold, & Williams, 1991; Porter & MacDonald, 1996). The writing conveyed in women's letters, journals and diaries authentically documents their experiences. Other NZ secondary sources provide general histories of women to help understand women's lives during this period (Brooks & Simpkin, 1975; Bunkle & Hughes, 1980; Coney, 1986; Grimshaw, 1972; MacDonald, 1990, 1993b; MacDonald et al., 1991; MacGregor, 1975, 1976; McKergow, 1991; Newman, 1979; Nicholls, 1990; Olssen, 1980; H. Simpson, 1962; Sutch, 1973; Toynbee, 1979; D. Wilson, 1996; Wood, 1974; Woodhouse, 1988).

Of particular interest to the period under discussion is that research which refers to emancipation issues. McDonald noted that women's early participation in sport gained impetus during the period when the nature of women's place in social and political life was in a position of debate (Else, 1993). Much work has resulted from commissions resulting from centenary celebrations of New Zealand's enfranchisement. Coney (1993) presents an illustrated social history, covering a wide number of aspects of women's lives. Of particular relevance are the links between fashion and prevailing social perceptions in an article

describing dress worn by women during the Victorian and Edwardian period. Coney's argument reinforced the role clothing played in the latter nineteenth century to convey women's social position. The composition of fashionable dress reinforced notions of gender roles being distinctly defined. The notion of Victorian conformity to a strict set of rules is repeatedly documented and appeared to form the basis of many ideas and conditions in New Zealand. Malthus (1989) reinforced these notions, by asserting that by the 1880s Victorian ideas of femininity were well ingrained in middle class New Zealand.

Scarcity of documented and published literature on dress in New Zealand confirmed the importance of furthering this area of research. In order to allow interpretative conclusions from the study of dress, existing literature and research was reviewed to inform further investigation of women's participation in sport and associated social issues.

## 2.2 Women and Sport

Historically there has been little published literature with a primary focus of women and sport. Most literature on historical sport in New Zealand concentrates on the accolades of male sporting achievements. Some material was located in publications of particular sport histories, namely tennis and golf (Elenio, 1986; Hawke & Committee, 1995) and club booklets produced to mark centennial occasions. Most of these publications included small sections in which women's involvement is discussed to a limited extent. Northover (1992) produced a book titled, *Women at St Andrews* which gives a general history of women's involvement in the Hamilton golf club. Primary sources of club records were investigated but provided little information. The most useful contemporary sources were newspapers and periodicals (*New Zealand Graphic and Ladies' Journal, New Zealand Mail, Christchurch Press*). These were particularly useful for contemporary comment on cycling. The cycling columns in the *White Ribbon* were particularly relevant, and provided a feminist perspective.

The role of women in sport has focused most successfully on the struggle of a few exceptional women with notable accomplishments. More publications have revealed interest in the lives of women mountaineers, (Barnicoat, 1904; Dawson, 2001; Du Faur, 1915; Grande, 1930; Irwin, 2000; Lynch, 1986; Ross, 1900). These books recognised the importance of the pioneering efforts of these women and increased freedom gained by

sport. However, they also exemplify the earlier years of women's history and sport history writing which set out to highlight heroic accomplishments. Other relevant unpublished academic literature on women's sport involves early mountaineering, golf, and physical education (Fry, 1985; Langton, 1996; Lynch, 1987; McCormack Ross, 1989; T. G. Russell, 1979; Ryan, 1983; Smith, 1997). Some of these are primarily descriptive of women's participation, but provided contextual information for the particular sports.

Literature regarding education gives insight into changing perceptions of sport and young women from a perspective of institutionalised socialisation. Ruth Fry (1985) describes the development of education and sports from the beginning of the twentieth century which gives the subsequent impact of changes in women's physical activity during the 1890s. Smith explores the emancipating and inhibiting structures of physical training in selected New Zealand schools during this period (Smith, 1997). A useful collection of essays on women in organised sports is produced in *Women Together: A History of Women's Organisations in NZ*, edited by Anne Else (1993). The introductory essay to the section on sport by Charlotte McDonald gives an informed historical account of women's involvement in sport highlighting the existence of organisations for women's recreation dating from the late 1880s. The recording of the initiation dates and associated club's records provide useful evidence derived from mainly primary source material of sporting organisations.

More common are accounts of women's participation in general sports histories or general histories of women. A more interpretative description of sport and gender relationships in the colonial context is discussed by Sandra Coney in a publication written for popular consumption (Coney, 1993). A chapter gives an overview of various individual and team sports that women were involved in and highlights examples of specific challenges faced by women in entering the sports arena. A common notion of historical and contemporary comment is that of the Victorian sportswoman being a social anomaly, exerting great efforts to overcome traditional conventions of femininity.

The most informative discussions of general sports and recreation histories in New Zealand are by Jenny Barclay and Scott Crawford. Barclay (1977) analyses trends in New Zealand sport from 1840 to 1900, but primarily examines the social role and function of male sports. However Barclay does note the aspect of increased opportunities for women's participation in recreation due to the nature of women's existence in colonial New Zealand. Crawford (1987) also used comparative approaches to consider the

relationship between women and sport in Britain and its trans-Atlantic colonies. Crawford claimed that in colonial New Zealand there was a climate of greater social acceptance for women to enjoy the freedoms of recreation. This view does not correspond with other writers, who viewed sport as a male enclave closely guarded against women (Coney 1993, Else 1993, Hammer 1990). Crawford does however make a distinction between the female athlete and the woman involved in recreational activity.

The last few decades have seen women become more of a central focus in New Zealand research. In accordance, academic research in women's sport is growing. Two unpublished theses have been most relevant to the theoretical premise of my thesis. Hammer (1990) in her thesis titled, *Something Else in the World to Live For...Sport and the Physical Emancipation of Women and Girls in Auckland 1890-1920* examines the development of women's sport during this period when the position of women in society was influenced by a growing feminist movement. Hammer (1990) discusses women's involvement in sport as representing a demand for equality that challenged the prevailing ideals of feminine behaviour. Ideals of equity in sport were part of a general movement for female emancipation. Hammer discusses the redefinition of perceptions of femininity to accommodate greater physical freedom.

Clare Simpson (1998), in an unpublished thesis, specifically looks at cycling and focuses on its role in redefining concepts of nineteenth century femininity in New Zealand. Much of the contextual information on women's involvement in cycling is derived from Simpson's detailed research. She writes from a feminist/socio-historical perspective. Simpson provides an excellent account of the social issues surrounding women's involvement in cycling with pertinent references to the etiquette of appearance and conduct to appeal to the conventions of public presentation. Simpson presents many of the issues located in international articles on cycling within the New Zealand context. There are a large number of articles which identify cycling as playing a key role in women's emancipation (Bradfield, 1972; Grossbard & Mervel, 1990; Hall, 1971; Marks, 1990; Rubenstein 1977; P. Russell, 1994; Winkworth, 1989).

The broader historical study of sport and accordant contextual information for this research is strongly related to discussions of gender issues. The Victorian period in particular was used to highlight the distinctive socially constructed gender spheres. There has been increased interest internationally in the last two decades in research and writing on sport and gender relations. Prevalent themes are highlighted in Mangan and Park's (1987) collection of essays in *From Fair Sex to Feminism: Sport and the Socialisation of*

*Women in the Industrial and Post-Industrial Eras.* This collection serves as a useful text for analysis of women and sport in times of emancipation. The collection of essays concentrated on women's involvement in sport with the predominant issues relating to the inhibiting effects of education, medical and health beliefs and cultural conventions. Hargreaves (1987) looks at the Victorian family structure and changed definitions of the female body in relation to power differentials between men and women. Vertinsky (1987) discusses the strong influences from medical institutions to claim the inherent weaknesses of the female body. Many subsequent studies have linked health, exercise and sport as a sub-section of women's history. The controlling mechanisms of educational institutions were explored by some of Mangan and Park's authors. Fletcher (1987) investigated the establishment of female traditions and a reinforcement of separate gender spheres within English physical education during the period 1880-1990. McCrone (1987) examined the physical freedom gained by the games played at public schools, while reinforcing Victorian values. McCrone placed great importance on sport as part of a wider thrust for emancipation for women, as developed in her later book (McCrone, 1988).

These aspects of the research brought forward pertinent questions to be investigated in the colonial New Zealand context.

### **2.3 A Synthesis of Components: Women, Sport and Dress**

In order to allow an interpretation to be directly derived from the analysis of women's sports dress for the research topic, an amalgamation of results from dress characteristics and social aspects of relevance needed to be considered. Jihang Park (1989) gave a reappraisal of previous literature discussing the correlations between sport and emancipation of women, sport and dress, and a consequent evaluation of all three aspects, in relation to Victorian England. Park noted the predominance of existing studies did not attend to the synthesis of all of the components: dress, sport and feminism. Contemporary and historical writing highlights generally accepted opinions that sport and feminism developed in unison. Park argues for a more complex relationship, one that is not necessarily causal (J. Park, 1989). Similarly there have been many references to the great significance sport has had on changes in women's clothing. However there is little evidence presented the adoption of more practical dress for physical activity during the period. This leads to considerations of dress reform and the women's movement. There are generalised correlations between plainer dress and feminism, yet the situation, which saw where many British feminists consciously choosing to wear more feminine conventional attire, to defer

hostile public attention, refutes this. In addition, there were those who advocated dress reform from a health perspective and in support of Aesthetic art movements.

Park (1989) concludes that the activities of women's sport, dress reform and feminism moved in separate spheres within Victorian England. The separate trends of ideological emancipation and bodily emancipation did not merge until pre-war years. Early feminists did not utilise the advantages of the physical freedom provided by sport as part of their national campaign for women's rights. Conversely, those women participating in sport were not necessarily interested in radical associations of the suffragists. Dress reform was not reinforced or advocated by the majority of those involved in the women's movement. Most women did not voluntarily dismiss the restrictions of dress. Park (1989) claims the limitations of dress and women's sport were the result of Victorian issues, many of which were self-imposed by women themselves.

Park's discussion allows highly relevant reference points and comparisons to be formed within the New Zealand context. Colonial conditions allowed a different interplay of factors and consequent relationships to form. Hammer (1990) and Simpson (1996) extended their discussion of sport and physical emancipation of women to include a chapter on dress. Hammer concluded that the progression made to greater physical emancipation was hampered by the physical restrictions of dress. Changing ideas and assertions of increased freedom were not necessarily reflected in contemporary fashion and any changes in sports dress showed compromises between propriety and practicality (Hammer, 1990).

The visual analysis reveals that the sports analysed indicated a managed appearance as a strategic action rather than a compromised position. This validates discussion by Simpson (1996) who proposed dress along with conduct was a crucial consideration of etiquette for women cycling.

The literature review revealed the amount of collated visual and written material in the area of historical dress in New Zealand is very limited. This research contributes to filling a void in detailed photographic analysis of dress within New Zealand. As outlined in the review, previous writing has provided impetus for the analysis and interpretation of dress within the New Zealand context. Historical sports dress, being a sub-division of historical dress allows an interesting comparative position for analysis of existing pieces of written work discussing the social meanings of fashionable dress. Any further research

within the field must be appreciated in the sense of extending historical costume documentation in New Zealand and interpretations of social relevance.

# Chapter 3

## Methods

### 3.1 Introduction

The method for this study uses elements from established models of artifactual analysis and visual analysis from pictorial evidence. A review of relevant models is included which provide a basis for the method in this research. In order to achieve my research aims, the primary focus was the analysis of visual evidence from dress worn in photographs of women participating in selected sports. Further the study of artefacts through the content analysis of photographs was integrated with socio-historical research. This combination of methods has not been employed in previous research in the study of dress in New Zealand. In response to existing research in the topic area, methods were developed using my own strengths from a background in design and historical dress to add a new methodological dimension.

### 3.2 Previous Methods of Artifactual Analysis

Several generic methods for analysis of artifacts have been prepared in related areas of research. These have formed a framework for subsequent analysis with adaptations to suit the specific requirements within clothing and textile research. Fleming (1973) proposed a model which forms the basis for much social documentation now used. The model used two stages. The first involved a description of physical properties of the artifact using categories of *design, construction, materials* and *function*. The physical properties also included the artifact's history or provenance. The second stage consisted of four operations performed on these properties in the first stage. The operations consisted of *identification, evaluation, cultural analysis* and *interpretation*. This model provided a systematic classification system of each artifact and a more holistic cultural framework. For cultural analysis to be performed, sampling from a body of related artifacts was used. In addition it was stressed that supplementary information must come from other sources external to the artifact.

Art historian, Jules Prown (1982) put forward a model in the *Winterthur Portfolio* using three components of analysis. The first component, *Description*, recorded internal

evidence of the object. The second component, *Deduction*, interpreted the interaction between object and perceiver. Thirdly, *Speculation* formed the hypothesis and posed the questions, which led to testing for external evidence. Prown emphasised a strict sequencing to the stages. This was an aspect of the model which could be questioned. Greater knowledge gained from comparative sources would enhance the description component of analysis. In addition, the use of external evidence could validate the hypothesis formed.

The methods of Fleming and Prown were adapted for studying the discipline of clothing and textile artifacts. It was found the models proposed by Fleming and Prown did not allow expanded analysis for the many differences shown between garments. Severa and Horswill (1989) used the properties proposed by Fleming but made adjustments for the study of dress. Design and construction become one property and function is integrated into the examination and deduction steps. It is often found that the property of history or provenance is missing or unreliable for historic dress. Severa and Horswill (1989) extended Fleming's model to account for this difficulty. *Evaluation* included comparisons of the object with others of the same kind in quantifiable terms. Fleming's model provided a systematic analysis but it doesn't allow comparisons, which can provide additional validity. Severa and Horswill added *Workmanship* to Fleming's properties, which included treatments and level of skill shown. They examined these properties with Fleming's properties but added *Intuitive analysis* to the Interpretation stage. Intuitive analysis allowed the use of subjective feelings to be used for interpretation. This form of analysis can be problematic but it could be argued that this is integral to most forms of interpretation.

Jane Malthus (1996) in her study of European women's dress in nineteenth century New Zealand used a combination of methods. A comprehensive list of dress details was collected and comparisons were made quantitatively using statistical clustering techniques to provide similarities and differences of characteristics during set periods. The methodology allowed a high level of reliability and validity in its use of large sample number and statistical testing.

It was found that methods used for the study of artifacts in costume and textiles differ philosophically and physically in their structures of categorisation. This can be attributed to the varied multidisciplinary nature of scholarship in the field. Varying

degrees of qualitative and quantitative analysis will always offer debate as to the usefulness of information documented.

### 3.3 Methods of Visual Analysis from Pictorial Evidence

The visual characteristics of dress from pictorial evidence are often studied to analyse changes over defined periods (Cosbey, Damhorst, & Farrell-Beck, 2002). Variation in source material can include illustrations and photographs in contemporary magazines and newspapers. The studies utilising pictorial evidence from newspapers and magazines may take advantage of more reliable availability, regularity and defined dating of images to aid research methodology. The styles illustrated in magazine and newspaper advertising are not necessarily representative of what women actually wore but do offer information of merchandise at the time. Photographs can have the advantage of showing a more realistic and honest picture of what women wore.

Cosbey, Damhorst and Farrell-Beck (2002) designed an instrument to study the styles of women's day dress illustrated in magazines, *The Delineator* and *Harper's Bazar*, from 1873 to 1912. Their research, aimed to identify the diversity of characteristics, dictated a very detailed systematic identification of a number of measures. Cosbey, Damhorst and Farrel-Beck (2002) utilised measures from other studies using visual analysis research and derived new modes of identification and measurement to allow increased validity and reliability of results for their needs of quantitative analysis. Coding with nominal categories allowed an effective method of recording feature styles (Behling & Dickey, 1980; Robenstine & Kelley, 1981; Turnbaugh, 1979). Nominal measurements allowed stylistic features to be commonly grouped according to types, for example sleeve styles, neckline treatments. Cosbey, Damhorst and Farrel-Beck (2002) extended the recording of data by providing descriptors of the given features, for example sleeve styles may be categorised as bishop, mutton leg, and others. This was seen as beneficial to define specific feature types and combinations to allow more meaningful variations and greater reliability of coding. Ordinal measures recorded lengths and widths of garment features without actual measures of the pictorial evidence as used in ratio measurement. Dress characteristics were also identified by ratings on a bipolar continuum as a semantic differential scale (Cosbey et al., 2002; DeLong & Minshall, 1988; DeLong, Salusso-Deonier, & Larntz, 1983).

The approach to the recording of dress characteristics is based on theories of semiotic analysis. A semiotic perspective identifies specific features to be recorded. The identification of dress characteristics incorporates measures of perceptual elements (Damhorst, 1999). These elements may form various combinations that show indicators of fashion change. The methodology instrument can provide identification of specified style characteristics as well as a meanings analysis. In a cultural interpretation a focus on social meaning is preferable. Semiology not only defines signs and symbols but also changes in positions of ideology. The component parts can be combined in new ways to derive new meanings. Cosbey, Damhorst and Farrel-Beck (2002) developed a partial semiotic approach by identifying the dress characteristics to record. A meanings analysis was not adopted in their methodology.

### **3.4 Visual Content Analysis from Photographs developed for the Research of Dress for Sport**

#### **3.4.1 Content Analysis through Collation and Coding**

The methodology was planned to study the style characteristics of sports dress worn by European women in New Zealand for the specified sports of tennis and golf, mountaineering and cycling. Information was recorded through the visual content analysis of photographs dated in the period 1880 to 1912. Photographs of sports clothing were collected from the Auckland Museum, The National Library, Nelson Provincial Museum, Christchurch Museum, Dunedin Museum, and Hocken Library Museum. As with all sampling of archival material which is determined by what remains in collections, the sample cannot be considered to be statistically representative. However it does allow indicative conclusions to be made for analysis. The sample was determined by the photographs available in the specified collections that fell within these criteria. Only those photographs which displayed a full-length frontal or three-quarter view were selected. Evidence needed to come from photographs where women were actively participating in the sport or shown with accessories that indicated involvement with the sport. The total number of women analysed in sport's photographs was 277. The number of photographs available in each sport comprised of 106 for tennis, 66 for golf, 31 for mountaineering and 74 for cycling. Characteristic details were collected for all sporting outfits to allow a greater degree of construct validity and provide quantitative results.

The development of characteristic properties for a recording table was derived from garment types and characteristics visible in fashionable dress during the period. Due to the coding being reliant on photographic material, the study focused on the appearance of the garments rather than the detailed level of technical construction. Other characteristics were developed for coding information from researchers in the field of visual analysis from pictorial evidence (Cosbey et al., 2002). Information from content analysis included: garment types, aesthetic characteristics of main fabrics used, design aesthetics, feature characteristics, length and widths of components, structural embellishment, surface embellishment, and accessory types (table 1). As Cosbey, Damhorst & Farrel-Beck (2002) highlighted, photographs and illustrations can show a significant amount of visual distortion. The assignment of set characteristics to each piece of clothing within the categorisation of specific sport activities allowed a classification of terms for clearer analysis. These characteristics were restricted to what was seen in the garment itself which guarded against subjective assumptions.

The most common form of characteristic identification was through nominal identification. The characteristics were coded by upper body characteristics and lower body characteristics. The same aesthetic measures were used to code the garments, but feature identification including surface and structural embellishment was determined by the defined features specific to the upper and lower body garments. Body location measures included ordinal measurement of lengths and widths of specified dress components in relation to the body. To allow consistency of recording, descriptors were used with demarcations of the sleeve lengths and widths, and hem lengths of lower body garments with corresponding scale values of one to five for coding (table 3). Semantic differential scales measured aesthetic qualities including fabric qualities of hue and weight (table 3), and design qualities of simplicity to complexity and angularity to roundness (table 2). These qualities were also ranked on a scale from one to five, with accompanying descriptors and examples. These more abstract qualities required a greater level of interpretation than what was required for the other measures. To aid consistency, copies of photographs which exemplified the various rankings of the features were used as reference while coding.

Frequencies of the garment types, features and characteristics were derived from the data. An analysis of the dress worn for the specified sports was made through the time periods, 1880 to 1890, 1890 to 1900, and 1900 to 1912. These quantitative results inform the following operations.

### **3.42 Operations: Evaluation, Cultural Analysis and Interpretation**

Information was collated and compared with comparative source material. The operations *Evaluation*, *Cultural analysis* and *Interpretation* analysed these characteristics utilising a more holistic framework as outlined by Fleming (1973). The three operations were inter-linked so were not necessarily sequenced. The *Evaluation* involved judgement of aesthetic quality and function. These evaluations were often related to the cultural analysis and interpretation. All known data from other sources were drawn together to give the dress an extended social meaning through cultural analysis and interpretation. A wide selection of other source material allowed a more valid interpretative process. This additional material included primary sources of nineteenth century newspapers and periodicals, sports journals, pamphlets and articles. Secondary sources used included books, articles, unpublished reports and dissertations.

### **3.43 Issues of Authenticity**

It was important to be aware that both primary and secondary sources needed to be evaluated for authenticity. Photographic records can parallel dilemmas of museum collections of garments. Often photographs were collected with little social information associated. It was common for a predominance of source material to come from a higher social class. The likelihood that the photographs were from an established family with property rather than migrant working family was greater. However, the evidence of what was missing was as important as what was available for analysis and interpretation. Ideally, knowledge of the origin of the photograph allowed a more reliable interpretation. The expanded context revealed more about the subject and verified consistency or variation of the source material in the period. Dating often posed a problem in source material, as commonly experienced in archival material. However knowledge of technological changes helped the identification of garments characteristics and dating of the photographs. Photographs were derived from a great range of sources, depending on the period, from personal and amateur photography to professional, studio, press and organisational photography. Questions had to be asked as to the purpose of the photograph, and in what context to allow a broader and more accurate interpretation. Accordingly, secondary sources were not devoid of the possibility of bias. Written accounts often uncritically described a generally accepted version of the Victorian period.

**Table 1: Recording table for Dress Characteristics**

Category			Date:
<b>General Description:</b>			
<b>Provenance:</b>			
Ref.No. _____	<b>Upper Body garment:</b>		<b>Lower Body Garment:</b>
<b>Fabric aesthetics:</b>	Hue value <i>Light – dark 1-5</i>		Hue value <i>Light – dark 1-5</i>
	Weight value <i>Light- heavy 1-5</i>		Weight value <i>Light- heavy 1-5</i>
<b>Other aesthetics:</b>	Design simplicity-complexity 1-5		Design simplicity-complexity 1-5
	Design angularity-roundness 1-5		Design angularity-roundness 1-5
<b>Feature Identification</b>			
<b>Closure/ opening</b>	<i>Centre</i>		<i>Centre</i>
	<i>Off-centre</i>		<i>Off-centre</i>
			<i>Side</i>
<b>Surface embellishment</b>	<i>Buttons</i>		<i>Buttons</i>
	<i>Bows</i>		<i>Bows</i>
	<i>Embroidery</i>		<i>Embroidery</i>
	<i>Lace</i>		<i>Lace</i>
	<i>Applique</i>		<i>Applique</i>
<b>Structural embellishment</b>	<i>Gathers</i>		<i>Gathers</i>
	<i>Panels</i>		<i>Panels</i>
	<i>Darts</i>		<i>Darts</i>
	<i>Pleats/tucks</i>		<i>Pleats/tucks</i>
	<i>Pockets</i>		<i>Pockets</i>
			<i>Flounce</i>
			<i>Drape</i>
	<b>Neckline/ collar</b>		<b>Length 1-3</b>
	Neck shape	<i>Round</i>	
		<i>Square</i>	
		<i>V-shape</i>	
		<i>High</i>	

		<i>Low</i>		
	Collar style	<i>Notched</i>		
		<i>Shawl</i>		
		<i>Turn-down</i>		
		<i>Sailor</i>		
		<i>Stand</i>		
	Surface embellishment	<i>Bows</i>		
		<i>Buttons</i>		
		<i>Embroidery</i>		
		<i>Applique</i>		
		<i>Ruffle</i>		
	<b>Sleeve/cuff</b>			
	Armstyle style	<i>Set-in</i>		
		<i>Drop shoulder</i>		
		<i>Dolman</i>		
	Sleeve style	<i>Basic fitted</i>		
		<i>Coat</i>		
		<i>Bishop</i>		
		<i>Mutton leg</i>		
		<i>Puff</i>		
		<i>Cap</i>		
		<i>Pagoda</i>		
		<i>Lantern</i>		
	Slve. structural embellishment	<i>Gathers</i>		
		<i>Pleats/tucks</i>		
	Slve.surface embellishment	<i>Bows</i>		
		<i>Buttons</i>		
		<i>Embroidery</i>		
		<i>Facing</i>		
		<i>Applique</i>		
	Cuff/slve. hem	<i>Band</i>		
		<i>Lapped</i>		
		<i>Ruffled</i>		
		<i>pleated</i>		
	Cuff/slve. hem surface embellishment	<i>Bows</i>		
		<i>Buttons</i>		
		<i>Embroidery</i>		
		<i>Facing/ applique</i>		
	Sleeve length	<i>1-5</i>		
	Sleeve width	<i>Shoulder</i>		
	(1-5)	<i>Elbow</i>		
		<i>Forearm</i>		
		<i>Wrist</i>		

Ref.No. _____			
<b>Accessory type</b>	<b>Category</b>		Description
	Shoes		
	Boots		
	Headwear		
	Neckline additions	<i>Bow</i>	
		<i>Cravat</i>	
		<i>Ornament</i> <i>/pin</i>	
		<i>Slip-knot tie</i>	
	Belt		
	Gloves		
	Corset evidence		

**Table 2: Dress Component Coding**

AESTHETICS

ANGULARITY -----ROUNDNESS

1	2	3	4	5
Straight blouse, ie) no waist definition		Shaped blouse	Semi-fitted bodice	fitted bodice, fitted sleeves, sloped shoulders
Straight jacket, ie) no waist definition		Fitted jacket, leg of mutton sleeves		
Trouser	Straight skirt	A-lined skirt	Full skirt	Full skirt, with protrusions

SIMPLICITY -----COMPLEXITY

1	2	3	4	5
Plain shirt	Plain shirt, leg of mutton sleeves	Shirtwaist or bodice with minimal structural embellishment eg. pleated shirtwaist	Shirtwaist or bodice with various types of structural embellishment or minimal surface embellishment eg. lace blouse	Ornate dress bodice, surface and structural embellishment
Plain jacket	Plain jacket with leg of mutton sleeves	Fitted jacket with minimal structural embellishment eg. pleating	Fitted jacket with various types of structural embellishment or minimal surface embellishment eg. lace blouse	
A-line skirt	Bloomers	Skirt-minimal structural embellishment	Skirt-various types of structural embellishment or minimal surface embellishment	Highly decorative skirt, surface and structural embellishment

**Table 3: Dress Characteristic Coding: Semantic Differential Scale Values**

ORDINAL MEASURES

LOWER GARMENT LENGTH

- 1 knee
- 2 mid-calf
- 3 ankle
- 4 top of shoe
- 5 full length

SLEEVE LENGTH

- 1 top-arm
- 2 midway top-arm and elbow
- 3 elbow
- 4 3/4
- 5 wrist

SLEEVE WIDTH

- 1 tight fit
- 2 easy fit
- 3 moderate fit
- 4 full fit
- 5 very full fit

FABRIC AESTHETICS

WEIGHT value, light-----heavy

- 1 eg. muslin
- 2 eg. cotton, satin, silk
- 3 eg. light wool
- 4 eg. medium wool
- 5 eg. heavy wool

HUE value , light-----dark

- 1 white
- 2 light grey
- 3 grey
- 4 dark grey
- 5 black

## Chapter 4

### Dress in Context

The following sections provide a description of day-dress worn by New Zealand women. These descriptions are presented chronologically, highlighting the periods, 1880-1890, 1890-1900 and 1900-1912. It was considered important to provide this chapter to precede the discussion of dress worn for sports. The literature review revealed that detailed photographic description of historical dress has not been addressed in New Zealand previously. It was thought that these descriptions were necessary to allow comparative analysis from the same archival source as the analysis of dress for sport. The qualitative dress analysis was made from selected photographs which displayed most clearly the characteristic details of fashionable dress worn by New Zealand women. Most of these images are sourced from the Tyree Collection in the Nelson Provincial Museum. It needs to be noted that Tyree's photographs evoke the biases of formal studio portraiture. However, when this is taken into consideration, they still provide interesting images of how these women wished to appear. To precede the dress descriptions it was considered important to provide contextual information to allow a more meaningful interpretation of the dress components and characteristics found.

#### 4.1 Dress in Context: Forming an Individual and Social Identity

In the nineteenth century, dress played a significant role in maintaining an individual and social identity. Many writers have made reference to the inhibiting Victorian conventions of dress for women (Roberts, 1977; Steele, 1985). Strict codes of behaviour and appearance were maintained to uphold social propriety and acceptance. Feminine aesthetics of the period reinforced the decorative, restrained and inactive role assigned to women.

The notion of complete Victorian conformity to a strict set of rules is oversimplified but did form the basis for many of the perceptions in nineteenth century Britain and its colonial settlements such as New Zealand. There were a number of ethnic groups who immigrated to New Zealand but British settlers composed the majority. It was primarily a working settler society attracting those who aspired to social and economic advancement

(Graham, 1992). In New Zealand colonial society, the public display of women's dress appeared equally important to withhold these seemingly rigid perceptions of social identity within an unfamiliar and challenging environment.

Dress and appearances were clearly seen as important to establish an identity in a developing society which allowed movement in social circumstance and subsequent position. Belich (1996) identified about five classes in late nineteenth century New Zealand: genteel, decent upper and lower classes and at least three levels of middle class respectability. Class distinction was a fundamental part of Victorian social attitude. To a certain degree, these values were fought against in a new society, hoping to develop an egalitarian society and denounce old values. The distinctions of birth, education, income and occupation were acknowledged but there was little subservience due to circumstantial necessity. Classes mixed, especially in early years in order to have any social activity. A degree of levelling of class divisions was evident in dress. Colonial changes in women's dress started at the lower end of the social scale (Ebbett, 1977). Women were not as restricted in their clothing choices as set by class codes in Britain.

However ideals and values were maintained to different degrees depending on the settlers' position in society. There were many accounts of social occasions including balls, dinner parties, garden parties, and 'At Homes' hosted by the elite which followed the etiquette of high society (Nicholls, 1990). The maintenance of these values was relished by those who wished to have a visible presence in society (J. Graham, 1992). Contemporary written accounts indicate that values were held high, seen as being an important tool for maintaining status or advancement and were aided by associated codes of appearance. Emily Cumming Harris, who could be described as a member of Nelson 'society' but of poor monetary circumstances, noted she had been to "two At Homes...Met plenty of fashionable people there but felt at ease ...as our own home dresses were *comme il faut*" (Cumming Harris cited in Porter & MacDonald, 1996, p. 180). The sense of self and family status was closely tied to appearances resulting in much consideration to maintain a social front. A later entry by Emily Cumming Harris on being invited to an 'At Home' of Lady Onslow, wife of the Governor writes "...we decided that I should go to represent the family as I had the most decent looking dress and bonnet..." (Cumming Harris cited in Porter & MacDonald, 1996, p. 181).

There is much evidence to conclude that women dressed for social occasions and followed all codes of etiquette. Special attention to appropriate appearance was necessary

for different occasions. The attention given to dress signified the desire to conform and exhibit signs of propriety as appropriate for respectable middle class women. Newspapers recorded fashions seen at social occasions as weddings, balls, dinners, parties and picnics. Identification of those women who were highly fashionable and non-fashionable was made in newspaper reports, drawing attention to the importance of appearance for public display (Malthus, 1996). Ladies pages of newspapers and magazines, such as the *New Zealand Graphic* and *The Weekly News*, outlined details of components and styles worn by the most fashionable overseas. There is also evidence of women's letters to and from Britain which query details of dress changes, (Barker, 1984; Porter & MacDonald, 1996). Consequently, women of greater wealth could display frequent changes in styles coming from Europe. Ready-made garments were available from early settlement, either imported or later factory-made here. However the construction of dresses in the 1870s and 1880s being elaborately decorated and fashionably fitted, demanded that most outerwear to be made by a dressmaker or at home (Malthus, 1996). Those women with less financial means adapted dresses and separates to keep up with fashionable appearance. A number of dresses in museums show that they have been mended and altered with alternative structural elements, trims and fabric additions. Malthus (1996) found in her study of artifactual dress that the dresses followed fashionable European styles in fabric, design and construction detailing despite the impracticality for the conditions of a developing colony. Generally, it appeared equally important for most New Zealand women to display the expected feminine aesthetics of the period.

Photographic evidence from this research shows that women went to great effort to display their highly elaborate dresses and accessories for the formality of social occasions and studio photographs. The clothing of middle class women presented their status and femininity, lavish with material and trimmings as seen in the formal dress from the 1880s and 1890s. All facets of dress respond to the inhibiting gender defining codes of Victorian dress previously documented.

#### **4.11 Defining Fashionable Femininity- 1880s**

Photographic analysis of fashionable dress worn by New Zealand women showed a strong correlation to British and American photographic references. The confining narrow silhouette was typical of fashionable dress from mid 1870s to 1882. The cuirass bodice, suitably named after a breast armour plate (Setnik, 2000), fitted the waist, hips and thighs. Blum (1974) refers to the fashion silhouette of hard rigid curves. The shapely curves could only be derived from the extended tight laced corsetry commonly worn in the period. The bodices were plain or more commonly exhibited structural embellishments of vertical or horizontal pleating or shirring on inserted V-inserts or plastrons. Decorative embellishments as black lace trim completed the aesthetic of delicacy and ornamentation. The neckline is characteristically high to support the stiffened high stand collar. The body concealing characteristics contributed to Victorian sensibilities of modesty and decorum.

The skirt was pulled around to the back with an elaborate code of folds cascading from a lower level to an extended full-length train. The narrow skirt was controlled by internal tapes, binding the lower legs, aimed at restricting movement in order to retain the straight skirt silhouette.



Figure 1: Miss O'Donnell, circa 1880  
Photographer: Tyree, Nelson Provincial Museum

Miss O'Donnell, of Nelson, shown in this formal studio photograph, wears a polonaise, most favoured by women during this period. This polonaise shows a highly fitted bodice extended to its characteristic overskirt extending to three quarters of the lower skirt length. The fitted nature of torso to hip is restrained by the elongated corsetry. Fashionable shirring is also incorporated in the neckline and sleeves giving the appearance of a vest bodice with narrowed shoulders. A white frill sitting under the chin fills the characteristically high neckline.

The overskirts often show a variety of draped configurations and decorative trim as evident here with satin hem border and interlaced cording at centre front. The drapery extends around to the back falling from the hip to knee level as an integral part of the polonaise. The underskirt adds to the decorative emphasis on the skirt with shirring and a double flounce at the hemline.

The formality of the outfit is made obviously apparent by the fabrics, most likely a wool blend, manipulated with a high degree of surface embellishment and the addition of accessories dictated by fashionable etiquette. Miss O'Donnell wears her best jewellery for the portrait, drop earrings, large silver brooch, pendant and chain watch. Her highly decorated hat with fabric flowers and ribbons sits propped above the parasol, while Miss O'Donnell holds the customary gloves. Other photographs show the popular princess-line dresses reinforcing the elongated, restrained silhouette of this period.

After 1882 the silhouette changed (Setnik, 2000). A curvaceous shape was reinstated with the wider skirt providing fuller hips at the sides and the bosom raised high again determined by an alteration of corsetry cut and tighter lacing (Setnik, 2000). The changes in design detailing included a shorter bodice basque, usually extending a few inches below the waist. The bodices were mostly plain, devoid of ornamentation apart from the buttoned front. Some chemisettes were fitted into V-shaped necklines with vertical pleating and lace insertions. Tight fitting three-quarter sleeves supplemented the small, round shaped shoulder-lines and fitted bodices.

Underskirts and overskirts show loose vertical folds created by gathers or a variation and mixture of pleat types. Restraint was still employed by ties controlling the skirt to the body but in a looser nature than seen in the early 1880s (Setnik, 2000). The increased hem diameter would allow easier movement if it was not for the increased weight and structure of the larger bustles which protruded from the back waist. The fashionable body was sharply confined through the rib-cage and released just below the natural waistline into a horizontal bustle at the back. The back bustle reached its climax in size around 1886. By 1889, the back bustle receded in accordance with overseas fashions (Setnik, 2000).



Figure 2: Johnston sisters, circa 1884  
Photographer: Tyree, Nelson Provincial Museum

The silhouette and design elements are shown in this studio photograph by Tyree. The Johnson sisters of Nelson, in formal daywear, wear separate bodice, underskirt and overskirt. The wearing of the corset and consequent fitting torso was a necessary fashion item. Photographs show strain wrinkles across the front bodice and the tight-fitting sleeves. Bodices were cut, extending just below the waistline at the side-seams into rounded centre-fronts. This feature along with the shaping of the applied decorative trims to the centre front bodice, of velvet and ribbon, accentuates the small corseted waist.

Skirts have a wider appearance. The sister's skirt on the left, with its horizontal hip drape and soft vertical inverted pleats exaggerate the curvaceous hip. The skirts' back drapery contributes to the heavier weight of underskirt and overskirt with pleats and ruffles, being worn over bustles, pads, and petticoats. The weight of these structural features and heavier weight fabric preferred for construction during this period restricted the capacity for movement.



Figure 3: Miss Jenkins, circa 1886  
Photographer: Tyree, Nelson Provincial Museum

The formal studio photograph of Miss Jenkins from Nelson set in front of a very English styled back-ground, could be dated circa 1886. The walking dress shows the back bustle at its climax with great folds of fabric drapery protruding horizontally from the back waist. Many improvisations were made by women to follow the fashionable trend. A contemporary comment by a young woman relays an incident.

My sister found something lying in the hall. It looked like a bundle of old clothes tied together. She took it into mother and one of the ladies jumped up and snatched it off her and tucked it up the back of her skirt (Ebbett, 1977, p. 26).

For others ingenuity of greater technical standing was devised. Local patenting of two forms of steel bustle are recorded, one combined a fold-up stool with the bustle to allow a more comfortable sitting arrangement (Malthus, 1989). The headwear during this period should also be noted as being as decorative as the other components of dress. Flowers, feathers, ribbons and even birds contributed to the embellishment of these extravagant hats. The formality of the hat, leather gloves and parasol complete the decorum of the walking outfit.

#### **4.12 Defining Fashionable Femininity- 1890s**

In the 1890s, fashionable dress displayed the same associated symbols of elaborate decoration with only the positioning of structural and surface embellishment on garments altered. Dress bodices became the focal point for a variation of decorative and structural features. Off-centre, diagonal or side fastenings allowed trims to be concentrated on the upper-bust at centre front, narrowing to the exaggerated waist. Bodices featured plastrons showing a variety of structural features: vertical pleats, tucks, rouching, draped effects sometimes edged with piping, contrast banding or applied revers (Setnik, 2000). The plastron or chemisette introduced other decorative elements with use of other fabrics as lace, chiffon or silk. By the mid-decade some bodices displayed structural elements of yokes and added fullness in the form of central pleats, and gathers from the neckline. There was a continued presence of high standing collars or more decorative forms with horizontal pleats finished with a large bow or sometimes vertical fans of lace. The alternative was a small turn-down collar. The fashionable bar-pin secured the respectability of the neckline.



Figure 4: Miller Sisters, circa 1892

Photographer: Tyree, Nelson Provincial Museum

The photograph dated in the early 1890s show some of the variations of bodice structural embellishments as described as fashionable for the period. The Miller sister on the left displays the popular plastron of contrast fabric, most likely silk, which matches the waist trim, skirt trim and sleeves. The photograph highlights the use of fabrics to introduce decorative textual changes to the outfits. The decorative use of buttons was a feature more fashionably seen in the late 1880s in American photographic analysis (Setnik 2000). The highly darted and boned bodices are indicative of the restraint imposed by the fit of upper garments. The central sister's dark figure against the studio set highlights the heavily corseted torso and waist worn by the three women. The extension of the bodice below the natural waist at the side-seams and deeper shaping at the centre front exaggerates this feature.

A characteristic feature useful for dating purposes through the 1890s became the sleeve crown shape and size. At the turn of the century, sleeves were narrow fitting with a characteristic raised crown that narrowed the shoulder with an inverted peak. Tyree's studio photograph of the Miller sisters shows the sleeve shape fashionable in the early 1890s. The sister on the right, wearing the asymmetrical fastening bodice, displays the slim, peaked sleeve-head. The inward angle is sometimes held by using pads attached to the sleeve lining. The sleeves typically finish short of the wrist. The other dresses show similar sleeve silhouettes but the raised shoulders are derived by gathered attachments. A variation of sleeve types pervaded the early 1890s, including bishop sleeves, with added fullness at crown and hem or fullness extending to elbow with fitted lower arm.



Figure 5: William sisters



Figure 6: Green family

Photographer: Tyree, Nelson Provincial Museum, circa 1894

In the mid-decade, the sleeves grew to display large leg of mutton sleeves. These sleeves contrasted significantly to the highly fitted sleeves of the previous decade and early 1890s. However these outward impressions of increased comfort were deceiving. Even though there was ample fullness provided by the tucks or gathers of the sleeve crown, and reinforcing aids, the sleeve usually had a stiff inner lining fitting tightly around the upper arm. Despite the fitting interlinings, the leg of mutton sleeves gave a broad, stronger appearance to the wearers with the increased shoulder width. This characteristic was one conventionally associated with a masculine attribute. However, additional structural and decorative embellishments softened the fashionable silhouette. Sometimes, bretelles added structural width and decorative trim to the shoulders. These were often accompanied with large collars. Another surface embellishment providing delicate textural additions to the neckline and shoulder area is the separate lace collarette seen in a variety of shapes. The photographs above indicate dating of mid 1990s with their characteristic full sleeves. The sleeve puff is extended out from the upper arm and fullness finishes at elbow to fit the forearm. The leg of mutton sleeves of the women in the Green family photograph show the collapsed nature of these large sleeves.



Figure 7: Miss Jones, circa 1898  
Photographer: Tyree, Nelson Provincial Museum

In the latter 1890s, the exaggeration of shapes seen in earlier decades became more moderate. The sleeves deflated to a smaller puff which sat higher on the arm. Emphasis was placed on the shoulders with decoration from a greater variation of brettelles and shoulder trims, as seen in the photograph. The upper arm was often covered with large epaulettes in an assortment of shapes being square, round, pointed or ruffled. Some dresses showed sleeves with very straight and narrow fitting sleeves apart from a slightly raised crown. Sleeve hems were commonly decorated with a ruffle or lace or shaped cuffs.

Dress bodices retained the decorative focus with even greater use of structural and surface embellishment. Pleats and gathers became more commonly seen in photographs in this latter part of the decade. Many showed contrast panels or insertions attached to inner linings. Most bodices ended at the waist; however there were some that extended to the hip with a basque. The same stiff, high necked stand collars retained popularity. The boning and high cut of the collars could restrict head movement (Setnik, 2000). Detachable collars served a practical and decorative purpose to add decoration to plainer style bodices or refresh slightly dated dresses.

The hourglass figure is completed with the A-line skirt. In contrast to the dress bodices displaying a number of structural and surface embellishments, the skirts displayed little ornamentation. Overskirts no longer featured as in earlier decades. The only

decorative features were usually placed at the hem in the form of ruffles or pleats or contrast fabric. The skirt construction of the dress was comparatively simple. The cut of the skirts allowed an A-lined shape with flared panels. Darts at the front provided a fitted shape at the waist and hips. Pleats or gathers gave added fullness at the centre-back. Some skirts had modified pads to provide more fullness under gathered or pleated folds (Setnik 2000). The larger undulating vertical folds visible in the photographs of the skirts in this period indicated a wider hemline and consequent increased facility for movement. Yet interior construction analysis revealed the use of horizontal elastic or tape to control the fall of these folds (Setnik 2000). The skirts lengths varied from full-length to brushing the toe of the shoe or boot.

#### **4.13 Moderating Appearances for Utility**

It was a condition of settler society that the role of wife and mother involved a much wider range of functions and duties than in Britain. Many women did not have the time or energy to devote to their own appearances due to laborious workloads as recorded in many contemporary diary entries (Porter & MacDonald, 1996). Colonial domesticity of maintaining the household usually without servant help, as lamented by many women unaccustomed to this, involved endless hours of cooking, washing, sewing, mending, starching, ironing, child rearing and often farm work and other jobs to supplement the family economy. Women at all levels of society and circumstances worked, whether it was in the home, or extended to work outside of the home often due to financial necessity. Dressmaking or sewing was a common and useful skill depending on personal circumstances for women, to supplement income alongside daily domestic duties in their own home or at clients' homes (Malthus, 1991). The recession of the 1880s brought significant hardship to some (J. Graham, 1992).

While there is evidence that fashions were avidly adhered to, Victorian values of middle class ethics of respectability and modesty did not allow a too fashionable and conspicuous appearance. Even though Malthus (1996) concluded that most women went to great efforts to maintain fashionable styles, she also noted the variations as time progressed to the degree to which women adhered to fashions, as indicative across any sector of society.

The extent to which women in New Zealand followed or kept up with fashion trends is hard to discover...there was a range from those who tried to follow the detailed changes reported in journals or magazines sent from England, or reprinted in the local press, through to those for whom women's fashion was irrelevant and an unnecessary frivolity (Malthus, 1992, p. 93).

Charlotte Godley noted that colonists wore what they had on hand as long as they ensured the etiquette of the occasion (H. Simpson, 1962). There would have been women who did not have the expendable time, affluence or interest to partake in the latest fashions.

The previous images are those taken in formalised studio settings. These are photographs in which the wearers have exhibited their best garments and accessories for the photographer and family's keeping. It is easy to forget the hardship of these women's lives until the alternative visual context is revealed.



Figure 8: Family in rural setting  
Alexander Turnbull Library



Figure 9 Women at home  
Alexander Turnbull Library

Photographs of women working at home show simpler garments devoid of the excessive ornamentation seen in posed portraiture. Fabrics appear to be light-weight wools or cottons, more suited to hard wearing demands of a working environment. The components of dress are the same but with less structural or surface embellishment evident. The silhouette still correlates to the fitted waist seen in more formal attire, indicating the same adherence to corsetry, despite the physical demands of work.

Severa (1995) noted the evidence of North American women wearing simpler dresses in many photographs of women at home in the 1880s. Housedresses were

described as one-piece cotton dresses with the bodice fullness gathered into a waistband and attached to a gathered skirt. These dresses were made with narrow bishop sleeves and often featured plain neck bands or yokes, sometimes with a frill embellishment. Dark woollen wash dresses were described as plainer with simple fitted bodice and sleeves, round waist and a shortened gathered skirt (Severa, 1995).

Malthus (1996) noted the lack of boning in a small number of dresses analysed from 1878 to 1880s. Malthus questioned whether New Zealand women were following the European fashion of the more relaxed nature of tea gowns without adopting the fully developed design. The British tea gown was an alternative style worn at home which provided fullness falling from the shoulder and was usually worn with no corsetry (Tortora & Eubank, 1994). The New Zealand dresses did not show the same construction cut but lack of boning would have provided more comfort. There was no photographic evidence found to suggest the alleviation of corsetry from New Zealand women's dress.

## 4.2 Dress in Context: Assertions of Social Changes

In the late nineteenth century New Zealand women increasingly asserted rights to changing opportunities. This was instigated by progressive changes in social, economic, and political circumstance. Women's greater participation in the public arena claimed a reassessment of social identity.

Extended education and employment opportunities modified women's lives. New Zealand women were highly educated in world terms. By 1893, more than half of New Zealand's university students were women (Malthus, 1989). Higher education extended the possibilities for career prospects and greater economic independence. For many women financial circumstances necessitated employment. The 1891 census revealed over 45,000 women were wage earners (Malthus, 1989). In the earlier period, domestic services were the main form of employment for women (Olssen, 1980). However opportunities for work extended beyond the familiar sphere of household duties (Coney, 1993; Olssen, 1980). Increasingly manufacturing and other well established industries employed many women, the majority being in the clothing and textile industry. In the latter period women began to take employment in the service sector. In addition there were rare enterprising accounts of women running their own businesses and employing others (Coney, 1993; Porter & MacDonald, 1996).

Increased opportunities reinforced the greater separation of home and workplace for women. This departure did not fit with the dominant ideology of the conventional woman institutionalised within the family. In the public view, the woman's extended role at work was always secondary to her familial role which neatly defined the separate gender spheres (Vertinsky, 1987). Olssen(1980) claimed the majority of women accepted their work experience as a short interval before marriage. Internalised notions of ideal womanhood within the defined sphere of supportive wife and mother prevailed. However the experience of increased social and economic freedom gave some women a degree of personal fulfilment beyond the confines of domestic role.

New Zealand's rapid growth in urbanisation had an important impact on women's circumstances. By 1890s over half of the population lived in towns of over 10,000 people (Graham 1992). Olssen (1980) highlighted an altered sex ratio balance, which favoured women aged between fifteen and thirty-five, in the main towns after the 1880s. The growth in urban living and development of transport infrastructures allowed an increased

number of women with greater accessibility to a widened public space (C. Simpson, 1998). Greater public participation in a number of work and leisure environments imposed moral and safety issues. Etiquette was imposed on women as to where and when they frequented public places (H. Simpson, 1962). Consequently an urban environment demanded women maintain etiquette of appearance and behaviour in accordance with a more public identity.

The emergence of the 'New Woman' was treated with disdain or excitement depending on the view held, as the 'New Woman' did not fit the traditional ideas of physical and social submission. Popular theories of the late nineteenth century, social Darwinism, and biological reductionism were used to defend the separate gender spheres and inequalities within them (J. Hargreaves, 1994). However, New Zealand women were fully aware of their part in a world wide movement of women and the progressive ideas of their age, advocating egalitarianism and democracy. Ideas of equality were more conducive in New Zealand society where women had earned great respect for their contribution to a wider sphere of community-based activities in the early settler period. The size of New Zealand allowed a cohesive contingency of women involved in many of the same suffrage organisations. New Zealand led the world in its suffrage campaign to gain the vote with well orchestrated political alliance and strong organisational support.

This period was a time of significant change for women, yet elements of traditional values remained evident in suffragist arguments. Early New Zealand feminists and activists argued from a position based on family morals. Victorian ideas of women's roles as wife, mother, homemaker and guardian of society's morals were associated and used to advocate the suffrage movement and vote for New Zealand women. Women suffragettes and politicians agreed that women's votes could provide a purifying of politics with a greater affinity to social problems. From this perspective, the vote was seen as an extension of the traditional role of wife and mother.

The contradictory nature of these social debates is displayed in the increased variance shown in women's dress from the 1890s onwards. Photographs show a mix of elaborately 'feminine' dress and a simpler style dress incorporating elements of men's styling in nature of components and characteristics. Dress became a useful tool to advocate emerging trends within a changing social context. Detailed analysis of dress showed a continued correlation to British and American photographic references.

#### 4. 21 Signs of Alternative Dress: The 'New Woman'

Alongside the elements of elaborate fashionable dress, a simpler mode of dress emerged in the 1890s. The simpler style incorporated garments with less structural and surface embellishment and more angular design aesthetics. These dress characteristics are strongly associated with the aesthetics of the 'new woman'. The 'new woman' is cited by Crane(1999) as wearing an alternative dress, which was borrowed from the men's attire, being a men's shirt styling, tie, tailored jacket, waistcoat, and men's style hats. These were worn in different combinations. However it must be noted that there were always elements of traditional dress or accessories that soften or 'feminise' the outfit.



Figure 10: The 'new woman', circa 1895  
Photographer: Tyree, Nelson Provincial Museum

The introduction of alternative elements of dress can be viewed as a visual expression of social change or an indication of women's desire to change. The combination of shirtwaist or blouse and skirt or tailored jacket, was seen to be worn for an increasing number of occasions. Again New Zealand women followed the fashionable lead of Britain and America. The Gibson Girl blouse symbolised the emancipated young woman (Laver, 2004). In the early 1890s the separate shirtwaist was occasionally seen as street wear but from the mid 1890s on there was much greater popularity. They were noted as being

affordable and stylish for working women. The simpler construction allowed the increased availability of ready-mades at reasonable prices or the facility to be made at home. The shirtwaist followed the styling of dress bodices, including variations of "masculine" shirt styles (Severa, 1995). The main structural components derived from men's shirts consisted of a turndown collar, buttoned centre front and buttoned sleeve cuff. Most shirts and blouses were white but as the decade progressed the fabrics varied. The fabric and additional structural and decorative features introduced more feminine aspects to the garment. The shirtwaist was seen tidily tucked into the skirt with a belt.



Figure 11: Miss Sutherland  
Photographer: Tyree, Nelson Provincial Museum

In addition to the shirtwaist, the tailored suit became more prevalent especially for the working woman. Severa (1985) refers to the term "man-tailored" suits in reference to the details associated with men's construction techniques. The tailored suit was derived from earlier English fashions, following the traditions of men's tailoring techniques. The suits are made of heavier weight fabrics, primarily wools. Structural details are commonly seen in men's garments as notched collars, set-in sleeve with tailored vent openings. Initially tailoring was carried out only by men but mechanisation imposed changes. The demand for tailor-mades and simpler styles allowed dressmakers in workrooms to adopt

industrial techniques and produce ready to wear garments (Malthus, 1996). Waistcoats were another item seen earlier mid-century but revived in the 1880s and 1890s in conjunction with the suit.

The tie was a frequently worn item of dress with the shirtwaist. Writers often make reference to the symbolic significance of the tie in men's attire. When discussed in relation to women, the tie is often associated with an alternative lifestyle and signifying an independence from conventional behaviour. Ginsburg (1988) claims "the very high, stiff, stud-fastened collar and plain tie served by a small pearl pin are uncompromising assertions of a claim to sex equality and mark an assault on masculine privilege" (cited in Crane, 1999, p. 245). There are earlier examples of women wearing ties but a more common occurrence is seen in photographs in the 1890s.

Crane (1999) also refers to the wearing of the men's style hat as a symbol of adopted masculine identity by women during this period. Photographs show the predominance of the boater style hat being worn with the outfits previously discussed. A number of the hats were simple with no embellishment other than a plain ribbon band. This contrasted sharply with fashionably ornate hats of the period with ribbons, flowers, bows and feathers adorning brim and crown. Others utilised the hat to feminise the outfit as seen in the photograph of Miss Sutherland in her feathered trilby style hat.

Photographs showed varied combinations of these garments and accessories. Byrde (1992) differentiates the strength of statement in reference to the combinations worn. The simpler, less decorous shirtwaist, plain skirt, slip-knot tie and plain boater denote a stronger appearance. Photographic analysis showed variations to the degree of structural and surface embellishment shown on shirtwaists and blouses. Accessories ranged from bows, cravats and floral embellishments to the more angular aesthetics of the plain slip knot tie and boater. Crane (1999) noted the growing acceptance of this simpler aesthetic which borrowed items from the men's wardrobe. This choice of appearance made by primarily younger working women was symbolic of the greater degree of freedom they were experiencing in the wider public arena. During a social period when gender delineations were being questioned, the combination of feminine and masculine symbols in dress could be seen as portraying the extension of traditional roles of feminine experience.

Crane (1999) did not classify trousers as part of alternative dress style due to trousers being a too greater symbolic challenge for middle class women to take. During

this period trousers signified a strong rejection of social conventions as witnessed by advocates of rationale dress. Not only did bifurcated garments reject existing patterns of gender specific delineations but also moral ideology. Nineteenth century society associated trousers with lower class women and prostitution (Smith & Grieg, 2003). This was not an identity which middle class respectable women could risk obtaining.

#### **4.22 Rational Dress: a Radical Plea**

An overt plea for significant changes in the restrictive nature of conventional fashionable dress came from the late nineteenth century dress reformers. Malthus (1989) has outlined the existence and arguments proposed by the New Zealand dress reform movement. She notes that the Rational Dress Association argued that women's dress should forsake the following of fashion, to be comfortable, and beneficial to women's health. Ideas advocated the replacement of tight-laced corsets and multiple petticoats with vests and drawers or combinations, and divided skirts or knickerbockers. The New Zealand Rational Dress Association was formed in 1894. An earlier proponent, Madame Elise, writer for the *New Zealand Mail*, advertised patterns for the 'new divided skirt' in 1884 and wrote of Lady Haberton's rational dress society in Britain (*New Zealand Mail*, 8 August, 1884). New Zealand dress reformers were very aware of the concerns and strategies being expressed by fellow advocates in Europe and America as published in local publications. Much debate was offered in many local newspapers and feminist publications, with focus on the tragic health implications of corsetry and tight-lacing.

Arguments outlined the relationship of dress to women's broader cultural development as well as health considerations. Kate Walker and James Wilkinson (1893) published a pamphlet on the subject of dress reform.

We hold that the frequent and regular use of the knicker costume will enable women, while retaining their loveableness to become the real companions of men in the higher walks of skill and knowledge [and] the increased activity of life that springs at once from the Higher dress reform will enable women to maintain, in various directions, higher degrees of excellence, profitable to themselves and greatly benefiting the morality of the nation (Walker, 1893, p. 20, p.16).

Their thinking and strategic delivery of argument utilised the same tactic as political groups using elements of traditional ideologies of women's social role while advocating progressive ideas. Reformists appealed to growing desires and associated health and beauty benefits of women's participation in physical exercise. As Walker declares in 1893 "So far as our experience and information can testify, women feel a delightful freedom, a immediate desire for active muscular exercise upon putting on the knicker costume" (Walker & Wilkinson, 1893, p.17). Many other contemporary comments link reform dress with the practicality of recreation and sport and these will be highlighted later with relevance to particular sports.

Dress reform precipitated much public debate (Malthus, 1989). Common reprisals concerned the negation of contemporary aesthetics of femininity. Walker and Wilkinson (1893) were aware of this in their pamphlet with compromised references to the 'prettiness' of Mrs Burns reform dress designs while advertising the availability of patterns and photos from her and others (Walker & Wilkinson, 1893). They advocated successive stages of dress reform to allow a progressive conversion; firstly to abandon the stays or tight compression, to move to divided under-things, then a short skirt, then baggy knickers in Turkish style, or divided skirt, a long tunic and knickers and finally a fitting knicker suit for work and exercise. A comment after their list indicates a tentative outcome to their projections, "We find that people arrive at some one of these stages and that they are very apt to put down the further stages as unwomanly, unsexing, immodest"(Walker & Wilkinson, 1893, p. 23).

The adoption of radical reform dress became associated with very vocal and visible dress reformers. The wearing of knickerbockers received so much ridicule that few women wanted to receive the public attention. Malthus (1989, p.44) attributed this to the " popular hostility to the 'new woman' , who was perceived as being a rational dresser, thus turning her back on femininity made it impossible for many women to be 'bifurcated and not ashamed' ". There are no known records from the Rational Dress Association. It is assumed the association did not last long due to the public denial of its assertions (Malthus, 1989).

There is little material or photographic evidence to indicate it was taken seriously by many New Zealand women. The formation of the Rational Dress Society came during a period when other civil rights for women, as signs of social emancipation, were

acknowledged and constituted. Yet the subsequent freedom with acceptance of full rational dress was socially rejected by most.



Figure 12: Kate Walker and James Wilkinson's wedding party, 1894  
Auckland Public Library

The much published photograph shows the rare photographic account of reform dress worn by Kate Walker and James Wilkinson's wedding party in 1894. The whole wedding party wore rational dress. To quote the newspaper report which described the dress with references to the alternative nature of the wedding attire:

the enterprising bride... was divided into two parts, as it were, the upper part of dress consisting of conventional bride's veil, and the lower sinking into a modified pair of breeches. Her costume was of stone blue bengaline, with vest and revers of white silk, embroidered with gold. She wore a beautiful wreath of jessamine / instead of the time honoured traditional orange-blossom, and although gloves were discarded, a lovely veil was worn- not, however, over the face, but thrown back, and falling in long graceful folds over the shoulders. The bridesmaid wore a suit of cream silk, with a lace collar. The lady in whose house the wedding took place (Mrs Alice Burn) wore a brown cashmere suit, trimmed with handsome braid. The suits were nearly all of the same design, neatly fitting knickers, long

coat, with revers, and a long vest, the coat being edged with cord to match the material. Most of the gentlemen were in knicker costume (The Sketch, 1894, cited in Malthus, 1989, p. 32)

Further visuals are shown in an article of the New Zealand Graphic of Mrs Burn wearing a variety of suits in tweed and velvet. Mrs Burns was renowned for her overt public display of rational dress and strong claims that skirts were "symbols of enslavement... the swaddling clothes of a sex that has not yet asserted its right of freedom" (New Zealand Graphic, 15 July, 1893, p. 663).

Traditional ideas of social and moral etiquette and aesthetic fashion taste outweighed the developments expressed in new assertions. Despite numerous warnings by medical experts, reformists and feminists, the majority of women continued to wear corsets until several decades later in the twentieth century. The confinement of the waist and exaggeration of the bust and hips appealed to contemporary perceptions of fashionable femininity, despite the subsequent hazard to health and proposed cultural fulfilment.

#### **4.23 A New Century with Combined Aesthetics**

The turn of the century reflected the developed industrial technology, economic and consequent social changes. Wider production and consumption sources and increased dissemination of fashion news allowed greater democratisation of dress in an early twentieth century context. By 1900, a lot of factory produced garments replaced smaller workshop production (Malthus, 1996). This impacted on the number of affordable ready to wear garments being sold in dress and department stores. However at the same time, increased availability and dissemination of sewing machines, paper patterns and dressmaking information allowed women to make much of their own outerwear and underwear (Malthus, 1992).



Figure 13: Family and Friends, circa 1905  
Alexander Turnbull Library

The group photograph in the outdoor setting illustrates the variation of components worn for day dress in the early 1900s. The characteristics of decorative feminine dress flourished as seen worn by the seated woman on the right. Even more lace, braiding, passementerie was added for ornamentation (Setnik, 2000). Lighter fabrics became popular in crepe de chine, chiffon, tulle and satin, sometimes embroidered in floral patterns or ribbon work (Laver, 2004). The extra layers of lace or fabric formed shoulder caps or over-sleeves. The delicate embellishments and light pastel shades reinforced the soft and delicate aesthetics of perceived femininity. Increased number of photographs showed bodices with gathers or pleats at the centre front which bloused out over the waist. This slightly lowered waist shaping created the characteristic S-shaped silhouette at the turn of the century. Illustrated fashion advertisements showed stiff figures with a constrained silhouette with the bust thrust forward and hips back. A live portrayal of this fashionable stance was more difficult to maintain unless in a posed studio photographic portrait. Corset manufacturers did their best to aid the silhouette, as illustrated in advertisements.

“Zita” Dip Front Adjuster...gives that charming dip-front or long waist effect now so essential to well-dressed woman ...The wearer will be surprised at the

extraordinary difference lengthening the front of the waist makes to the figure...It makes your waist look smaller (Auckland Weekly News, 22 January, 1903, p. 50).

Skirts were cut differently from earlier in the decade. A tulip shaped skirt was derived from an increased number of gores providing an increased hem circumference with flare from the hips or knee. Fullness was still retained at the centre back of the skirts with gathers or tucks. Formal fashionable dress demanded great quantities of jewellery, bracelets, brooches, rings, and high rows of pearls. Proper etiquette demanded accessorising with gloves and hats. Large silk or straw hats with expansive brims were decorated with ostrich feathers, ribbons, lace, bows, flowers and sometimes birds.

Most photographic evidence shows women wearing a blouse and skirt combination. Blouses could retain many of the same structural and surface embellishments seen in dress bodices. The blouses showed elaborate pin tucking and insertion techniques often integrating lace. These features were often seen on sleeves and collars as well. Figure 13 shows the fashionable cascades of lace falling from the neckline of the women's blouses. Other structural components are similar to the dresses with long sleeves and high necklines finished with stiff boned stand collars. The blouses are tucked into the skirt waist showing the tight corsetry underneath. The women wear the boater style hat with varied degrees and forms of embellishment.

Some women, as those seen in the photograph on the left side, chose to wear less decorative garments and accessories. These dress components characterised the elements of alternative dress. A plain blouse with turn-down collar and slip-knot tie was worn. Surface embellishment is restricted to horizontal hem pleating on the skirt. The jacket, which had been construed as so unfeminine in the nineties became firmly established (Bond, 1981). It needs to be noted, however, that the jacket retained its rounded outline with the figure fitting waist darts and panelling.

Towards the end of the decade the silhouettes became slightly straighter with a slimmer appearance emerging from a higher waistline construction. Skirts became less full with a progression to a hobble skirt aptly named due to their restricting effect on leg movement. Soft drapery replaced the earlier bell-shaped skirts.

It was not until the post-war period that there was a rationalisation of dress to allow a practical freedom of physical movement. A changed social context allowed public

acceptability of fashionable aesthetics and functionality for physical and social emancipation. During the period of this research, it was evident that there were changes in dress which preceded this. A combination of aesthetics had developed incorporating simpler elements of dress devoid of structural and surface embellishment as well as highly elaborate elements. This choice of appearance was symbolic of the greater degree of freedom women were gaining in the wider public arena. The combination of feminine and masculine symbols in dress portrayed the extension of traditional roles of feminine experience. Increasing physical opportunities in sport and recreation for women had become part of these progressive social changes. The relationship between fashionable day dress and dress for sport is significantly close as this research revealed. It is difficult to make direct causal links whereby one has influenced the other. Interplay of both dress types was utilised to convey a visual expression of changing conditions.

## Chapter 5

### Women and Sport

The investigation of dress worn for sport must consider the cultural context and conditions that surrounded women's involvement in sport during the designated period. The dress worn was symptomatic of the contradictions which surrounded perceptions of women's participation. Predominant ideology created much prejudice and ambivalence to women's participation in certain forms of physical activity. Sport had been developed and established as a male activity. Victorian codes of gender delineation and traditional conventions of sporting practice contradicted the acceptance of women within the realms of physical activity. Active participation was seen as the antithesis of the feminine role. However changing circumstances and contradictions are exemplified by the social institutions of education and medicine. Their underlying theories exemplify the contradictions as liberating and inhibiting agents for women's participation in sport. New Zealand women's lifestyles were changing with increased opportunities for leisure time. However, it would be misleading to consider this advancement, as witnessed in other social spheres, in terms of any dramatic changes. Conventions retained the woman's primary social role and identity within a restricted sphere. Contemporary critics of women's participation in sport frequently expressed fears of women becoming masculine in their conduct and appearance. Appearance management in dress facilitated the changing perceptions and acceptance of women in sport.

#### **5.01 Sport and Masculinity**

Organised sporting activity was traditionally established and maintained for a substantial period of time as an activity of male domain. The foundations were formed within colonial New Zealand when sport became a predominant cultural activity. Sporting practice in New Zealand comes from a cultural inheritance, reflecting essentially the same character as its British roots (Barclay, 1977). Relationships between sport and masculinity are epitomised in the philosophy of 'Muscular Christianity' from *Tom Brown's School Days*. Thomas Hughes in 1857, heralded the benefits of male athleticism and rationalised sport as a vehicle of education including the qualities of moral manliness, fair play and sportsmanship (S. A. G. M. Crawford, 1987). Middle class settlers were keen to embrace the ideals of sport advocated and carried out by the upper classes in Britain alongside the

motivating factors of pioneering values and circumstance. Unlike Britain, participation wasn't relegated to the privileged few. Organised sporting activity dispelled class derision as participants teamed together to enjoy social activity as well as competitive rivalry between provinces and later international levels. Sport activity soon became regulated, with primarily men organising the administrative structure. Sport reinforced the physical commitment and resilience seen so necessary as pioneering virtues, as well as the group cohesion essential for pioneering survival. "The idea of sport as the embodiment of a 'character training' vehicle and thus a social agency which perpetuated the values of conformity both in spoken word and action, manliness and hard work, stood out" (S. A. G. M. Crawford, 1987, p. 59).

Sport, within its form as a social institution, perpetuated conventional delineations of gender assignment. The traditional associations of sport with strength, virility and endurance were qualities associated with men (Coney, 1993; Vertinsky, 1987). Men's behaviour in sport could legitimately be described as aggressive and competitive. Women's inherent emotional, cooperative and passive qualities could not be equated or judged on the same terms for sporting activity. Crawford (1987) claimed "there was a social climate of social acceptance, if not for the female athlete then certainly for the women to enjoy the fun and freedom of recreational activities" (Mangan & Park, 1987, p. 175). However organised sporting activity was closely guarded against women. Within a wider societal view, sportswomen contradicted prevailing stereotypes of female inactivity. Women were initially only legitimately involved in a supporting role, one which reinforced their inferiority to men.

## **5.02 Sport and Education**

Educational institutions played a significant part in promoting physical exercise and in turn redefining a female identity to young women. Once sports were accepted as part of the girl's school curriculum in England, opposition was lessened to their participation (S. A. G. M. Crawford, 1987). Likewise, early New Zealand private girl's schools introduced exercise and sport. Girls were given the opportunity to experience the advantages of physical activity which influenced choices later on in their lives. Physical exercise was seen as part of the well rounded nature of character development in education. Smith (1997) noted that physical education took different forms, including drill and gymnastics taken by

female teachers, visiting male physical training instructors, male and female principals and male coaches from outside of the education sector. In the latter period, much instruction was based on the gender appropriate Swedish exercise system of Madame Martina Bergman-Osterberg. This ideology had been credited as a version of feminism, which was dedicated to the development of mind, character and the body (J. Hargreaves, 1994).

Interestingly, promotion for the positive outcomes of increased exercises for young women was advocated with conventional nationalistic ideals. There was the underlying belief that this form of female education was for the betterment of a woman's role as a superior wife and mother (J. Hargreaves, 1994). Exercise was oriented to fit Victorian social values with the primary aim to promote a healthy procreative function (J. Hargreaves, 1987). Physical exercise for girls in New Zealand schools accordingly showed "more scope for physical freedom, but within new constraints which circumscribed femininity and prepared them for motherhood" (Smith, 1997, p. 69). Many educators with enforced regulations reinforced conventional character training for girls about high moral standards and appropriate ladylike behaviour (Smith, 1997). However it must be noted there were variations between schools with differences of curriculum planning. There were some who challenged aspects of dominant ideology, although it appeared that a legitimisation of advances needed to happen within the confines of traditional thought. From the 1880s, tennis, croquet and swimming were available in schools (Coney, 1993; Ryan, 1983). Despite the limitations imposed by conventional ideology, girls made the most of the increased opportunity for physical exercise and subverted these controls to enjoy legitimised physical freedom (Smith, 1997). There are claims these activities were made more possible with the seclusion from the public eye (J. Hargreaves, 1994).

The 'private' nature of educational institutions also introduced a form of dress not allowable in a public domain. The gymslip, a pleated tunic, was originally designed by one of Madame Osterberg's students in the early 1890s (McCrone, 1988). The gymslip was not introduced into New Zealand schools until the twentieth century (Hammer, 1990; Smith, 1997). The deviation from conventional dress was designed to allow greater movement for physical exercise. The private confines of institutional practice legitimised the initial concerns of questionable propriety and decorum for girls in their school years. Crawford (1987) describes the reactions to young women's participation in sport being in an atmosphere of "amused tolerance".

Everyone, now-a-days, recognizes the necessity of providing some sort of physical exercises for girls. It is no longer the fashionable fad to keep them bending over needlework half the day, and sitting at the piano, or studying for the remainder, with a couple of hours thrown in for a staid game of croquet, or an equally staid walk...Fortunately for the health of the next generation it is becoming the sensible fashion to admire a girl's well-developed form and graceful figure-due to healthy, well considered and suitable exercise- rather than a doll-like face and fashion-plate figure, which make the thoughtful people sigh, and wonder why girls and women can be so idiotic as to compress their waists into an unnatural, and therefore unbecoming shape, giving themselves present discomfort and certain future suffering (New Zealand Graphic Ladies Journal, 6 January, 1894, p. 22, col.2).

### **5.03 Sport and Medical Discourse**

During this period the increased public display of physical activity provoked discussion on orthodox views of medical doctrine (Hammer, 1990). Physicians asserted the already established rhetoric from Social Darwinism of women's innate physical and emotional vulnerability. Social judgements were made based on erroneous scientific facts which impacted significantly on societal perceptions of women's active participation in sport (Mangan & Park, 1987). There was a contradictory nature to the warnings of physical and mental damage due to the inferior physiological capacity of women and the latter promotions of exercise to improve the many ailments women experienced. Nearing the end of the century, comments made by physicians generally asserted moderate amounts of physical exertion helped women's health matters and increased their child-bearing abilities (Vertinsky, 1987). Doctor Lomax-Smith, one of the more progressive medical practitioners in New Zealand, referred to the weak and fragile nature of a woman and claims "mental and physical strain had to be avoided if she did not want to seriously indispose herself for the special functions of reproduction and maternity" (Lomax-Smith, 1895, p.23). Doctor Truby King, founder of 'scientific motherhood' and the Plunket Society in New Zealand publicly expressed fears of the damaging effects of over exertion (Olssen, 1981). It needs to be noted that eugenic arguments were primary social concerns of this period. These fitted the traditional associations of women's domestic role rather than that of new physical and social freedom (Hammer, 1990).

#### **5.04 Sport and Dress: the 'New Woman'**

The 'New Woman' was associated with a more active and public identity. The 'New Woman' did not fit the traditional ideas of physical and social submission. Views of increased freedom were displayed in a fashion development exhibiting simpler masculine features of dress at the time. The distinct nature of gender roles was being questioned and subsequently shown by changes in dress. Despite the outward expression and promotion of these changing values, traditional Victorian values resulted in critique of the movement by many. 'The New Women tried to obliterate the distinctions of sex, by following the same pursuits, wearing the same kind of clothes, indulging in the same sports as men' quoted the Christchurch Press (Coney, 1993). Contemporary critics of women's participation in sport frequently expressed fears of women becoming masculine in their appearance and conduct. Stereotypical characteristics of the 'new woman' threatened the existing dominant ideology of middle class femininity (Simpson, 1998). Many of the debates surrounding women and sport in contemporary sources revolve around ideological definitions of femininity and incongruity of appearance and behaviour. The New Zealand Graphic wrote of women tennis players:

Habited in strange unbecoming costumes with not a graceful line of drapery to show their sex, a man's cricket cap on their head, big flat-footed shoes on their feet, exhibited freely by their short skirts, they rush, they tear about the courts and fling their arms about...panting with unnatural excitement, growing scarlet-cheeked and hot in their pursuit, all the dignity of maidenhood lost in their perspiring rush for victory (1890, 1 November, p.15, col.3).

Most discussion in contemporary written accounts of sports dress centred on propriety and convention.

A given social front tends to become institutionalised in terms of the abstract stereotyped expectations to which it gives rise and tends to take on meaning and stability apart from the specific tasks which happen at the time (Goffman, 1971, p.37).

Ideas of women's participation in sport shocked Victorian sensibilities. Examples of institutional and legal restrictions placed on women's sporting clothing reflected the deeply held stereotypes about women's physical abilities, role in life and ideals of physical beauty.

An overriding concern of nineteenth century middle class women was to portray outward signs of respectability in public. Special attention to appearance and an expected code of behaviour was important. Sport provided a deviation from supposed respectability with the known gender roles and hierarchical relationships being threatened. The maintenance of moral purity and primary attendance to familial and domestic matters was still paramount to womanly concerns (J. Hargreaves, 1987).

The promotion of recreation for healthy procreation widened a social acceptance of physical activity, but it still retained the woman's primary social role and identity within a restricted sphere. Organised forms of sport continued to arouse public antagonism based on firmly established biological and moral premise. Women needed to display restraint and respectability to confirm their social identity to legitimise their involvement in sport. Traditional visual associations of appearance aided this necessity. In alignment with other social and political advancements women relished the opportunity of physical exertion to assert a newfound control of their bodies and consequent mental development. However, sport participation contested social conventions of middle class propriety. A departure from stereotypical or previous experiential relationships allowed extra attention.

To minimise the public antagonism women managed their appearance to moderate conventional perceptions. Photographic evidence found that most women participating in sport utilised the aesthetic of the 'new woman', already portrayed in the public arena. However, the varied components and elements of dress were symptomatic of the social circumstances of the particular sports. The following chapters highlight some of the circumstances specific to the sports: tennis, golf, mountaineering and cycling, which in turn characterised the dress worn.

## 5.1 Tennis: Social Display and Competitive Compromises

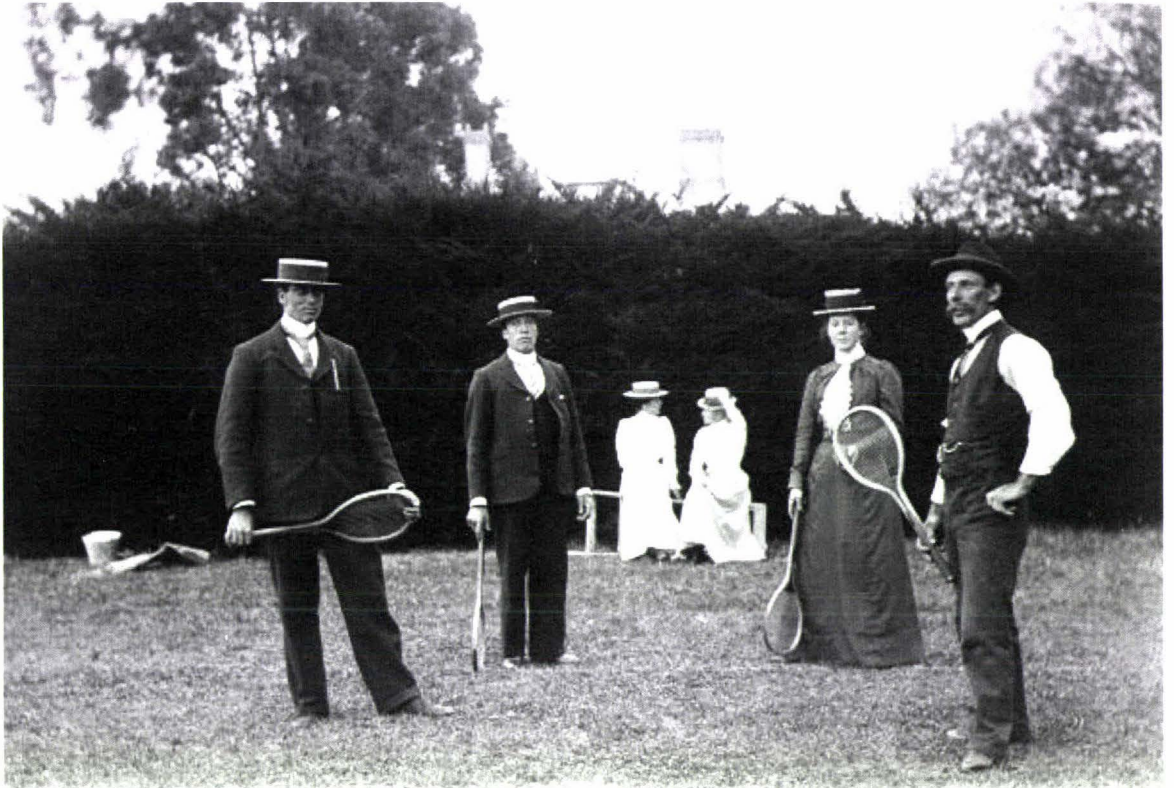


Figure 14: Mixed tennis, circa 1905, Alexander Turnbull Library

## 5.1 Tennis: Social Display and Competitive Compromises

A moderated appearance, one combining a mixture of elements is indicative of the involvement of most women involved in tennis, fulfilling both social and competitive participation. For many, tennis remained an event which allowed a deviation from domestic and familial responsibilities and facilitated wider social contacts. For the majority of women, the underlying assumption was most likely that their participation in sport should not necessarily undermine their femininity. Photographic analysis found a dress was the preferred garment type worn for tennis in the period 1880 to 1900 (fig. 52, 61). A sport which began and continued to fulfil a social function for many women showed dresses which displayed the same attributes of fashionable dress. Dress showing embellished structural features and rounded components was an accepted feminine aesthetic for social display. At the same time tennis facilitated a broadening of opportunities and a physical freedom. Towards the end of the period 1900 to 1912, the predominance of alternative dress components, in the form of shirt and skirt garment types (fig. 52, 61), relayed some progressive moves towards more functional attire. Coding of design simplicity and complexity, and angularity and roundness showed a wider representation of these aesthetics compared to the other sports throughout the periods (fig. 55, 56, 64, 65). This appeared to acknowledge the variance of dress for this sport which represented both recognition of conventional feminine associations and a changing identity related to increased freedom.

### 5.11 Dressed for a Social Occasion

There was less antagonism towards sports that appeared to constitute a social occasion which involved little physical exertion and which did not impose conflicting perceptions of women's passive nature. Croquet was the first outdoor game that middle class women were actively involved in, providing a role of social entertainment and requiring very mild physical exertion. Lawn tennis succeeded croquet in popularity by younger women as a more invigorating exercise. The playing of tennis by women was accepted as a non-contact sport which could be played in a manner that did not violate ladylike behaviour. Following British practice, tennis was initially played by the wealthy on private grounds as a popular garden party activity. Initially tennis was viewed as a leisure activity of the cultured (J. Hargreaves, 1987). Lawn tennis allowed a social opportunity for women of all ages and an activity played on home grounds was deemed as an acceptable

place to meet and mix with the opposite sex. It was promoted within the familial context to reinforce an acceptable form of recreation to reflect close family relationships important in Victorian respectability (J. Hargreaves, 1985).

Tennis was first played by New Zealand women in this capacity in the 1870s (Barclay, 1977). With primary functions of sociability and matrimonial prospects, etiquette of appearance was upheld with the same managed requirements of fashionable dress. Tennis was the only sport from the selected sports to show photographic evidence in the period 1880-1890 (fig. 51). In these earlier years, the dress was the predominant garment type (fig. 52, 61). Fitting with characteristics which closely resembled fashionable dress, the dresses displayed a wide range of surface and structural embellishments in the upper and lower garment components (fig. 57, 58, 60, 66). Coding of design simplicity and complexity on the lower garments indicated rankings throughout the scale (bipolar continuum) (fig. 64) unlike the upper body components (fig. 55). In accordance with fashionable day-dress, there was more focus on decorative and structural elements in the lower garment components than the bodice in this period. Tennis lower garments showed a higher frequency of structural embellishments in the forms of pleats, gathers, draped pieces and flounces than other skirts worn for sports (fig. 66). This result most likely reflected the number of garments analysed from this earlier period (fig. 52, 61).



Figure 15: Tennis on home grounds, circa 1886

Alexander Turnbull Library

The details of the dress worn by the centre woman tennis player are not highly visible but the extreme silhouette helps to date this image. The tight fitting front indicates a highly corseted bodice with prominent bust lift and a restrained rib cage. The large protruding back bustle with its elaborately draped skirt was fashionably worn in this latter period of the 1880s. The dress is typical of a highly formal dress made of a lustrous silk shown to advantage with the intricacy of the draped and puffed overskirt. An underskirt of a darker toned fabric allows a full-length outfit. A compe bonnet typical of the period completes the formality.



Figure 16: Tennis with friends, circa 1887

Nelson Provincial Museum

The young women are all wearing dress indicative of fashionable dress circa 1887. During this latter period the skirts are wider with added fullness at the hip, compared to a narrower and longer silhouette of the early 80s. Surface and structural embellishment was commonly featured in the skirts, often displaying asymmetrical draped overskirts. The white dress shows a deep centre front skirt drape with white lace trim. The side of the overskirt appears to be hanging free. The rest of the skirt fullness is attained by soft waist pleating and a small bustle, positioned just below the back waist. The young woman on the right displays a more exaggerated asymmetrical front drape. The striped cotton fabric allows a helpful analysis of the overskirt's fabric drape being pulled around to the back to aid the formation of added fullness for a small back bustle. The third woman on the left wears a skirt showing added structural fullness in the form of a central horizontal drape, edged with vertical pleats.

All the women show a silhouette indicative of the corsetry shape of the period. A shorter tightly laced corset returned, worn with the shorter basque bodices. The bodice fronts are cut, curving from just below waist level at the side-seams to a curved centre front. The extent of restriction in the bodice fit and corsetry lacing is clearly shown by the woman on the left. Her bodice shows tight horizontal pull lines and clearly defined waist shaping. More detailed photographs of fashionable dress and construction analysis during this period show the use of boning in darting at the front and panelling at the back bodice to achieve this degree of fit. This dress also shows the typically tight sleeves of current fashionable day-dress. The other dresses show some reprieve with the sleeves cut with

slightly more fullness through to wrist length. However arm movement remains restricted with the set of the sleeves cut with a high armhole and positioned high into a shortened shoulder length.

As typical of late 1880s fashions, all the bodices show variations of structural and surface embellishment with high standing collars. The woman on the left shows a centre front trim, possibly black passementerie with a double set of small close set buttons. A matching decorative black trim is visible on the sleeve cuff and high round neckline. A white lace fichu decorates the neck falling to bust level at centre front on the woman in the centre. The woman on the right displays highly fashionable horizontal tucks on a central plastron. All the day dresses worn by the women appear to typically represent fashionable dress of the time. It is evident much time was taken to appear formally and appropriately dressed for a social occasion.

In the 1890s, the dress remained as the predominant garment worn for tennis (fig. 52, 61). Analysis of coding for the aesthetics simplicity and complexity (fig. 55), and feature identification (fig. 57) showed the upper garment components retained a range of structural and surface embellishments, and the skirt became simpler (fig. 66). This corresponded to the shift of decorative embellishments from the skirt to the bodice as seen in fashionable dress during the same period. Bodice characteristics showed evidence of structural features which indicated the adherence to fashionable dress, for example, off-centre closures, pleats, gathers and surface embellishment including lace, appliqué and embroidery (fig. 57, 60).

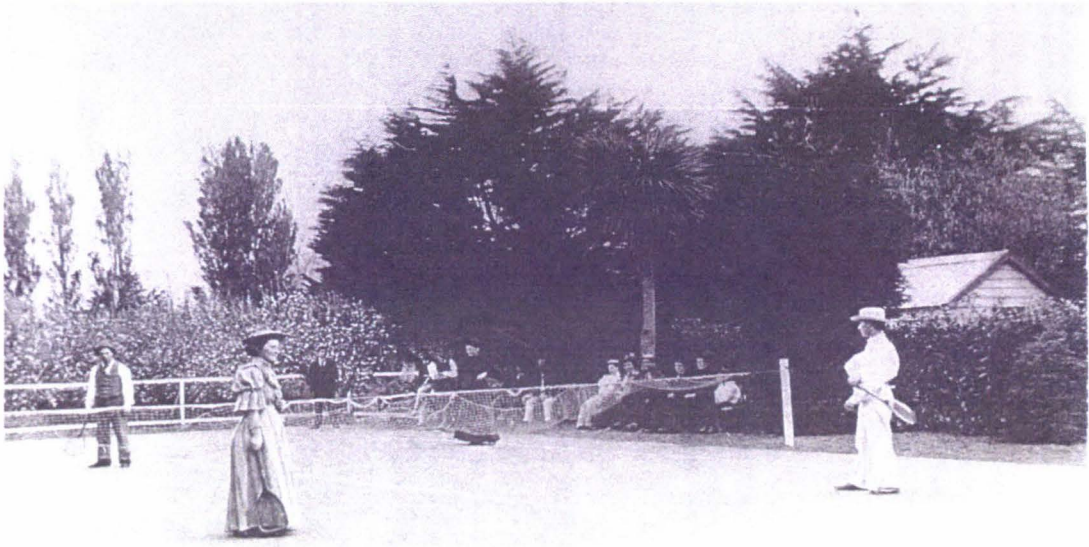


Figure 17: Smart's Pond, circa 1895  
Canterbury Museum

This photograph is taken by J. Lamb of a tennis game at Smart's Pond. The mixed group of players and spectators indicates a social occasion. The most visible woman tennis player wears a dress which has many features worn in fashionable dress of the suggested dating. The puffed sleeve with an attached deep frill falling to the elbow was not so commonly seen in photographs but is indicative of an up-to-date feature in costume references for the mid-decade (Severa, 2000). A fitted under-sleeve finishes at the wrist. The bodice also features a wide bertha collar trimmed with a decorative ruffle corresponding with the stand collar trim. As typical of the period, most fashion garments displayed more elaborate bodices and simpler style skirts. The skirt is flared with slightly more fullness shown at the back and falls to approximately five centimetres above the ground. A small flat crowned hat completes the outfit.



Figure 18: Family and friends, circa 1894  
Hawkes Bay Museum

The group photo indicates a social occasion of family and friends. The photograph illustrates how the activity of tennis appealed to older women as well as younger as seen in the previous photographs. The women wear dresses as they would for a social outing. Dating of the occasion is indicated by the woman near the centre wearing white. Her bodice with leg-of-mutton sleeve shape indicates early to mid-nineties. The other older women's dresses don't display this same fashionable cut of sleeves but rather the peaked sleeve crowns from a few years earlier. Analysis has generally shown that women of an older age bracket commonly wear garments slightly outdated but all aspects of respectable dress are strictly adhered to.

## **5.12 Alternative Dress Displaying Progressive Signs**

In the 1890s, the number of women who wore components of alternative dress for tennis increased (fig. 52, 61). This combination of dress elements was more commonly worn by progressive young women during this period. However, it was during the period of 1900 to 1912 that photographic evidence reveals a significant increase in the number of women wearing a shirt and skirt for tennis (fig. 52, 61). During this period most of these upper garments displayed few structural and surface embellishments (fig. 55, 57, 58, 60). The majority of the shirts were very simple with features borrowed from men's style shirt; basic fitted sleeve, lapped cuff, centre closure, high round neckline with stand collar or turn-down collar (fig. 57, 58, 59, 60). The skirts were simple A-lined skirts shaped with panels (fig. 66) to allow a wider hem width. Skirt lengths remained at ankle length or full-length (fig. 67), retaining accepted codes of modesty.



Figure 19: Ethel Haggett , circa 1893  
Alexander Turnbull Library

Ethel Haggett, photographed on a tennis court, wears the tailored suit. The tailored suit consisted of a tailored jacket worn over the shirtwaist and skirt. The suit is most likely constructed of wool of medium weight to hold the tailoring applications. The jacket sleeve allows dating of the photograph to be circa 1893. There is evidence of drape or collapse lines in the leg of mutton sleeve as seen in the years leading up to the mid-decade when the sleeve was at its widest and most supported. The jacket has a wide rever with top button positioning at the bust. The jacket length is short extending to the skirt's waistband. Ethel wears the jacket open. A closed jacket would prove difficult to play in with the tight restriction of darting and panelling to fit the suppressed waist. It is uncommon to see photographs of women wearing jackets for tennis most likely for this reason (fig. 52). The jacket is worn over the shirtwaist of white cotton. The shirtwaist showing a two-piece collar appears to be of simple construction with no decorative structural embellishment evident. The shirtwaist appears to be quite loose as it blouses over the skirt. The plain black slip-knot tie is tucked securely into the waistband. The accompanying plain skirt completes the hourglass silhouette with fitted waist and flare falling from the hips. Panelling is seen on the front of the skirt to achieve the large folds evident at the hem. The skirt clears the ground by a few centimetres. A small straw hat perches high on the head to complete the accessorising of a reasonably plain outfit.



Figure 20: L. Mackorras and Bessie Scott, circa.1894  
Alexander Turnbull Library, photograph by James Cameron

Young women L. Mackorras (first name is unknown) and Bessie Scott are seated outside a home holding their rackets. They are wearing similar outfits of shirtwaist and skirt. These garments appear to have been made from the same fabrics and trims. Even though ready-mades were readily available, these garments could be made easily at home with access to patterns and domestic machines. Shirtwaists followed fashion styling of dress bodices of the period which included an assortment of styles. These shirt waists are showing a number of surface and structural features. L. Mackorras wears a shirtwaist with a gathered bodice falling from a high neck shoulder yoke and is tucked into a highly restricted waistband. Bessie Scott wears a full shirt waist which is gathered into the high round neckline, released to blouse over the bust and gathered back into an attached waistband. Both blouses display stand collars, characteristic of the period. The collars sit over a stiff black under-collar matching the decorative black lace trim shown attached to both shirtwaists in different positions. The large leg of mutton sleeves are the focal point and defining feature of the bodices. The size and shape of the sleeve-head and fitted forearm date the outfits. The silhouette is defined by the small corseted waists displayed by both women. Plain straw hats are worn with a flat satin ribbon trim.



Figure 21: Name unknown, circa 1893  
Nelson Provincial Museum

The young woman in this photograph from the Nelson area shows a more formal shirt waist than previously seen. The formality here is being primarily expressed through the fabric, being satin or silk. As mentioned earlier there was variation in shirt waist styles indicating the variations in fashionable dress styles worn. A ruffled trim decorates the centre front. Gathering at the neckline allows fullness over the bust. The cut of the shirtwaist is typical of the period showing added fullness at the front and a fitted back, often using ties on the inside to tighten the side-seam. This version of shirtwaist is worn out to the upper hip and is secured with a tight self fabric belt rather than being tucked inside the skirt waist. Bishop sleeves were commonly worn (fig. 59), gathered at the sleeve-head and to the banded cuff. A very high stiff stand collar with a fine trim on the upper edge completes the fashionable bodice. Extra attention to a fashionable appearance is indicated by the horsehair hat, trimmed with ribbons and flowers. The skirt shows the typical walking dress length, brushing the top of the shoes. A wide faced/false hem reinforces the skirt's hemline.

### **5.13 Competitive Concessions**

Despite an overriding public resistance, the 1880s showed the beginnings of women's participation in institutionalised forms of sport (R. Crawford, 1987). Tennis was one of the most popular at this time. Women's interclub tennis matches began in 1886 (Hammer, 1990). The earliest sports clubs were initiated within the social context of debate over the legitimacy of women's extended lives in the public arena. With social mixing as a legitimising intent, croquet and later tennis clubs allowed a mixed membership. This constituted a common pattern for most sports that women participated in (C. MacDonald, 1993). The majority of women who played were seen as fulfilling a social capacity rather than a form of competition, fitting the respected secular spheres of gender experience. The participation in the game was publicly acceptable in a form that revealed their position to be inferior to men's position and play. The inhibiting effects of women's dress reinforced this notion. Any great degree of physical exertion, and extended bodily movements were deemed impossible in attire that so closely resembled fashionable dress of the period. Women's participation in club tennis during this period was still restricted to the upper middle to upper class. This was due to the financial requirements of club memberships, equipment and fashionable dress (Hammer, 1990). The dress of these women maintained the symbolism of conspicuous consumption seen in fashionable dress portrayed by those who could afford leisure time. Ebbett (1977) described early women tennis players wearing flannel quilted dresses with an apron with a functional pocket for balls, and wearing a tweed cap of 'masculine appearance'. Although this correlated with British women players (Cunnington & Mansfield, 1969), there was no photographic evidence to verify this description.



Figure 22: Early Tennis Club , circa. 1888  
Canterbury Museum

The photograph taken by E. Wheeler & Son shows an early Christchurch tennis club with a mixed membership. The uniformity of dress indicates dress requirements set by club regulations. All the women's garments appear to have been made from the same pattern with variations in fabric type and placement. The two-piece outfits are constructed of a combination of white cotton and black and white stripe cotton. It is likely the outfits were made by the individual women which would account for the different treatments of fabric choice and grain-line placement. A desire to convey an attractive individual aesthetic within the confines of propriety and regulation dress is highly likely. The components of dress requirements follow expectations of fashionable dress circa 1888. Structural characteristics are the same with small concessions made for increased freedom of movement. Additional fullness was made to the skirt width than evidenced in other photographs. However by 1888, many daytime dresses featured long pleated skirts which hang straight with this added fullness (Severa, 1995). A hip-length apron drape is pulled horizontally around the full skirt and is secured at the back to form a small bustle, as shown by seated woman on the right. The length of the skirt appears to finish a few centimetres above the ground. The sleeves are cut to the fashionable length to the forearm and finished with a cuff. The sleeve cut is modelled on the fitted set-in sleeves of the period but there is evidence of more ease added to the pattern possibly to suit the function of the tennis dress.

The young woman seated on the left shows the fashionable cut of the shortened fitted bodice extending to a curved centre front. All the women show the essential nature of the curvaceous corset of the period to define the womanly figure with a high bust and highly restricted waist. The bodices have high round necklines with two-piece collars attached. Decorative embellishment has been restrained in the dress components. The hats are comparatively plain but show small variations in colour shade, brim shape and decorative trim in the form of ribbon bands and small floral attachments. Most women show an absence of any neckline accessory. However the young woman seated on the left wears a ribbon bow neatly secured by a brooch at the centre front neck position. Footwear most likely consists of black ankle boots with flat heels and oval toes characteristically worn during the period. The importance of maintaining a direct reference to known fashionable tastes was obviously paramount to satisfy regulatory concerns.



Figure 23: New Zealand Tennis representative team, dated 1896  
Copy from 'NZ Illustrated Magazine' 1899, Volume 1, p. 202  
Alexander Turnbull Library

In contrast to the leisurely milieu of social tennis the more serious and exceptional abilities of individuals can always be highlighted. This formal studio photo by Falk of Sydney, shows Kathleen Nunneley in the centre of the New Zealand tennis representative team which went to New South Wales, Australia in 1896. This trip signalled Kathleen Nunneley as the first New Zealand woman to compete internationally. Her athletic abilities

were unsurpassed during this period. She won the national women's singles titles for thirteen consecutive years from 1895 to 1907 and won 10 doubles titles and nine mixed titles (Elenio, 1986). Her achievements are well documented in contemporary editorials and her play was noted as being uncharacteristically strong compared to other women. As in other games, women's play was generally modified to a less athletic style. Contemporary descriptions noted the commonly slower pace with lack of volleying and underarm serving. Nunneley negated this and claimed the advantages of practising and playing regularly against men to improve play construed as 'soft' (Elenio, 1986). Her competitive prowess with her male counterparts is strongly represented in this image. Even though this photo displays all the formality of studio composure, other photo's showing Nunneley in action, display the same components of dress. Nunneley is pictured here wearing a simple white cotton shirtwaist with a concealed front and characteristic stiff collar stand. The large leg-of-mutton sleeves, so prominent in the mid-decade fashions, add an air of authority with their significantly widened shoulder width. The black bow tie and plain straw boater with matching wide ribbon band adds a formality not seen to the same extent in the male members of her team. A wide leather belt emphasizes the confined waist. The gored skirt is most likely made of practical wool serge. The seated position raises the skirt, to make her black leather lace-up shoes with black stockings conveniently visible. All the expected components of the alternative dress style for the mid-nineties are worn, with no evidence of surface decoration or structural embellishment.

The growth in the 1890s and subsequent early decades of the twentieth century of sports organisation into clubs and competitions did make a significant change to the feminine ideals of the earlier period. Greater participation and the sanctioning of competition saw some progressive changes to women's physical freedom. Improved technology in terms of sports equipment, communication and transport facilitated a higher level of sport involvement. There was no doubt that individuals, like Kathleen Nunneley, extended the perceptual boundaries of women's capabilities of play. Arguments that sport was unnatural to women and concerns they might denigrate the games should have been dispelled by these individual women. For many women, tennis had moved from a social occasion to encompass the excitement of competitive sport. However the competitive nature of participation negated previous and continued contemporary ideals of feminine behaviour. The Press stated: "tournaments, with all the keen competition, the publicity and sustained excitement, do harm" (cited in Coney, 1993, p. 238). Contradictions were overtly evident from those that criticised women for indulging in competitive and public display to

critical appraisal of women's play in technique and appropriate dress. Comparisons of dress worn for tennis were being made with public comment. Vantage, a tennis critic asserted:

Ladies who honestly want to play well don't dress as if going shopping or for a quiet walk. They don't wear dresses whose skirts reach the ground; they don't wear hats that either give no shade, won't stay on, they don't wear stiff cuffs and collars, and they don't wear bangles and rings (New Zealand Graphic and Ladies' Journal, 1893, 25 November, p.438).



Figure 24: Members of the New Zealand Representative team 1906.

From left, Eva Travers, Lucy Wellwood, Lucy Powdrell, Kate Nunneley, Mrs G.Goldie(the chaperone), Annie Gray. In front, Alice Ward. Manager: George Goldie.

Dr Stout Collection, Alexander Turnbull Library

Nunneley and her competitive contemporaries continued to wear simpler elements of dress throughout the next decade. The New Zealand representative team in 1906 who defeated Australia are shown posed in their playing uniforms. A plain white shirt is worn with a white gored A-line skirt. There is evidence of slight variation of elements worn, as shown by Annie Gray who wore a shirt with a frilled lace collar and pendant at her neck. The other members of the team show no other decorative elements on their dress apart from embellishments on an assortment of hat styles. Headwear appeared to be the distinguishing feature for individual and feminine aesthetics. Kathleen Nunneley displayed

the strong demeanour portrayed in earlier images, wearing a plain boater hat with black band at the crown and wide black slip-knot tie.



Figure 25: New Zealand championships, Lancaster Park, January 1912  
Canterbury Museum

By 1912, competition dress for national tennis tournaments had progressed to an aesthetic displaying no surface embellishment and few elements of structural embellishment. There had been a shift in definitions of legitimate female play. This photograph demonstrates how the tennis dress was now borrowing directly from the same components and elements of alternative dress. Masculine elements of dress were strongly evident with the angular lines of a straight cut shirt with plain set in sleeves, and turn down collar. Neckline additions comprise of men's style slip-knot ties and bow ties. The lower body garment retained the feminine reference of the A-line skirt with increased fullness at hem to provide some mobility. The skirt extends to the ankle revealing white stockings and white flat shoes. Photographic evidence did not reveal evidence of the bifurcated garment to be worn for tennis at any time during the period (fig. 61), fitting with the denial of fashionable dress to accept true physical and social freedom. The dress of the 'new woman' showed progressive changes without making too greater radical assertions. Social concern to retain an acceptable appearance within a public profile was still of primary concern at this time. Photographic analysis revealed tennis garments were

primarily made of light weight fabrics and were generally light in hue throughout the periods (fig. 53, 54, 62, 63). This is most likely due to seasonal preference of the sport. This also corresponded to descriptions of tennis dress in Europe in the pre-war period (Cunnington & Mansfield, 1969).



Figure 26: Collingwood Tennis Club, circa 1906  
Tyree Collection, Nelson Provincial Museum

The women members of the provincial Collingwood tennis club wear a varied combination of dress components as indicative of many provincial clubs. Club membership continued to fulfil a social role for many, rather than participation at a competitive level. Examples of elaborate fashionable dress of the decade are shown as well as alternative dress. The only common sign of club membership is shown by the wearing of club ribbons. A number of the women, appropriately positioned in the front row of the photograph, dress suitably attired for a garden party or public outing. The two women positioned to the left, both wear dresses displaying fine lace collarettes, highly fashionable in day dress of this period. Both their bodices and skirts show elements of decorative and structural embellishment in the form of pleating and ribbon appliqué. The dress silhouettes are indicative of the fashionable S-shaped curvature. Corsets remained to be worn despite the discomfort of physical play. Analysis of silhouettes and restrained waistlines in the photographs showed the wearing of corsetry for tennis throughout the period researched

(fig. 68). An advertisement for 'Oktis' corset shields is a reminder of the primary concerns of the period, "Tennis is one of the most graceful as well as enjoyable pursuits which the athletic lady can follow, but it is a game which plays havoc with one's corsets" (Auckland Weekly News, 1911, 19 October, p.53). Corsetry remained a crucial item of dress for women to retain respectability in appearance, despite damage to health and physical restriction. The restraining consequence of the corsetry cut reduced the ability to move freely, aiding notions of the restrictive behavioural activity acceptable for women. Other aspects of dress reflect fashionable styling of the decade. The bodices are cut with added fullness to blouse over the belted waist. Shaped skirt panels are shown by the circular spread of the back hemline by the woman on the front right. The women in the second row, on the left appear to be wearing separates, comprising of a plainer blouse and skirt. Hat styles vary from boaters to those with wide brims decorated with bows and flowers. Photographic evidence showed that most women chose to wear hats with feminine references for tennis (fig. 68). Even though alternative dress components became the most common, it was obviously important to retain a degree of feminine aesthetic for some accessories.

## 5.2 Golf: Organisation and Uniformity



Figure 27: Christchurch Ladies' Golf Club, 1893  
Canterbury Museum

## 5.2 Golf: Organisation and Uniformity

The formation of golf clubs was indicative of the developing institutionalisation of sporting involvement in the latter nineteenth century. As Simpson notes "As sport became more formalised, it became subject to bureaucratic forms and practises which were part of the prevailing beliefs about what constituted a rational society and which were features of nineteenth century modernity" (C. Simpson, 1998, p.76). The traditional rules and etiquette associated with golf perpetuated many prejudices for women. However, the increased participation of women in golf clubs represented a solidarity and independence of women and sport. This was strongly reflected in the dress worn by women for golf. In the time period from 1890 to 1912, when photographic evidence was available for golf, analysis revealed that all the women wore the primary components of alternative dress; being the shirt and skirt (fig. 52, 61), and the majority accessorised these with a slip knot tie and belt (fig. 68). Both upper and lower body garments exhibited a high level of simplicity which revealed very few structural characteristics or surface embellishments (fig. 55, 64). Generally, women responded with expected dress and appearance codes, while promoting many practical components within the parameters of acceptance. The organisational nature of this sport was reflected in the uniformity of dress worn throughout the period for golf. Feature identification showed little variation in characteristics in comparison to a wider range seen in dress analysed for the other sports (fig. 57, 58, 59, 60, 66) and fashionable dress. Generally dress codes signalled changes within the institutionalised practice of club identity.

### 5.21 Institutional Regularity

Golf courses were first developed in New Zealand in the early 1890s. In the beginning, golf was legitimised as a gentle outdoor exercise for women that constituted a social activity. Women's involvement was seen as supportive, fitting an expected role in the patriarchal hierarchy of the period. Conventions of the supportive and domestic role of women were displayed with the associated social events alongside their physical involvement. "If the men made the course, their women contributed moral support, morning tea, and even manual labour" (Kelly, 1971, p.32). It was through the club organisational structure established by men that women began to play golf. Golf, like tennis in earlier years was considered an elite sport for those with the affluence of time and money. The names of women recorded in photographs or club records indicating

participation in club activities and tournaments, were those associated with influential men of the province.

In many developing clubs, women were given access to membership. However, this privilege came with many concessions. Membership was often restricted and set days were relegated to women. To exemplify typical concerns of protocol and elitist prejudice, minutes recorded from the all male committee at Hokowhitu Golf Club, 1901 state, "to start playing women on Sunday would possibly give club bad name and attract attention of the public generally to Sunday play" (Hawke & Committee, 1995, p.130). Women's play remained largely separate with little threat to the ritualistic male domain.

Women formed their own clubs with much negotiation for facilities and access to the courses under various terms. There was a growing independence of women's clubs but the prejudices resulting from male domination overran many attempts until a later period. The majority of club committee records clearly show the non-participation of women in administrative matters (Anderson, 1996; Club, 2001; Hawke & Committee, 1995; Kelly, 1971). Despite this, the numbers of women involved in club play increased substantially over the period (Kelly, 1971; Northover, 1992). Ladies golf had an active role in competitive tournaments at regional and national level. Rules and conventions followed the traditional lead of British golf (Else, 1993). Concessions were made to women's play, reinforcing and affirming their inadequacy for physical aptitude. Shortened courses were derived from concerns over the women player's ability to exhibit sufficient freedom within their stroke. Lord Moncrieff explained:

We venture to suggest seventy or eighty yards as the average limit of a drive advisedly...because that cannot well be done without raising the club above the shoulder...the posture and gestures required for a full swing are not particularly graceful when the player is clad in female dress ( Badminton Library, 1902, cited in Cunnington & Mansfield, 1969, p. 76).

The nature of dress and physical movements attributed as being appropriate to women dictated their perceived abilities.

The numbers of women involved in club play increased substantially over the period (Kelly, 1971; Northover, 1992). With the growing numbers of women playing golf, perceptions of the legitimacy of the ability of women's play was altered. "The interest and

dexterity displayed by the ladies makes one seriously doubt whether anything more than mere conventionality sets limits to the incursion of the gentle sex into the realm of athletics" (New Zealand Graphic and Ladies' Journal, 19 Oct 1901, p. 730, col.1). Before World War 1, there were forty clubs with women's membership, including main centres as well as many provincial areas. The largest clubs in Auckland, Christchurch and Otago, Wellington, Napier, Timaru and Hutt showed memberships of approximately 100 (Kelly, 1971). This would account for most photographic evidence of women golf players being in the time period 1900 to 1912 (fig. 51).

Established rules and etiquette was a signature of club membership dating from early Scottish golf clubs and appeared to be strictly adhered to, including dress protocol for men and women (Cunnington & Mansfield, 1969). The New Zealand Ladies Golf Union was established in 1911 having already become affiliated to the Ladies' Golf Union in Great Britain (Else, 1993). This union created more independence from men's clubs but still within the realms of a traditionally male dominated sport. Along with the more formalised rules of the game came stronger infrastructures which in turn supported the sports with increased competitions at all levels, sponsorship and greater spectator facilities. This reflected the nature of more commercial institutional concerns.

A sport dominated by historical conventions and organisational structure demanded a greater degree of standardisation to rules and etiquette to dress. Club archives revealed few records of regulation dress for women. However, photographic evidence showed there was greater uniformity to dress worn by women for golf than found in the other sports investigated (fig. 52, 57, 58, 59, 60, 61, 66). Analysis of those photographs with provenance revealed little variation in garment types worn, whether in larger urban clubs or provincial clubs and level of play, and whether social or competitive.



Figure 28: Christchurch Ladies Golf Club, 1893  
Canterbury Museum

The Christchurch Ladies Golf Club was established in 1893, a year after the Otago Ladies Club, who claim to be the earliest in the southern hemisphere (Kelly, 1971). The Christchurch Ladies Golf Club was an exception to most clubs having negotiated accommodation in a small hut in Hagley Park and shared playing rights with the Christchurch Golf Club (Northover, 1992). The Christchurch Ladies Golf Club claimed the membership of the first woman, Mrs Lomax-Smith, to win a national title in the first New Zealand Ladies Amateur Championship held in Dunedin (Northover, 1992). The photograph shows the enterprising group of women in regulatory dress for the club. The playing uniforms show the simpler alternative dress elements of the period. The shirtwaist and skirt in darker toned medium weight wool exuded a strong, practical demeanour. No decorative embellishment is present. The accessorising of the plain small-brimmed boaters consists of a flat ribbon, matching the club colours and stripes of the men's style slipknot tie. The shirtwaist allowed a degree of movement with pleats falling from the neckline, allowing fullness over the bust to be controlled again at waist level. Fashionable leg-of-mutton sleeves indicated fullness in the upper-arm, but little ease in the lower-arm section. Some women wore a bishop sleeve, also commonly fashionable in the period. The nature of added fullness to the full length of the sleeve allowed a greater degree of movement. However other familiar elements signifying fashionable taste and protocols for propriety of dress prevail. The high round neckline is finished with a high stiffened stand collar or turn-down collar. Significant restraint is seen at the waistline and uplifted bust with the wearing

of the apparent obligatory corset. The hour-glass figure is reinforced with the clasped belt at the waist and gored full-length skirt.

These components and elements typify other photographic evidence of dress for golf during the pre-war period (figs. 52, 54, 55, 56, 57, 58, 59, 60, 61, 63, 65, 66).

## **5.22 Functionality within Accepted Conventions**

In the latter period, other upper body garments, jackets and woollen cardigans were worn in addition as an outer layer (fig. 52). These garments showed progressive moves towards more functional attire. Consistently throughout the period the garments worn for golf displayed a high level of simplicity (fig. 55). Photographic evidence revealed very few structural characteristics or surface embellishments (fig. 55, 57, 58, 60). A high degree of angularity in design aesthetics corresponded to this in the upper body garments (fig. 56) showing a departure from more fitted, curvaceous lines which previously defined feminine dress. The predominant coding for angularity/roundness in the lower body related to the skirt's feminine reference in silhouette, characteristic of alternative dress (refer fig. 65). Generally, women responded with expected dress and appearance codes, while promoting many practical components within the parameters of acceptance.



Figure 29: Three women playing at Hokowhitu Golf Club, 1909  
(Hawke & Committee, 1995)

The three women wore regulatory Club jackets over white shirtwaists and gored skirts. The practicality of a jacket was needed in colder climates. The jacket is cut looser, incorporating more ease in body width than seen in other fashionable upper body garments for women. The soft draglines indicate the fabric to be light-weight wool, possibly of knit construction. The jacket is cut closer to the style and fit lines of men's tailored jackets. This characteristic was not seen in jackets worn for other sports or fashionable dress. The lack of waist darting or suppressed waist panelling gives a straighter and longer silhouette. As witnessed by the finishing back-swing of the woman in play, the cut and fabric weight allows sufficient movement for extended arm lift. The jackets are devoid of surface embellishment apart from buttons and club signature on left breast pocket. Hip pockets are shown to be of practical use. Tailored collars exhibit a top-collar in contrast coloured fabric which matches the turn-back cuffs on the sleeves. The neckline is filled in with the white shirtwaist turndown collar and slip knot tie. A brooch fastens the tie in position. Two of the women wear a man's style hat, the felt fedora with moderate size brim and crown. In contrast, the woman on the left wears a hat with a large bow embellishment. The wide brimmed hats, fashionable at the beginning of the century, were tied in place with veils or ten-inch hat pins (Hawke & Committee, 1995). The accessory looks out of keeping with the plainer, more practical elements of the playing uniform. However the wearing of masculine and feminine style hats was evident in many photographs (fig. 68).



Figure 30: Three women playing in a Wanganui tournament, 1910  
Photographer: F.J.Denton, Alexander Turnbull Library

Consistently throughout the period, photographs show women playing golf in a shirt and skirt (fig. 52, 61). The white cotton shirtwaists are cut with similar straight proportions to the man's shirt style with increased body width over the bust. The shirt style sleeve is cut with a slightly lower arm-scy and increased top-arm width. The wider sleeve width is maintained through the lower arm and suppressed at wrist with tucks controlled by the attached lapped cuff. The shirtwaist is tucked into the belted skirt waist. The woman on the right wears a skirt cut with three front panels with increased flare added from the knee down. The lowered positioning of flare is more pronounced than the other women. A low hip patch pocket adds a practical structural embellishment to the golfing skirts. Photographic analysis showed the skirts worn for golf commonly showed the addition of pockets, unlike dress for other sports (fig. 66).

The skirt lengths remain cumbersome. In the period 1890-1900, the majority of golf skirts were full length (fig. 67). The following decade showed most skirt lengths shortened to the ankle (fig. 67). The woman at the back wears a significantly shorter skirt appearing to be calf length. This was uncharacteristically short but may be attributed to

the youth of the player. A contemporary British golfer, Mary Hezlet in *Ladies Golf*, 1907 stated:

In wet weather the long skirt hampers every movement... and is very tiring to drag about. A short skirt-really short, not simply a couple of inches off the ground -looks infinitely nicer and more workman-like, and makes an inestimable difference in comfort ( cited in Cunnington & Mansfield, 1969, p. 78).

The impracticality of the long, wide hemmed skirts was commented on in the New Zealand context. Algie Rainbow recalled the impracticalities of dress for his wife, Mary, the first winner of a championship on Bridge Pa golf course in 1912:

One of the tribulations of women golfers of those days was the long skirt-almost to the ankles-which decency then demanded and which on a windy day could be most disconcerting, particularly when putting. The remedy was a circle of elastic which rested around the waist through the fairways and on the green was pulled down to about knee height (Rainbow cited in Tacon, 1998).

Evidence of this useful accessory is witnessed in the previous photograph, loosely dangled below the waist belt. Heavy boots were often worn. Evidence of practical concerns for dress were relayed in a committee meeting at the Alexandra Golf Club, in 1908: "The secretary is instructed to write to the Lady members of the club to the effect that the Committee requests the ladies to wear broad heels, as high, narrow heels do grievous injury to the course, especially the greens" (Alexander Golf Club, 2001, p. 9).



Figure 31: South Island team at New Zealand championships, Shirley, 1910  
Canterbury Museum

In the latter period, the women wore the same elements of alternative dress seen earlier, being the white cotton shirt and gored skirt. The shirt showed no surface or structural embellishment. The style of the blouse has a similar cut to a man's shirt with a turn-down collar, set-in sleeves with a lapped cuff and buttoned centre front. Little shaping is shown in the body of the blouse allowing ease for movement. Likewise, the sleeves indicate fullness through the entire length and are tucked onto the lapped standard cuff. These characteristics were the most prevalent in photographic analysis (fig. 57, 58, 59, 60).

The woman in the centre wore a knit polo-neck jersey, a garment commonly worn by men during this time. It was not until the post-war period that women wore knit jerseys to the same extent. Knit jackets had begun to be seen advertised for sportswear. Photographs at the end of the research period showed women wearing knit jackets for golf as evidenced by the two women in this photograph (fig. 52). Increasingly, manufacturers of dress utilised the growing popularity of sport to market new products. The woman in the centre wore a tailored jacket style borrowed directly from men's dress. The striped fabric indicated there was no darting or panelling used to shape the garment, contrary to fashionable dress highlighting the womanly curves. The straight silhouette seen in all the jackets is a precursor to fashion trends of the post-war period.

### 5.3 Mountaineering: Extended Boundaries and Individualism



Figure 32: Freda Du Faur, 1895

Photographer: G. Mannering, Canterbury Museum

### 5.3 Mountaineering: Extended Boundaries and Individualism

While recreational sports as tennis and golf developed from social beginnings, more radical departures from womanly pursuits were experienced by an adventurous few. Mountaineering was a recreation which highlighted individual women who extended the conventional boundaries of womanly pursuits. These individuals contributed to changing perceptions of a reconstructed identity for women and recreation, which demanded extremes of physical and mental endurance. To coincide, the dress for these pursuits demanded greater extremes of functionality and consequently displayed greater individuality which extended the generally accepted feminine dress codes.

It was within the isolation of the mountains that a few women asserted a greater degree of freedom from the strictures of respectable dress. Photographic evidence revealed the wearing of bifurcated garments by those who denounced accepted conventions (fig. 61). As revealed in Europe, there was evidence of women climbing in bifurcated garments in New Zealand prior to this investigation period. Jane Maria Atkinson, who made the first ascent of Mt Egmont, is noted as making a daring pair of 'dungaree or canvas trousers' for her climb of Mount Egmont in 1855 (Ebbett, 1977, p. 67). Joanna Harper in 1872, in the Mount Cook area, wore her "riding habit which, looped up, is a splendid costume for climbing" (Harper cited in McCormack Ross, 1989, p. 28). It is assumed that this was thought of as the most suitable form of dress which already existed due to its acceptability in an alternative sport.

This early denouncement of conventional dress was uncommon. The photographic analysis of dress worn for mountaineering showed the predominance of alternative dress components. In the period 1890 to 1912, the jacket, shirt and skirt were the garment types most commonly worn (fig. 52, 61). Written accounts indicated that women wore alternative dress components with alterations made necessary for the functional demands of the sport. Mountaineering was the only sport which showed photographic evidence of shortened skirts (fig. 67). Despite this, other accepted conventions of feminine aesthetics were evident. Photographic analysis showed a range in the degree of angular to rounded aesthetics (fig. 56, 65). Straight line shirts, skirts and bifurcated garments were worn with straight, angular aesthetics, as well as darted and panelled jackets and bodices which gave a fitted, shapely silhouette. However, as seen in the other sports, there were changes towards simpler aesthetics, with less structural and surface embellishments being shown in the latter period (refer fig. 55, 64).

Mountaineering revealed the least number of photographs for analysis of what was worn by women in the selected sports (fig.51). Mountaineering for women was a sport made possible only for a privileged few (Lynch, 1987). Few women had the economic and social freedom to allow involvement. Unfortunately no photographs prior to the 1890s were found for this research (fig. 51). Accordingly, there were few written records of women's accounts in the mountains, including what was worn. This needs to be taken into account when an interpretation was made from a small number of quantitative frequencies. Even though the predominant findings mirrored the trends found in other sports, the nature of the findings reflected the individual women themselves. This chapter highlights some of these individual assertions of dress.

### 5.31 FORRESTINA ROSS

...no Paris toilettes were necessary for the trip. In fact I looked out some old clothes, took a considerable tuck in a serge skirt and invested in a ferocious pair of boots, which weighed down my new kitchen scales in the most alarming manner. Our relations, who looked upon our newly acquired taste for mountaineering as a phase of lunacy, made sarcastic comments about these boots, and insisted on referring to our 'great feat' on the glacier for many days after our return ( F.Ross 1900, cited in McCormack Ross 1989, p. 19, p. 29).



Figure 33: Forrestina Ross and Mrs Maxwell at foot of Hochstetter Dome, Upper Tasman Glacier  
Marion Scott Collection, Hocken Library (reproduced in Coney 1993)

The photograph exemplifies the magnitude of the physical exertion demanded by the strenuous exercise of climbing, which most considered an 'act of lunacy' for women. Forrestina Ross recorded many of her own mountaineering exploits in the 1890s during her career as a journalist and editor of the *New Zealand Alpine Journal* for a period in 1894 (Lynch,1986). Forrestina's accounts and recorded successes illustrate the contradictory nature of the support given in her pursuit of mountaineering. Forrestina often accompanied

her husband, Malcom Ross, on demanding expeditions. Her abilities were acknowledged in his written accounts and the naming of Forrest Ross Glacier in honour of her (McCormack Ross, 1989). Further formal acknowledgment as the first woman to gain full membership of the New Zealand Alpine Club in 1892 was based on her climbing achievements: 1890 Tasman Glacier expedition, 1892 an 8,800 feet ascent of Mount Earnslaw, and an 1892 ascent of Mount Boupland (New Zealand Alpine Journal 1892, New Zealand Alpine Club Qualifications of Members of Section Book). The New Zealand Alpine Club was an exception to the acceptance of female membership in mountaineering clubs. When the club rules were drafted, women were not specifically excluded, hence full membership was allowed from the beginning (McCormack Ross, 1989). Generally other clubs followed the nature of exclusive male membership of the English Alpine Club. Other clubs fought for the privilege until the latter half of the twentieth century (McCormack Ross, 1989). As evidenced in golf administrative structures, there was strong opposition and prejudice in a sport established and defined by men. Graham (1996) noted after the initial acceptance of women in early years, the New Zealand Alpine Club gave little encouragement and failed to be inclusive of women for a substantive period after. On an individual basis, evidence of support was given by male relatives who encouraged women in their common passion. However the underlying premise of women's physical and mental fragility continued to restrict women's achievements. Social conventions ensured women were dependent in the mountains. Generally expeditions were mediated by men, male relatives or guides who led and controlled the circumstances. Malcom Ross wrote of conditions which were supposedly too "dangerous and almost impossible for Mrs Ross to overcome", and retreat was consequently directed (Ross, 1892 cited in McCormack Ross, 1989, p. 10). Frustration of prejudice was noted by Forrestina at being left behind to tend to camp domestics when climbing was considered too demanding (Ross, 1900; Scott, 1943; McCormack Ross, 1989). Despite this, Forrestina was not inhibited by the usual domestic obligations after the birth of her child in late 1890 with subsequent noteworthy climbs recorded after 1892. Forrestina Ross was privileged to have the economic freedom to allow her pursuit of a recreation she enjoyed and shared with her husband.



Figure 34: Forrestina Ross and Joanne Turnbull  
on Tasman Glacier, circa 1900

Photographer: Malcom Ross, Alexander Turnbull Library

Only a few photographs record the exploits of Forrestina Ross and dress details are difficult to define; however, garment types and a few further aesthetic characteristics can be ascertained. The photographs show Forrestina Ross wearing a shortened skirt with blouse and jacket. The silhouette indicates an outfit of dark medium to heavy weight wool, styled in the manner of everyday dress. The jacket has a defined waist most likely shaped by darting and panelling. The outline of the sleeve indicates a fuller sleeve-head in the leg-of-mutton style. The heavy, long skirts worn for social acceptability impeded the movement and were seen as a safety concern during the rigours of alpine climbing. In describing her own dress on one of her expeditions, Forrestina made reference to her shortened skirt which indicated a radical departure from conservative wear.

A scarlet guernsey, close tweed cap, heavy boots with nails, and a very short serge skirt. The skirt was very abbreviated, and the obtrusive way I slipped into the breakfast room that morning and sat down quickly on the nearest chair was the result. I felt shy about my ankles (being seen)... Even though my skirt was short, I found it liable to hook on to a rock at the back as I took a forward step.(R. Hargreaves, 1998, p. 275)

The shortened skirt revealed the large 'ferocious' boots as described by Forrestina. As important as the boots were for the practicality of climbing so was the wide brimmed hat and veil which provided protection for the complexion. Forrestina Ross typified women

mountaineers who wore garments of everyday dress as fashion and propriety dictated, but with necessary adaptations for reasons of practicality and safety.

### **5.32 MAY KINSEY**

With such advantages there is no reason why ladies as well as men with a competent guide should not visit those most distant points on the glaciers which, up to the present, have only been available to the hardy mountaineer... (Dawson, 2001, pp. 160-161)

Such were the words of May Kinsey, who was the most photographed woman mountaineer of the 1890 period. Bee Dawson (2001) described May as "more 'Sunday adventurer' than a true explorer". In notes written by May, she encouraged other women who wished to participate in the less demanding mountain climbs (Dawson, 2001). This was a period when there were growing tourism facilities and transportation (R. Hargreaves, 1998), which facilitated more women to make shorter and less demanding expeditions. Few written accounts were found of May, but there are many photographs due to her father's passions for photography and mountaineering. May obviously enjoyed her father's company and recreational pursuits as the photographs testify. There are a number of photographs which record May involved in other forms of sport, including tennis, golf and cycling. As an only child of a wealthy businessman with keen cultural interests, May was indulged and encouraged to accompany her father and friends on many adventures (Dawson, 2001). Being a highly sociable family with noteworthy connections, May was exposed to adventurous stories of an assortment of well travelled friends (Dawson, 2001). Despite May Kinsey's mountaineering not showing the extreme physical challenge that other notorious women demonstrated, her recreational endeavours were still seen as a social anomaly by the majority at the time.



Figure 35: May Kinsey, outside tent near Hermitage, Mount Cook, 1895  
Photographer: Joseph Kinsey, Alexander Turnbull Library

This photograph, most likely staged by her father, shows May posed with a formal composure amongst strategically positioned camping and climbing equipment. Despite many photographs by Joseph Kinsey of May appearing in a contrived setting, analysis is still useful. What was worn was no doubt indicative of her usual mountaineering dress or her considered combination of garments for the portraiture. May wore a white cotton blouse devoid of any surface embellishment. The blouse is cut with sufficient ease to allow movement in the body and sleeves. The sleeves have a gathered sleeve-head, and increased girth throughout the sleeve length to gather to the plain sleeve cuff. The blouse is neatly tucked into a panelled skirt. The skirt is made of a medium to heavy wool with diagonal weave or a bias alignment. The skirt length appears to be shortened to approximately 30 centimetres above the ground. A stitched hemline indicated a reinforced hem providing greater strength for outdoor terrain and activity. Accessories include the practical leather boots, puttees and gloves. As a symbolic portrayal of the functional and the decorative elements of dress, in one hand May holds a walking stick and the other a bunch of mountain flowers. Accordingly, symbols of dress which denoted conflicting conventional gender coding is relayed through the headwear and neck accessory. May wore an embellished straw boater perched neatly on her head in contrast to a black bow tie. Both accessories were superfluous to the activity but obviously considered important to maintain a respectability of dress and appearance for the photograph. All elements are indicative of alternative dress for everyday wear apart from the shorter skirt length and additions of functional accessories.



Figure 36: May Kinsey (Moore) and Mattias Zurbriggin, 1895  
Kinsey Collection, Canterbury Museum

Archive information accompanying this photograph labelled the photograph as May and Mattias Zurbriggen at camp before climbing Mount Sefton, Westland. The photographic record could have been made prior this climb but the setting, as Dawson (2001) pointed out was most likely the family home with the identification of a neatly mowed lawn, and roof in the background. This photograph showed May in similar dress. She was photographed wearing the same skirt as the previous photograph, which in a standing pose confirmed the shortened length. May wore a white slip-knot tie with the white blouse. The small boater is perched neatly on her head. In addition, May wears a tailored wool jacket. The jacket shows structural embellishment indicative of fashionable styling in the mid-nineties. Flared shoulder bretelles extend the shoulder width over the exaggerated leg-of-mutton sleeves. The moiré satin shawl collar adds a formality to the jacket to which a brooch is attached. Photographed with ice axe in her hands, there is the same combination of functional and fashionable dress elements. The same characteristics of dress are shown in photographs of May and women friends in other photographs.



Figure 37: Joseph Kinsey, May Kinsey(Moore) and friends,  
Tasman Glacier, circa 1895  
Kinsey Collection, Canterbury Museum

### 5.33 FRED A DU FAUR

From the moment my eyes rested on the snow-clad alps I worshipped their beauty and was filled with a passionate longing to touch those shining snows, to climb their heights of silence and solitude, and feel myself one with the mighty forces around me...the over-mastering love of the mountains is something which wells up from within and will not be denied. An unsympathetic environment and want of opportunity may keep this love hidden from its possessor; but alter the environment and give the opportunity and the climber will climb as naturally as the sparks fly upward (Du Faur, 1915 cited in Dawson, 2001, p. 169).

An Australian woman Freda du Faur, was a celebrated mountaineer in New Zealand with the claim to being the first to climb Mount Cook in 1910. Freda was renowned for the number of first ascents and traverses made in the Southern Alps (McCormack Ross, 1989). It was the emotive words of Freda du Faur which allowed an understanding for the freedom sought in this radical form of recreation. Freda Du Faur published detailed accounts of her climbing from the late 1900s onwards with her experiences of the continuing prejudices encountered by women climbers.

One of the greatest inhibiting factors of women's extension of physical participation was the prevalent perception of women's weakness and fragility. Even with a growing number of significant mountaineering accomplishments made by women prior the new century, there remained a disbelief in women's physical competence.

The fact that I was going to attempt Mount Cook leaked out and in consequence I had to face the storm of disapproval and criticism. Everyone was against us: they came at us separately and together to say it was 'madness' or an unjustifiable risk... (Du Faur, 1915 cited in McCormack Ross, 1989, p. 19).

Restriction was encountered through public condemnation and also through the subsequent internalised notions of the women themselves. It is not surprising to note the personal comments of Freda's expressing uncertainty of her own fortitude as a female during some of the more trying moments in her expeditions (McCormack Ross, 1989). However, it was Freda's attention to mental and physical training as preparation that allowed her to earn her success. Her own strength of character and passion for

mountaineering overcame common social beliefs. "An eminent professor in biology has often attempted to convince me that the mental and physical strain of sixteen hours mountaineering is too great for a woman's constitution. I certainly do not agree..." (Du Faur, 1915 cited in McCormack Ross, 1989, p.25).

Alongside the contemporary inhibiting notions of women's physical and mental weakness, Freda was faced with further social implications of immorality. Being a single, independent woman, the prospect of climbing with male guides with no chaperones led to disapproval. A woman travelling alone was seen as rare and an odd event without the added physical and moral risks of alpine climbing. Freda was one of the first to confront the conservative conventions openly voiced at the Hermitage on announcing her expedition plans, with the declaration "...that if my reputation was such a fragile a thing that it would not bear such a test, that I would be very well rid of such a useless article" (Du Faur, 1915 cited in Dawson, 2001, pp. 174-175).

Freda added: ...I sighed, not for the first time in my existence, over the limits imposed on me by the mere fact that I was unfortunate enough to be born a woman. ...I don't wish to pose as a martyr, but merely point out the disadvantages of being a women pioneer even in the colonies, where we are supposed to be so less conventional than elsewhere" (Du Faur, 1915 cited in Dawson, 2001, p. 175).

...for about ten minutes I almost succeeded in wishing that I possessed that useful appendage to a woman climber, a husband. However, I concluded sadly that he would probably consider climbing unfeminine, and so my last state might be worse than my first (Du Faur, 1915 cited in Dawson, 2001, p. 175).



Figure 38: Freda Du Faur, 1895  
Photographer: G. Mannering, Canterbury Museum

This photograph encapsulates Freda's demeanour of strength and determination. The quality of the photograph also allows a close analysis of dress detail. Conventions of dress and appearance remained a challenge for the woman climber. Freda wore a plain white blouse with no additional structural or surface embellishments. A small decorative pin fastened the prim stand collar at centre-front neck. The blouse is neatly tucked into a wool skirt. Freda's skirt was significantly shorter than fashionable dress and any other lower body garments identified with sports during the period. The knee-length skirt revealed the hem of her knickerbockers worn underneath. Puttees were worn to protect and conceal the legs. Far from the critical eyes of the conservative women at the Hermitage, Freda retained her skirt despite its superfluous function. Freda recalled an argument with a Mr Earle who initially refused to climb with her due to her skirt:

...I replied with more vigour than politeness that in that case he would have to stay behind. The skirt in question was so brief that on showing it to Graham, and asking him if it were all right to climb in, he had grinned cheerfully and exclaimed "Skirt ! I should call it a frill" and passed it as harmless... (Du Faur, 1915 cited in McCormack Ross, 1989, p. 32).

Even though Freda had shortened her skirt significantly for reasons of practicality, it was presumably important that she retained her skirt for personal notions of aesthetics and propriety. Her guide, Peter Graham had become accustomed to the inconveniences of women climbers and their skirts. Peter Graham advocated practical solutions:

When fitting out women with these long skirts, I gave them a piece of cord to tie around their waists so they could pull the skirt through it to a convenient length. Safety pins secured it. The guides usually carried a supply of these strong pins for the purpose...(P. Graham, 1965, p. 163)

Freda had devised a skirt with less fabric weight in length and width. The front of the skirt revealed less added fullness with slight flare at the side-seams and a darted front waist. A belt with decorative clasp added a small degree of detail at the front waist. Freda's simple dress with short skirt and knickerbockers reinforced her strong composure. Freda was fully aware of the expectations of dress and appearance and conformed to these on return to the public reception of the Hermitage. Freda went to great lengths to conceal the damaging effects of harsh climbing conditions on her complexion and dressed to expectations. Freda made special note that she dressed for dinner after climbing at the Hermitage in her "prettiest frock" (Du Faur, 1915 cited in McCormack Ross, 1989, p. 19).

Superstitions die hard, and being perfectly well aware that the average person's idea of a woman capable of real mountaineering or any sport demanding physical fitness and good staying power, is a masculine-looking female with short hair, a loud voice, large feet, it also gives me particular pleasure to upset this preconceived picture. In the year of grace 1910 a love of fresh air and exercise is not a purely masculine prerogative (Du Faur, 1915 cited in Dawson, 2001, p. 183).

Freda du Faur overcame many obstacles through compromises and achievements. Freda was fortunate to have independent means which allowed a choice of lifestyle other women could not afford. Once Freda had succeeded in her conquests, the compromises to social conventions became less necessary. The following photograph illustrated Freda's dress in subsequent climbs. Freda wore a woollen jacket while climbing with a similar cut and styling to a man's tailored jacket. There was no surface or structural embellishment or shaped panelling denoting a feminine silhouette. Concerns to preserve a feminine aesthetic remained important. She retained her short skirt worn over knickerbockers, the only significant difference to the dress of her male guide beside her.



Figure 39: Freda with her guide, C Milne on summit of Dampier, 1912  
Photographer: Peter Graham, Weekly Press, Canterbury Museum

### 5.34 CONSTANCE BARNICOAT (GRANDE)



Figure 40: Constance Grande collection (reproduced in Dawson 2001)

Personally I do not believe that a woman can do serious climbing except in one kind of costume-boys' knickers properly cut (not bloomers which are hideous and impractical) and a long loose jersey or coat. Those who cannot bring themselves to the point of discarding the conventional garb of city civilisation after proving it cumbersome - perhaps even dangerous-should let their first ascent be their last. They are decidedly not imbued with the spirits of the true mountaineer (Grande, 1930 cited in McCormack Ross, 1989, pp. 30-31).

Skirts, even the shortest, are almost impracticable in such places...I promptly sent for proper boy's boots, the heaviest procurable, with very thick soles which I had well nailed, and generally rigged myself out as like a boy as possible with a white wool 'sweater', knickers, and puttees to my knees. Except in some such dress the

guide flatly refused the risk of taking ladies; and he was perfectly justified (Barnicoat, 1904 cited in Dawson, 2001, p. 197).

...I wonder if anyone realises, until they try it, the freedom of being without the tempestuous petticoats? Whatever arguments may be urged against a boy's dress for a woman anywhere within the range of civilisation, those arguments do not hold good in the wilds...A real boy's dress is, in my view, far preferable in every way to a compromise such as a so-called 'reformed' costume (Barnicoat, 1904 cited in Dawson, 2001, p. 197).

Constance Barnicoat challenged a number of conventions. Many women climbers made concessions but it was Constance who made the most radical assertions of dress. These were indicative of a number of protestations that Constance made in other aspects of her life. Constance's highly successful tertiary education and career combining politics and literature, allowed her an independent lifestyle, primarily in Europe, few women experienced. Her husband, Julian Grande, whom she married later in life, wrote her biography titled *Constance Grande: War correspondent, traveller, alpinist and imperialist*. His writing showed great respect for her achievements and personal qualities of independence, energy and intolerance to hypocrisy (Grande, 1930). Constance succeeded in conquering many challenges that few or no women had achieved before her (Dawson, 2001).

Her mountaineering exploits were fuelled by expeditions in New Zealand, while returning to visit family. In her own words, Constance relayed her determination to partake in her first experience:

Of course before attempting such an expedition as ours, of the extreme roughness of which it is very difficult, almost impossible to give an idea to anyone unacquainted with trackless virgin country, I had to satisfy the guide that I was fit for the undertaking. At first he shook his head. "Very well, 'I thought, 'you shall shake your head another way before I have done with you, 'which he did. I spent over a fortnight at the Hermitage training as hard as I could about the mountains and moraines and up the great eighteen-mile-long Tasman glacier (Barnicoat, 1904 cited in Dawson, 2001, p. 208).

The expedition was successful. Constance Barnicoat, along with Ada Perkins, and Jane Thompson became the first women to make the transalpine crossing of Copland Pass from the Hermitage to Westland. Constance returned to Europe and furthered her mountaineering experiences on summits considered the most trying and challenging for any individual.



Figure 41: Party to cross Copland Pass. 1903 From left: Constance Barnicoat, J.Smith(guide), J.Clarke(guide), Jane Thompson, W.Tennent, Ada Perkins(kneeling in front)  
W.A.Kennedy Collection, Canterbury Museum, Christchurch.

The photograph recorded Constance in 1903 in a party of three, who made the first transalpine crossing into Westland from the Hermitage via Copland Pass. The photograph showed her wearing the garments she advocated as being essential for the women mountaineer. She wore a white woollen sweater with men's trousers, puttees, boots and hat of masculine style. Any form of frivolous accessory was dispensed with. By adopting men's dress, Constance experienced complete freedom of movement. Trousers which symbolised a significant departure from female respectability and accepted conventions at this time were adopted for common sense functionality.

Peter Graham recalled seeing Constance in the party on Copland Pass. He noted his uncertainty whether it was a man or woman and added "It had rather startled the inhabitants along the Coast to see a woman travelling in such attire" (P. Graham, 1965,

p.70). Constance had strong opinions as to appropriate dress which concurred with her guide whom she claimed refused to take women with him unless dressed accordingly. Later photographs of Constance climbing in Europe show her in the same dress as her male companions. Constance appeared to set herself aside from other women on matters of dress and her own physical attributes and achievements.

I am prepared for contradiction, and even abuse from feminists, when I state the number of women who have climbed throughout a long series of years, long enough to acquire any real skill or knowledge of mountains and glaciers, always has been and still is exceedingly small...few women have a sufficiently sound physical constitution or sufficient physical strength ever to become first-rate climbers. Absolute soundness is probably more essential to the mountaineer than great physical strength...how many women are absolutely sound, physically strong and really enduring? (Barnicoat, 1904 cited in Dawson, 2001, p. 213).

Her views on the abilities of women's strength and endurance reinforced prevalent notions of women's inferiority. Constance possessed rare attributes of an inspiring individual irrespective of her gender who did not allow social opinion to inhibit any form of expression, including dress appropriate for sport.

## 5.4 Cycling: Public Confrontation and Exposure



Figure 42: Cyclists in Greymouth street, circa 1900

Photographer: James Ring, Alexander Turnbull Library

## 5.4 Cycling: Public Confrontation and Exposure

The advent of cycling characterized all of the issues that surrounded women and sport in their search for independence in this period. Simpson (1998) gives an excellent account of the impact of cycling and consequent issues which led to the redefinition of a feminine identity in her thesis titled *A Social History of Women and Cycling in Late-Nineteenth Century New Zealand*. Many writers have claimed the immense emancipating factors of cycling for women worldwide. It was the mass popularity and subsequent public exposure which arose from cycling which contributed to a changing perception of women's identity. Evidence from this research of selected sports validated the crucial consideration of appearance for the acceptance of women's participation in sport. However it was cycling that confronted the individual and public with a dilemma of dress to satisfy functionality, aesthetic, social and moral concerns with greater assault on known conventionalities. The sought ideals for greater freedom in the broadest sense were exposed by mass participation in cycling by women on all levels of social and organisational activity that the sport provided.

Photographs indicate that social display and adherence to fashionable taste remained an important consideration for many women in their cycling dress. A number of women throughout the period wore dresses that displayed the fashionable elements of everyday wear (fig. 52, 61). However, most women's cycling dress signified assertions of change with alternative dress components. During the period 1890 to 1912, the majority of women wore a shirt or jacket and skirt (fig. 52, 61). These garments' characteristics appeared to align themselves closer to fashionable dress than the other sports. Of the selected sports analysed, cycling showed the widest range of simplicity and complexity coding for garments worn in the 1890s (fig. 55, 64). Rather than progressing to simpler aesthetics in the latter period as other sports did, more upper body garments showed a greater degree of structural and surface embellishments (fig. 55, 64). There is a wider variation of surface embellishments, for example appliqué, lace, braiding evident in dress for cycling (fig. 57, 66). These characteristics are not significant in frequency but do indicate a greater reference to more fashionable codes of dress than other sports. Fashionable dress at the beginning of the twentieth century displayed more elaborate dress details than the previous period. In accordance the coding of more rounded aesthetics in the period 1900 to 1912 in upper body garments for cycling (fig. 56) indicated that a feminine silhouette remained important for many women in their cycling dress.

In the 1890s photographic analysis showed a small number of women who wore a bifurcated garment (fig. 66). There was no photographic evidence of bloomers or trousers in the latter period of 1900 to 1912 (ref. 66). During this period radical statements of rational dress had been moderated to accommodate for acceptance in a sport which evoked much public debate. Attention to dress and etiquette provoked less negative attention in a sport that confronted many social conventions concerning women and sport during the period.

#### **5.41 Public Exposure and Prescribed Etiquette**

The popularity of cycling surpassed that of other sports. At the beginning of the 1890s, only three or four women were seen cycling in the main urban centres (Clare Simpson, 1998). The late nineties showed large numbers of women cycling in both urban and rural regions (C. Simpson, 1998). Most of the photographs of women cycling were from the period 1890-1900 (fig. 51). Cycling fulfilled a range of informal and organised activity from recreational social jaunts in the streets and parks, extending to cycle tours, and competition races, and throughout the period a functional mode of transport. The social phenomenon of cycling reflected the technological and economical advances of the period. The mass appeal for cycling came with improvements to the design of the bicycle, and commercial accessibility to women (C. Simpson, 1998). The safety bicycle with pneumatic tyres was easier to ride and less dangerous on rough New Zealand roads (C. Simpson, 1998). Importation and local manufacturing and retail on an increasing scale allowed greater accessibility to middle class women (Barclay, 1977). Cycling became a fashionable, consumer oriented recreation popularised with the publication of cycling papers and increased exposure in women's journals. A phenomenal amount of information was relayed through this media to inform, promote and expose cycling to a growing market. Cycling was endorsed to the public as an enjoyable and healthy exercise to be encouraged in women.

In the early nineties, public reception to this new form of recreation was mixed. Women were viewed in a radical context not experienced or witnessed before. This new image of women didn't align itself with one that was primarily inconspicuous (C. Simpson, 1998). Cycling for women displayed unprecedented extensions of both physical and spatial mobility (J. Hargreaves, 1994). This new form of physical exercise was seen as a departure

from womanly concerns and soon became public property to be exposed to all forms of public commentary. A cycling journalist noted:

No matter how insignificant a woman may be, nor how inconspicuous her garb, nor how desirous she is to escape notice, she is sure to attract attention upon the bicycle. Under other circumstances, such as walking, driving or riding, no one would dare to stare or criticise her, and this too, no matter how gay her gown nor how demonstrative her demeanour. But cycling seems to make her open to comment of the most open sort. The entire army of pedestrians, cabmen and small boys feel privileged to stare at her and pass remarks. Non-cycling women regard her with amazement and amusement. She is *public property*, open to all kinds of comment and criticism (New Zealand Cyclist cited in C. Simpson, 1998, p.110).

The many concerns that arose from women participating in sport were highlighted with the highly visible nature of cycling. The public profile of women engaged in a sport which extended women's physical capabilities beyond moderate exercise defied conservative opinion. Beyond the inhibiting strictures of women's physical competence, there were social and moral concerns aroused by the conspicuous nature of women cycling. These women cyclists appeared morally and physically vulnerable. Riding without a chaperone or family supervision within urban bounds and surrounding country vicinities allowed possibilities of unrestricted friendships for young women (R. Park, 1987). Cycling saw the advent of greater freedom of social movement which went beyond previous experiences.

Middle class Victorian thinking aligned freedom and spontaneity with sexuality (J. Hargreaves, 1994). The strong visual representation of women on the streets with no chaperonage confirmed the fears of a loosening of social standards. Winkworth (1989) discussed how the physical action of women cycling in unrestricted public space, with consequent exposure of the legs and fast physical motion, was considered morally indecent by many. Association was aligned with women of loose morals or prostitution which was a concern of the New Zealand public at the time (C. MacDonald, 1986). Urbanisation had provoked many challenges towards the visibility of women in the public context, and consequently strict codes of legitimised behaviour or etiquette had been devised. The conservative public could not comprehend why women would compromise their moral and physical safety with this newfound sport which openly denied rules of acceptable conduct.

The first women cyclists were confronted with intense verbal and physical abuse (New Zealand Wheelman cited in C. Simpson, 1998) With growing numbers of women cycling, strategies of conciliatory conduct were employed to counteract the negative reactions (C. Simpson, 1998). Contemporary publications for women cyclists made it very clear the essential need of revised attention to conduct and appearances by defining etiquette for safety reasons as well as social acceptability.

#### **Hints to Wheelwomen**

Don't ride without gloves.

Don't wear flaming colours in your hat.

Don't wear a skirt that shows more than eight inches of your boot.

Don't allow your escort to ride inside, nearest the sidewalk. That is your place.

Don't wear more than one colour in your whole costume, including hat and boots. Don't try to ride on a busy cycle path on the strength of one lesson in the academy. Don't boast of the superiority of your wheel. In the slang of the day, "there are others."

Don't walk your bicycle more than is absolutely necessary. It attracts unpleasant attention.

Don't try to keep up a steady conversation while riding. You need your breath for pedalling.

Don't wear club pins outside your coat, and never wear two large crossed flags on your lapel.

Don't make short turns at corners. A bicycle will slip easily, particularly if the ground is dry.

Don't hesitate to offer assistance in case of a spill, whether the unfortunate is of your own sex or not.

Don't ride down elderly or inexperienced cyclists just because you have more control of your machine than they.

Don't rest one foot on the ground and the other on the outside pedal. It will make you look ungraceful, if not worse.

Don't stand in the middle of the road to fix your lantern or pump your tyre, so that every other rider will have to make a wide detour to pass you.

Don't start until you are certain that not only your wheel but your costume is in perfect condition, so that nothing will break loss under the strain of riding.

Don't trim any part of your visible wheeling costume with lace or frills of any kind. Remember that the best dressed wheelwoman is she who is most severely plain in every detail.

Don't hesitate to accept assistance from a man in case you are in trouble with your wheel. That is an occasion when a woman may take well-meant help from a stranger of the opposite sex.

Don't keep on ringing your bell when you see that the driver of a horse is turning out to make room for you. The jangle of the bell may frighten the horse and is sure to annoy the driver.

(NZ Metropolitan Cycle Show catalogue, p.111, Alexander Turnbull Library C17869)

These prescribed instructions for women of proper conduct and appearance were typical of the many rules of etiquette written in cycling magazines and newspapers at the time (*New Zealand Wheelman*, *New Zealand Cyclist*). The same attention to detail was relayed in extended tutorship in a growing number of cycling schools often established in association with retailers and manufacturers (C. Simpson, 1998).

The increased exposure to more frequent heterosexual relations needed careful attention to social protocol. Generally a restrained approach of moderate pace, controlled movement and consideration for others, was advocated. Both conduct and appearance should be quiet and inconspicuous. Etiquette related to conventions associated with ideal feminine traits with repetitive references to maintaining a graceful composure and conservative appearance. The importance of self-presentation was seen as equally important as the cycling protocol itself as evidenced by the number of instructions relating to dress. 'Porowhita', a writer for *White Ribbon* who claimed herself to be one of the first lady cyclists in New Zealand, offered advice and council on matters of riding etiquette and dress:

The weight of the body on the left foot will bring the machine to a standstill, and hold it there while you get off. Do not attempt to get off with the left foot; that cannot be done gracefully, and you surely have a fall, or at all events, if it can be managed, you will not look graceful, and this is what every lady should aim at...for I suppose every woman wishes to look her best on a bicycle, and unless you have perfect confidence in your ability to mount and dismount properly, you will not look perfectly at home on the machine...worst of all, do not sit on the saddle of the machine and push yourself off with your foot. All these are bad habits, and look extremely ugly. The proper way to mount a bicycle is to stand on the left side of the machine, hold it perfectly straight, hold yourself perfectly straight also...and give a light spring into the saddle; but before doing so, give your skirt the needful little twist to ensure it being perfectly straight when you land in the saddle...I should advise that ladies who have not managed to acquire these little trifles which go to make up a graceful whole, should take a few lessons from a lady(if there is one to be found with time and patience to spare) who can give the necessary finishing lessons in the art of cycling ('Porowhita' cited in *White Ribbon*, 1897c, p.9).

Etiquette details of dress and riding conduct alongside safety advice was relayed to novice riders through popular readership in women's editorials and cycling publications. Just as details of fashionable dress were relayed and followed from Britain and America so were affirmations of British society noted in relation to women and cycling.

Some still view it as a most unladylike, not to say unwomanly, thing...our own most noble Queen...actually encourages it in her own family, should go far to dispel this almost unreasonable prejudice...We all know that Her Majesty is one of the greatest sticklers for etiquette in the world, and her aversion to fast and unladylike women is well known...The quieter ladies can dress, and more circumspectly they behave the better for cyclists generally ('Porowhita' cited in White Ribbon, 1897b, p.8).

Photographic evidence showed the majority of women followed the rules of etiquette, wearing restrained, inconspicuous elements of dress. Most adopted the alternative dress of the period with some structural characteristics borrowed from menswear as well as feminine references in embellishment and silhouette.

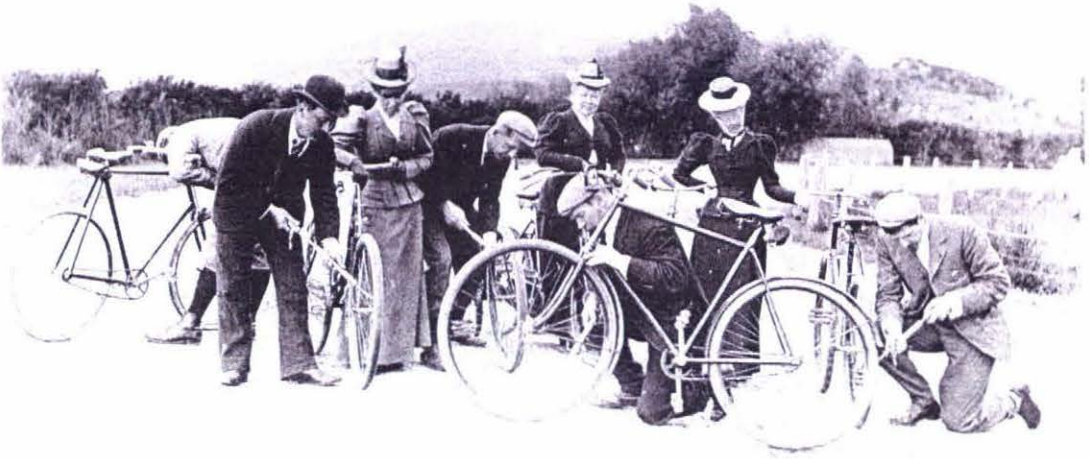


Figure 43: Kiddey family and friends near Halswell

Kiddey Collection, Canterbury Museum

This photograph encapsulates the social protocols of cycling in mixed company. The men attended to the mechanical matters of the bicycles while the women watch with the commonly suggested passive composure. Rough, undeveloped New Zealand roads led to frequent punctures and mechanical problems. 'Altiora' in the *New Zealand Cyclist* suggested to women that men should fix their punctures to avoid damaging fingernails or the soiling of gloves ('Altiora' cited in *New Zealand Cyclist*, 1898). These sentiments may have been agreeable to this particular group of women. In the earlier years a number of photographs show women cycling in the company of men, often with their fathers or other family members or friends enjoying informal excursions. The tailored suit with matching wool for jacket and skirt was a common form of cycling dress. The jackets were commonly hip length worn over panelled skirts extending to almost full-length. The sleeve shapes indicated the period from 1893 to 1896, with pronounced leg-of-mutton sleeve-heads. As seen in alternative dress the sleeve shape indicated greater freedom of movement in the upper-arm. However the foundation structure which supported the added fullness and fitted inner lining did not allow for increased comfort. Likewise, the lower arm ease is minimal as seen in the jacket worn by the young woman on the right. The two younger women wear Norfolk jackets with pleated vertical fronts, belted waists and high buttoning tailored revers. Despite the tailored construction details of the Norfolk jacket and broad shoulder width denoting a stronger composure than decorative fashionable dress of the period, the exaggerated waist was defined by the highly corseted silhouette.

'Porowhita' commented on the wearing of corsets, reiterating medical commentary in cycling magazines conferring the dangers of tight clothing when cycling: "The act of cycling quickens the respiration, expands the lungs, etc., and how is this possible when the organs of the body are so confined in a tight corset that breathing with comfort, even when not riding, is an impossibility" ('Porowhita' cited in White Ribbon 1898d, p.4)? 'Porowhita' suggested discarding the corset altogether or finding alternatives. No photographic evidence showed the discarding of corsetry (fig. 68). Corsets have been found in museums in New Zealand with characteristics which align with those advertised for cycling (Merrick, 2005). They are cut lower below the arm and shorter to free restriction in a seated position for legs and upper body movement. Adaptations of the corset for the purpose of cycling were part of the many attempts to rationalise the inconveniences of everyday dress, while maintaining the known aesthetic conventionalities.

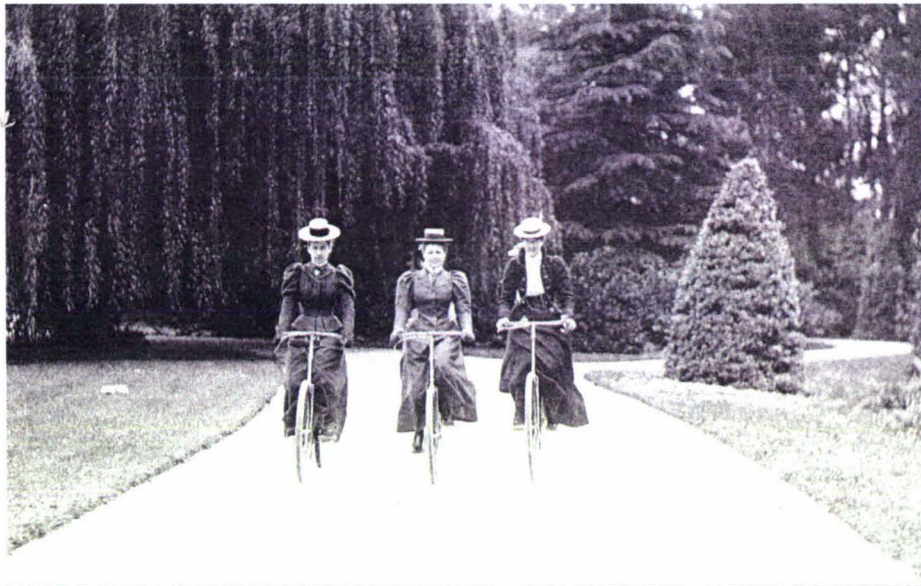


Figure 44: Three women cyclists in Hagley Park, Christchurch , circa 1893  
Kinsey Collection, Canterbury Museum



Figure 45: Five women cyclists, circa 1893

Hayes Collection, Canterbury Museum

The same three women cycling are shown in the group photograph of five women which display the characteristics of dress more clearly. The five jacket styles indicate the detail differences in structural and decorative embellishment evident in jackets worn in the mid-nineties. For some women, the outward display of an elaborate fashionable dress code was maintained for cycling. This is shown in the upper garments and accessorising worn by the women second on the left of the group of women. Decorative embellishment was especially prominent and common in the upper body garments, the jacket and blouse. Contrast braiding decorates the front, flat collar and sleeve hem of the shortened bolero style jacket. This is worn over a blouse also embellished with contrasting braid or ribbon work and decorative buttoning at centre front and frilled stand collar. A striped belt with a silver clasp contributes to embellishment of an otherwise plain skirt. Accessorising with gloves and matching fabric banding and plumage on the hat complete the composition as a highly fashionable outfit. Subtle forms of embellishment have been incorporated in the other jackets. The contrasting braided buttonholes and sleeve cuff add a tailored decorative finish to the woman's jacket on the right. The woman on the left wears a tailored jacket with contrast black velvet top-collar and black hat with matching plumes. The New Zealand Cyclist described the popularity of headwear:

...there is a distinct fancy for the canvas hat with befeater crown. It is new and smart, and withal light to the head. With a navy-coloured cloth gown a red canvas is decidedly becoming, finished with a band and large rosette of black satin ribbon,

the necessary height at the left side being given by a loop of ribbon or a bunch of quills (New Zealand Cyclist cited in Simpson, 1998, p.115).

The other women wore quieter, less embellished forms of dress, incorporating structural features devoid of added surface embellishment. The jackets commonly showed vertical pleating and self-fabric belt in a Norfolk jacket style. The Eton jacket with less structural details was most commonly worn. Fly fronts further concealed surface embellishment of buttons. These characteristics were derived from men's tailoring but a defining feature for women was the curvaceous cut obtained by exaggerated darting and panel shaping through the waist area. The jackets in the photograph all appear to have been worn over white cotton shirts. A writer in the *White Ribbon* indicated alternatives for cycling:

Some ladies prefer a Norfolk body...others again like a blouse of some light material...I decidedly prefer a skirt and jacket of the same material. When you have this you can either wear a blouse, vest or front, and I have always found that the loose sleeves of the jacket are much cooler even on a hot day than a blouse, that is if you have only a front or vest ('Porowhita' cited in *White Ribbon*, 1898g, p.10).

Similar attention was given to the suitability of skirts for cycling with detailed descriptions in women's editorials. Of primary concern was the appearance of the cycling skirt to provide a flattering look.

A pretty style of skirt for riding is one which fastens slightly at the side, towards the front, a row of buttons at either side, the upper part of the front width giving a nice finish. The top of the front width should not be too wide, as the narrower it is, and the closer the buttons are together, the more slim will the appear the figure of the wearer. This skirt should have a single box-pleat at the back, so arranged that it forms an opening for the saddle, and the skirt falls gracefully on either side of the machine (New Zealand Cyclist cited in C. Simpson, 1998, p.116).

This styling is evident in the photograph of five women cyclists. Photographic analysis revealed an off-centre fastening and buttoning on skirts for cycling (fig. 66). It is assumed that this was a popular style as it was prescribed commonly in advertised patterns in American, English and consequently New Zealand publications. Many details were given to

accommodate for the long skirts which caused problems for movement and entanglement, as well as the immodesty of revealed legs. These descriptions allow an understanding of the adaptations made to the interior construction of the skirts unseen in photographic analysis.

A well cut skirt is indispensable, and there are many makes, all claiming to be the best. My own experience, after several years and many trials of different kinds, has resulted in the adoption of one cut by a dressmaker who is a cyclist herself, and, therefore, has a proper idea of what is wanted. This opens at each side, and has no opening whatever down the back. This serves a double purpose, for it prevents the cold wind striking on one's back when riding with it behind, and also prevents any chance of catching on the saddle when mounting or dismounting. It also looks much better on the machine. The skirt should be fastened on each side with three buttons, and have a pocket on either side also.... The lining of the skirt should be carried right down to the bottom, and there should not be any foot lining at all, no seams of any kind, and no braiding binding the skirt. On either side should be placed two eyes to fasten the elastic bands for keeping the skirt down in windy weather; if the skirt is properly cut it will keep down in ordinary riding. The said elastic bands can be obtained ready made at many shops, and are called "The Fixit" dress holders, but any lady can very easily make them. Two pieces of elastic are required, one for the ankle and the other to fasten to the eye in the skirt. The shape is like a T, and when not in use they can be hooked up to the outside of the skirt out of the way. Use safety dress hooks....I see many ladies indulging in a very dangerous practice, and that is fastening the skirt to the shoe, or round the foot....There are many opinions as to the weight of the skirts, but my own opinion is that a skirt somewhat heavy in texture keeps in place and hangs much better than a light one. If it is properly fastened to a body or blouse the weight hangs from the proper place, that is the shoulders, and is not felt by the wearer at all ('Porowhita' cited in White Ribbon, 1898f, p.10).

These adjustments of dress which addressed the impracticalities were internal to the construction, maintaining the outward aesthetics known and accepted by the majority. The matter of dress for cycling, just as it was for everyday appearance, was promoted as a primary tool for women to maintain an attractive and respectable social identity. For the majority, it was still possible to wear the simpler, unobtrusive garments from everyday

dress to retain a respectable appearance. Even in the context where women were cycling in a less public environment the same dress types and components were worn.



Figure 46: Single woman on tour, circa 1894  
Canterbury Museum

Cycle touring became a popular form of recreation despite the physical demands of long distance riding and difficult road conditions. The slower pace and absence of any competitive elements appeared to allow greater acceptance. A number of women have been recorded as having cycled long trips throughout New Zealand (C. Simpson, 1998). Advice was given for touring including dress in newspapers and cycling publications (*New Zealand Wheelman*, *New Zealand Cyclists' Touring Club Gazette*, *The New Zealand Cyclists' Touring Club Pocket Book and Diary*). The *New Zealand Cyclists' Touring Club Pocket Book and Diary* made the following suggestions: "...first, wear nothing but pure woollen garments; secondly, have them well cut; thirdly, do not overclothe the body; and, fourthly, in the event if a long ride, take a change or send one on to your stopping-place" (*The New*

*Zealand Cyclists' Touring Club Pocket Book and Diary, 1897-98, 1898, p. 41*). The garments and accessories advocated were practical to ensure warmth and protection for changeable weather conditions. Flannel shirts and lightweight wool serge or tweed skirts were suggested with the advantage of being lighter (Otago Witness cited in C. Simpson, 1998, p. 91). Accessories were recommended that fulfilled practical considerations while retaining the etiquette of appearance.

....A light weight cycling cape can now be obtained almost anywhere, and it is an easy matter to strap it on to the handle bar when going on a journey....many wear canvas shoes and they look very nice when new, but in the event of rain coming on are anything but safe or comfortable. Thin shoes are also ridiculous for our New Zealand roads; they are all very well for park riding, but we have such a changeable climate that we ought to be prepared for rain whenever we go out. The most comfortable shoes I have ever tried are the Kangarette; they bare made of kangaroo skin, and never lose their shape or become in any way uncomfortable, and it is possible to walk into a shop and purchase a new pair...For cycling it is much better to wear shoes, for then the ankle can have full freedom so necessary not only to make a good but a graceful cyclist ('Porowhita' cited in White Ribbon, 1898h, p.10)

While practical advice was common, maintenance of customary femininity in dress and appearance was upheld. An editorial in the New Zealand Graphic praised a handle-bar toilet case, containing a mirror, powder puff, scent bottle and curling irons: "by dismounting and using her bicycle lamp to heat the irons, the feminine cyclist may restore her curls before returning" (New Zealand Graphic and Ladies' Journal cited in Coney, 1993, p. 117).



Figure 47: Studio photograph of three young women and cycles, Nicol group, circa 1905  
Photographer: Tyree, Nelson Provincial Museum

The turn of the century saw a greater acceptance of involvement of women in cycling. Simpson (1998) claimed that as time progressed generally less attention was given in cycling editorials to the earlier protocols of etiquette. Photographic evidence revealed the continued display of garment characteristics which corresponded to prescribed protocols. Alternative dress components associated with the 'new woman' were predominantly worn, but displayed a variation of structural and surface embellishments as seen in fashionable dress.

## 5.42 Calls for Radical Dress Reform

Contemporary commentary addressed the practicalities of dress for other sporting activities but it was cycling which publicly brought to attention the possibility of rational dress. Due to the blatant impracticalities of fashionable dress for cycling, dress became one of the most controversial issues. Ryan (1983) claims that cycling was the catalyst in the move towards women's participation in more active sports, attributing this to reforms in dress. Changes in dress were instrumental and symptomatic of interplay of factors. It would be difficult to assume the relationship between women's extended participation in sport and reform dress could be explained in such simple, unilateral terms. There is no doubt that the early women cyclists who strongly advocated and wore knickerbockers as a more sensible dress for cycling exposed the rationality of dress for physical exercise. The bifurcated lower garment spurred substantial public debate in newspapers and popular cycling magazines. The push for rational dress gained greater impetus than it ever did as its inception in bloomer form in preceding decades. Despite the significant advances of the design of the safety bicycle, it was still considered dangerous with numerous reported accidents.

Advocates of reform dress seized the opportunity to show the impediments of conventional dress for greater physical demands and functional safety of cycling. The arguments for adoption of the masculine dress arose in the context of women's new position for freedom. A female writer who contributed to the column *Women of the Wheel* in the New Zealand Wheelman showed the close relationship regarded by some on these issues.

I for my part strongly affirm that girls must have practically the same vigorous muscular schooling that boys have, if they are to grow up into women fit to be the political equals of men... The matter will therefore stand on the same plane as dress reform, and the earnest study of politics, and it will belong more to the coming or new woman than to the old regime ("Women of the Wheel" cited in New Zealand Wheelman, 1893, p.5).

Cycling became associated with a freedom beyond the benefits of increased physical exercise. There were many contemporary accounts of the pleasure and exhilaration gained by the newfound experience. Many viewed cycling as a statement of social emancipation. The wearing of bifurcated garments by some brave enough to combat the antagonism was

an overt expression of this sought freedom accepted only as a male prerogative. The women who publicly wore knickerbockers for cycling were seen to be the strongest proponents of dress reform and social emancipation (Malthus, 1989).

In the *New Zealand Graphic and Ladies' Journal* 1893, Alice Burn urged women living "in a land of such promise, and in an age of such rapid development" to acknowledge that their "flowing garments" were really "symbols of enslavement...-the swaddling clothes of a sex that has not yet asserted its right to perfect freedom".

Those who raise objections on the score of immodesty should beware lest they only succeed in laying themselves open to a charge of puriency. These same individuals would probably express nothing but surprise to hear the modern evening dress for girls termed immodest or immoral...Indeed, there are those who see in the general adoption of the rational dress a new era of modesty and morality that shall tend to make these virtues a fixed quantity not dependent for its quality on the clothes its women wear. We might just as well agitate to have men put back into skirts on the plea of immodesty as refuse the new athletic dress for women on that pretence (Burn cited in *New Zealand Graphic and Ladies' Journal*, 1893, p.663).

Alice Burn strongly advocated the bifurcated knicker suit in serge or tweed as a healthier and more comfortable alternative to conventional attire.



Figure 48: Misses Walker, 1895

(New Zealand Graphic and Ladies' Journal, 9 Feb 1895, p127, col.2)

Reproduced by Auckland Institute and Museum

The Walker sisters are photographed in full cycling dress. Both jackets are tailored in men's fashion in cut, silhouette, and design detailing. The jackets show little shaping and suppression through the waist. Design detailing is minimal with no surface embellishment. The jackets differ in collar style, one with a high buttoned neckline and turn-down collar and the other with a high buttoned tailored rever. The sleeve type is characteristic of a men's jacket, being a set-in coat sleeve with a three buttoned tailored vent at the cuff. The jackets are neatly buttoned up over a shirtwaist and tie. The knickerbockers are cut with ease for movement and are held below the knee with elastic. The knickerbockers clearly defined the legs along with the black stockings that covered the leg from knee to ankle. Flat riding shoes completed the functionality of the cycling dress.



Figure 49: Blanche Lough in cycle racing dress, circa 1896  
Photographer: A.E. Preece, Canterbury Museum

Cycle racing represented the extreme of women's involvement in cycling, both in appearance and conduct and consequently negative reaction. Racing in serious competition exceeded the public's tolerance for what was considered acceptable as a respectable female identity. When Alice Burn entered a road race in the early nineties, publications were inundated with fierce debate. Again commentary saw a direct reference of cycling and wearing of knickerbockers as a protest for advancement for women's rights. It was apparent that women's physical aptitude was not a considered attribute in competitive cycling. The *New Zealand Wheelman* reported on a Ladies' Cycling Carnival at Lancaster Park and lady competitors at a general cycle meeting in Christchurch three years later (*New Zealand Wheelman* cited in C. Simpson, 1998, p.83). Comments from the *New Zealand Wheelman* editor indicated the prejudices of public sentiment. Cycling racing was

not publicly accepted unless seen in the form of novelty racing rather than serious competition. The popularity in numbers of spectators at the ladies' races was most likely out of curiosity rather than support.

Wearing knickerbockers and cycling threatened to "revolutionise all pre-conceived ideas of femininity" ('Figaro' cited in *New Zealand Graphic and Ladies' Journal*, 1897, p.65). Exhibiting a radical change of dress was not possible by the majority of women. The fact that 'Porowhita', writer for the column *Cycling Notes* in *White Ribbon* the feminist publication of the period, is scathing of women cyclists in knickerbockers, indicates the lack of support for reform dress. 'Porowhita' writes:

...it is every woman's duty to make herself look as nice as she can, and I have not yet come across a becoming rational dress costume. ...One afternoon, when staying in the country with some friends, word came that some cyclists were riding past the house, and of course we all rushed to see them pass. The back view of their knickerbockered legs struck me as particularly comical, and I at once asked my friends if we should look like that if we adopted it. The idea had never entered their heads before, and we all unanimously agreed that we would stick to our skirts at all costs...Women cannot afford to sacrifice everything to so-called comfort, and I think all right thinking people will allow that the skirt adds much to women's dignity, also that the ladies always look more graceful on their machines than the gentlemen do. Take away the skirt you certainly take away this grace ('Porowhita' cited in *White Ribbon* 1893a, p. 4).

An article in the *New Zealand cyclist* commented on the continued lack of support for knickerbockers late in the decade.

A leading manufacturer prophesied some time ago that in a few years no more women's wheels would be made, because all women would then be wearing bloomers and divided skirts, and riding diamond frame machines. So far, however, the tendency is rather the other way. The knickerbockers cycliste (sic) is fast disappearing, ladies cycling dresses are made as near perfection as possible, and fully meet the necessities of the majority of women. As far as the scorcher and the female athlete, they may still make themselves conspicuous if they like, but the women of good taste will pursue the even tenor of her way in a becomingly-made

coat and skirt for many years yet (New Zealand Cyclist cited in C. Simpson, 1998, p. 150).

Many editorials described bifurcated garments as ugly and unbecoming. Attempts to change the conventional aesthetics of women's dress by the more radical reformists were unsuccessful.

#### **5.43 Conciliatory Action-Alternative Dress of the 'New Woman'**

Park (1989) questioned the relationship in England of the dress reform proponents, feminists and women sportswomen, commenting on the incorrect assumptions of direct correlation that many assumed. The beginnings of cycling in New Zealand showed a strong alliance between these components. MacDonald (1993) claimed that Christchurch was the home of the most progressive women's organisations, and many of these members also took up cycling. Christchurch gained the reputation in New Zealand as the cycling town initiating larger numbers of women cycling (C. Simpson, 1993). The Atalanta Club was established in Christchurch in 1892 and was the first all women's cycling club in Australasia (C. Simpson, 1993). The cycling clubs for women provided cohesion and legitimacy for women who wanted to pursue cycling during a time when general support wasn't given, with organised recreational and social events. Many of the named members were highly involved in other political and social organisations. Women who founded the Atalanta club included Kate Walker and Alice Burn, were also leading exponents of dress reform. Club minutes from early club meetings highlighted the debate of dress for club uniforms. Members were fully aware of the public's antagonism towards cycling and reform dress. When knickerbockers were proposed for Atlanta Club, a letter to the Christchurch Press declared:

The bicycle makers here have supplied several ladies with machines adapted to their dress, and I think the ladies are very well content with the present arrangements, and a good majority are determined to resist adapting any uniform that a lady would hesitate to wear (Christchurch Press cited in Wood, 1974, p.70).

The group itself had mixed reactions to the strong assertions that reform dress symbolised. Dress reform was one of the most radical components of emancipation movement (C. MacDonald, 1993) and the Atalanta club became strongly associated with a

political agenda. However, not all the women in the club shared the same political affiliations. Due to its controversial nature, it was decided that the subject of club uniform be postponed until 1893. The members of the club were instructed to wear club colours and an emblem to signify membership (Christchurch Press cited in C. Simpson, 1998, p.78). Later records show a unanimous decision that none of the members could appear in rational dress due to the extent of negative public reaction. (New Zealand Wheelman cited in C. Simpson, 1998, p.78). The same conciliatory actions were employed by the Merimo Ladies cycling club the same year. The prohibition of rational dress by these earliest clubs experiences set precedent for others in the country to follow (C. Simpson, 1998).

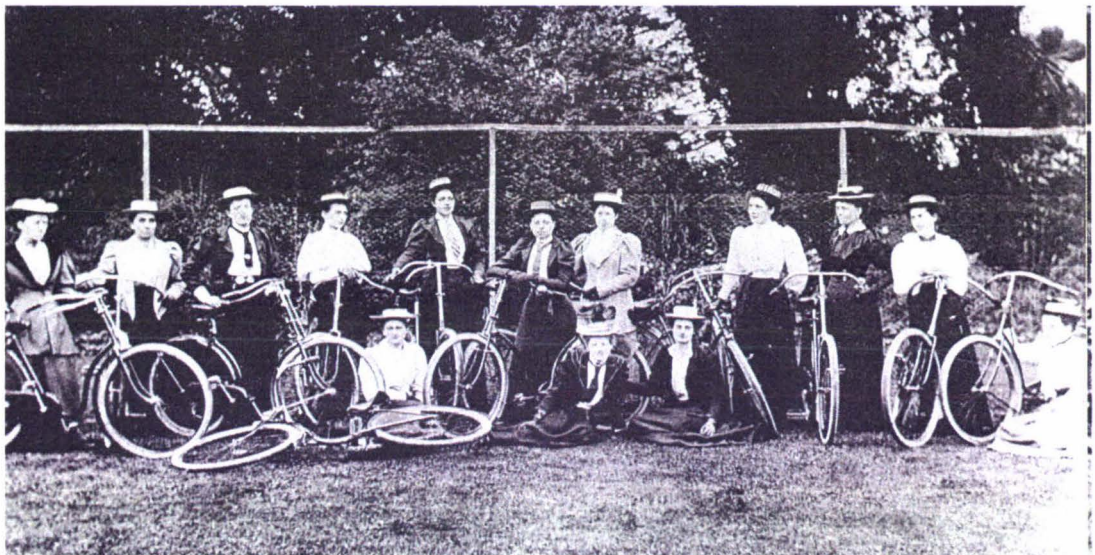


Figure 50: Atalanta Cycling Club 1895, formed by the first women cyclists in Christchurch in 1893  
Included Alice Burn, Kate Wilkinson, Mrs Harry Thompson, Mrs Stace, Miss Boyd, Blanche Lough, twin sister Bertha Lough, Miss Thompson  
Reproduced by Canterbury Museum

The women in this photograph all wear a combination of tailored jacket, blouse and skirt or shirt waist and skirt. These garments of alternative dress were adopted by all of the members. The plain boater was the hat style commonly worn. This was considered a conciliatory action of appearance management to allow an acceptance of what was considered a new sport in the early days of cycling. The public was accustomed to seeing this combination of dress for other forms of social and public activity. As long as propriety was maintained with a moderated attention to dress and conduct, cycling as a sport for women could receive greater acceptance.

For most, the donning of a bifurcated garment sacrificed a woman's femininity. However, other arguments of less visible rational dress were promoted. Woollen undergarments for warmth were advocated and interestingly, knickerbockers, if concealed under the skirt.

Of course it is understood that knickerbockers under the skirt are worn. They can be procured in many materials and makes, but for comfort I prefer the knitted ones. They can be made of finer wool for summer wear, and never ruck up uncomfortably under you on the saddle. Some ladies have a fancy for the tweed or surge, but to my fancy they are not so pleasant to wear for long distance riding ('Porowhita' cited in *White Ribbon* 1898e, p. 4).

Other references indicated that knickerbockers were worn under skirts (*New Zealand Cyclist*, 22 October 1898, p. 10). Cycling fashion became a branch of general fashion and many tailors invented a bicycle costume (*New Zealand Cyclist*, 29 January 1898, p. 5). Other designs were devised, consisting of wide divided skirts and pull-ups. It can be assumed these adaptations were more acceptable with less debate found in published sources. Simpson (1998) claimed the divided skirt was deemed more acceptable with the cycling magazines promoting new patterns. Divided skirts were made to look like skirts when off the bicycle. There were convertible versions, including a design which the skirt could be pulled up with a series of ribbons and hooks. When riding, the skirt could be pulled up to reveal knickerbockers underneath, or when walking dropped to give the appearance of the fashionable skirt (C. Simpson, 1998). Photographic evidence could not show the extent to which women wore the concealed knickerbockers. However it was strongly evident that the majority of women chose to wear dress for cycling which signified the desire for changes without overt assertions which undermined acceptability.

## Conclusion

This research has revealed the importance of a managed appearance to retain acceptability of a changing identity for women. Increased participation in sport represented changes towards greater public participation and social freedom in a broader sense. Predominant ideology created much prejudice and ambivalence to women's participation in some forms of physical activity. This research confirmed other studies which highlighted the sportswoman as a social anomaly during this period. A managed appearance in the form of strategic action contributed to changing notions of traditional femininity. This study reinforces the ability of dress to define and redefine an individual's identity and to maintain and alter a system of beliefs. Dress was used to communicate assertions of change within parameters of social acceptance.

The earliest photographs showed women playing sport in dresses which displayed the same attributes of fashionable dress. Dress showing embellished structural and surface features and rounded components was an accepted feminine aesthetic for social display. Photographic analysis of dress for sport indicated a progression towards dress which showed less surface and structural embellishment and increased functional features. The predominant dress for sport consisted of dress components which were an aesthetic associated with the 'new woman'. This alternative assertion of dress was symbolic of the greater degree of freedom women were gaining in the wider public arena. The combination of feminine and masculine symbols in dress portrayed an extension of traditional roles of feminine experience. The dress of the 'new woman' showed progressive changes without making radical assertions. Within early cycling photographs and editorial comment there is evidence of a strong relationship between sporting activity, dress reform and feminist assertions. However attempts by women to wear bifurcated garments for cycling and mountaineering antagonised the general public who feared the masculinisation of women's dress and the consequent revision of a feminine identity.

Photographic analysis of garments and characteristics of dress reflected the different social circumstances and conditions of the particular sports. Tennis represented the earliest photographs of the selected sports available in archival sources. This period showed a closer affinity to fashionable dress with more elaborate elements of surface and structural embellishment. Tennis began and continued to fulfil a social role which demanded the aesthetics of social display. It was not until the turn of the century that photographic evidence for tennis showed a predominance of simpler garments in the form

of alternative dress components. This was highly evident in photographs showing women who participated in levels of national competition. It was in the late nineteenth century that the growth of sports organisation into clubs and competition signified progressive changes in the nature of women's sport. Dress for golf was strongly characterised by a uniformity of alternative dress components and features throughout the period. Institutionalised practice appeared to dictate a regularity of dress. In contrast, coding of aesthetic qualities of design simplicity/complexity, and angularity/roundness showed a wider representation in cycling. Cycling fulfilled many informal and organised activities including a means of transport. In accordance, greater public exposure demanded greater attention to etiquette and social expectations in dress. In contrast, the private nature of mountaineering allowed more individual assertions of dress in response to functionality. Despite the differences pertinent to the individual sports, tennis, cycling, golf and mountaineering dress all showed assertions of change with alternative dress components towards the latter part of the research period. This dress code maintained restraint with references to conventional feminine aesthetics. Symbolised elements of change and continuity were expressed. Combined aesthetics and gendered symbolism in dress for sport asserted progressive changes within parameters of social acceptance.

This investigation has provided a useful record of women's dress for sport during the late nineteenth century and early twentieth century in New Zealand. During this study it became evident there were a number of areas where this research could be furthered to extend the study of historical dress. The same method could be utilised for analysis of dress for sport and/or fashionable dress in subsequent periods. Accordingly, this research has only highlighted the dress worn for selected individual sports. Further investigation of team sports available to women during the same period would substantiate or provide alternative outcomes in a comparative study. Other contextual research could lead to the study of dress worn by Maori women. This study reinforces the ability of dress to derive characteristics and perceptions of a specified time period and provide us with detailed insights of the lives of women within our culture.

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'Altiora' (1898, April 16). *New Zealand Cyclist*, p.7.

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'Porowhita' (1898d, January). *White Ribbon*, p. 4.

'Porowhita' (1898e, January). *White Ribbon*, p. 4.

'Porowhita' (1898f, February). *White Ribbon*, p. 10.

'Porowhita' (1898g, July). *White Ribbon*, p. 10.

'Porowhita' (1898h, July). *White Ribbon*, p. 10.

# Appendix

## A.1 Graphs

Figure 51: Number of Women Analysed for the Selected Sports

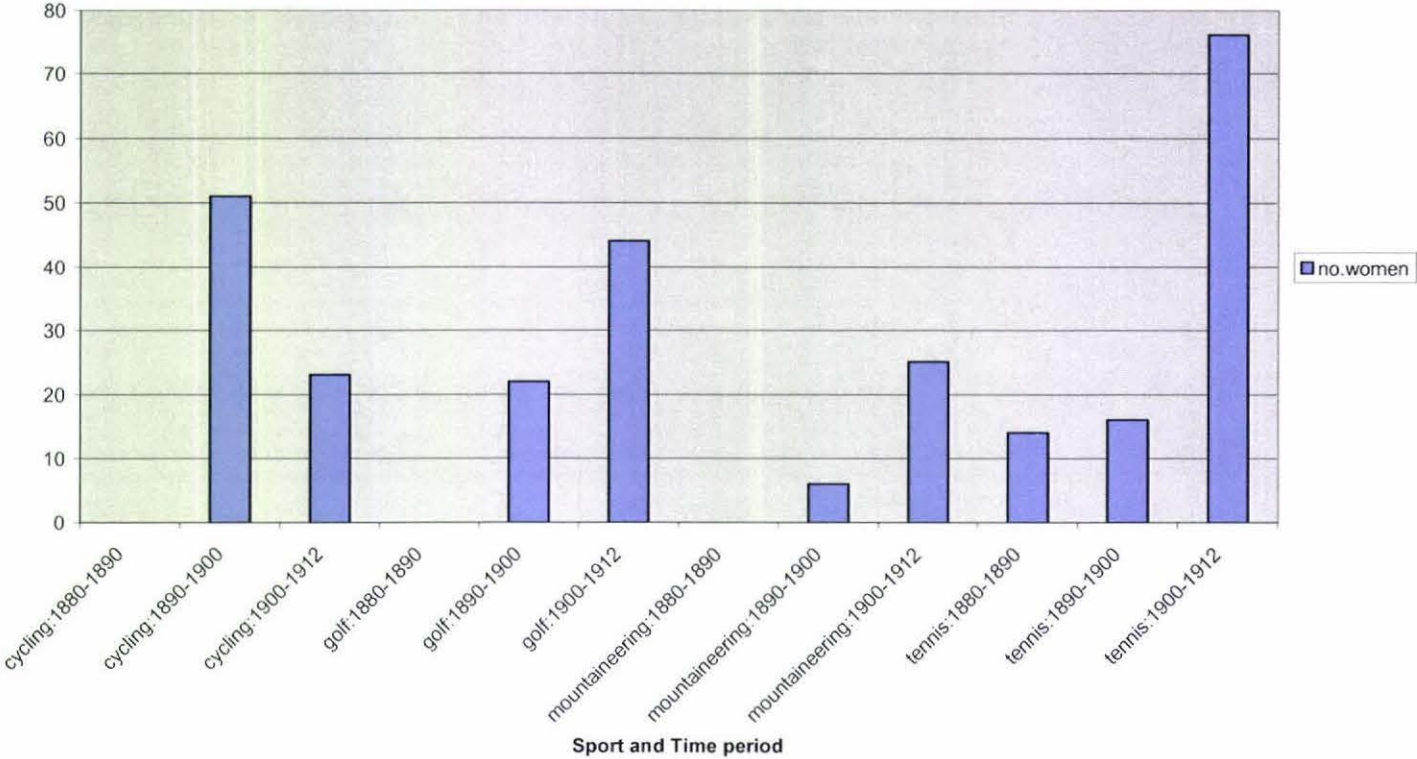
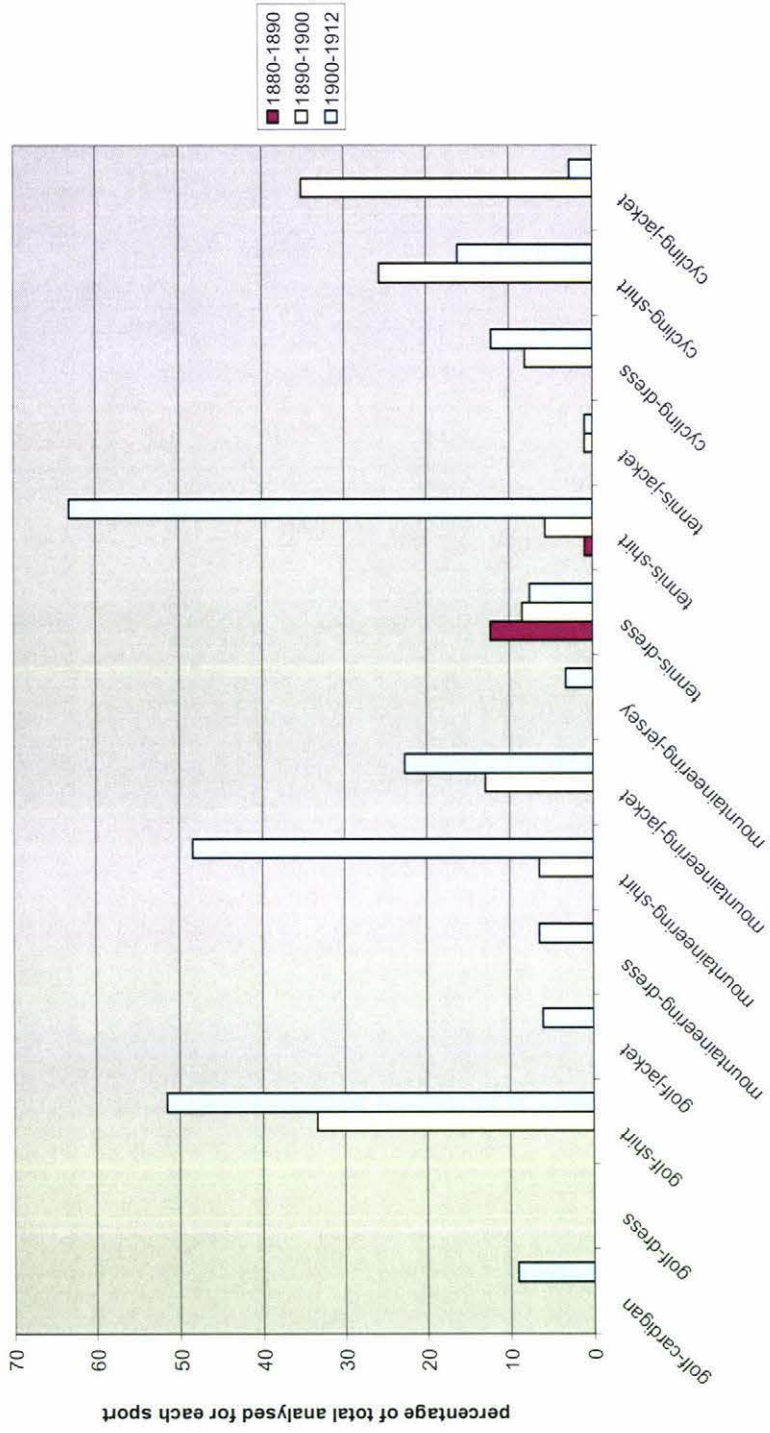


Figure 52 : Upper Body Garment Types for the Selected Sports



**Figure 53: Upper Body Garment Hue**  
 (refer to table 3 for coding descriptors : 1, white - 5 , black )

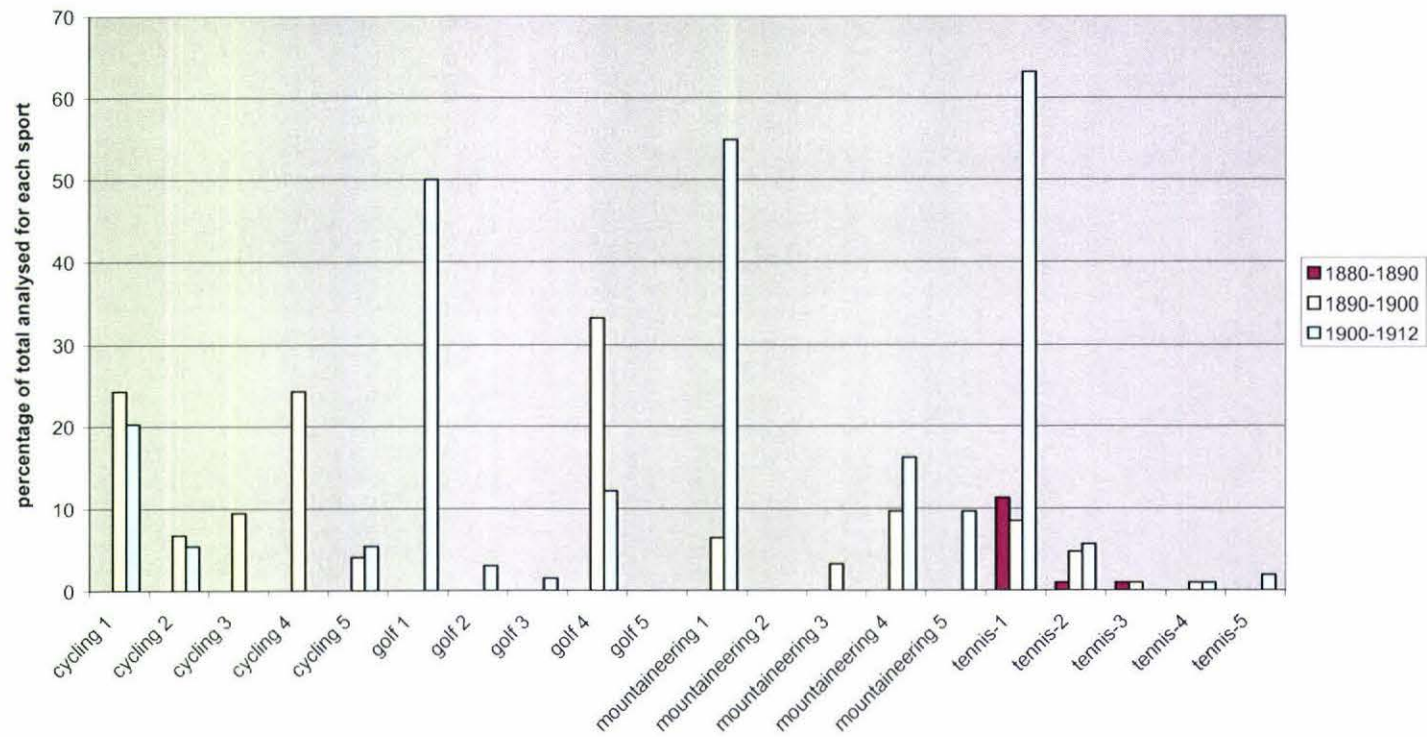
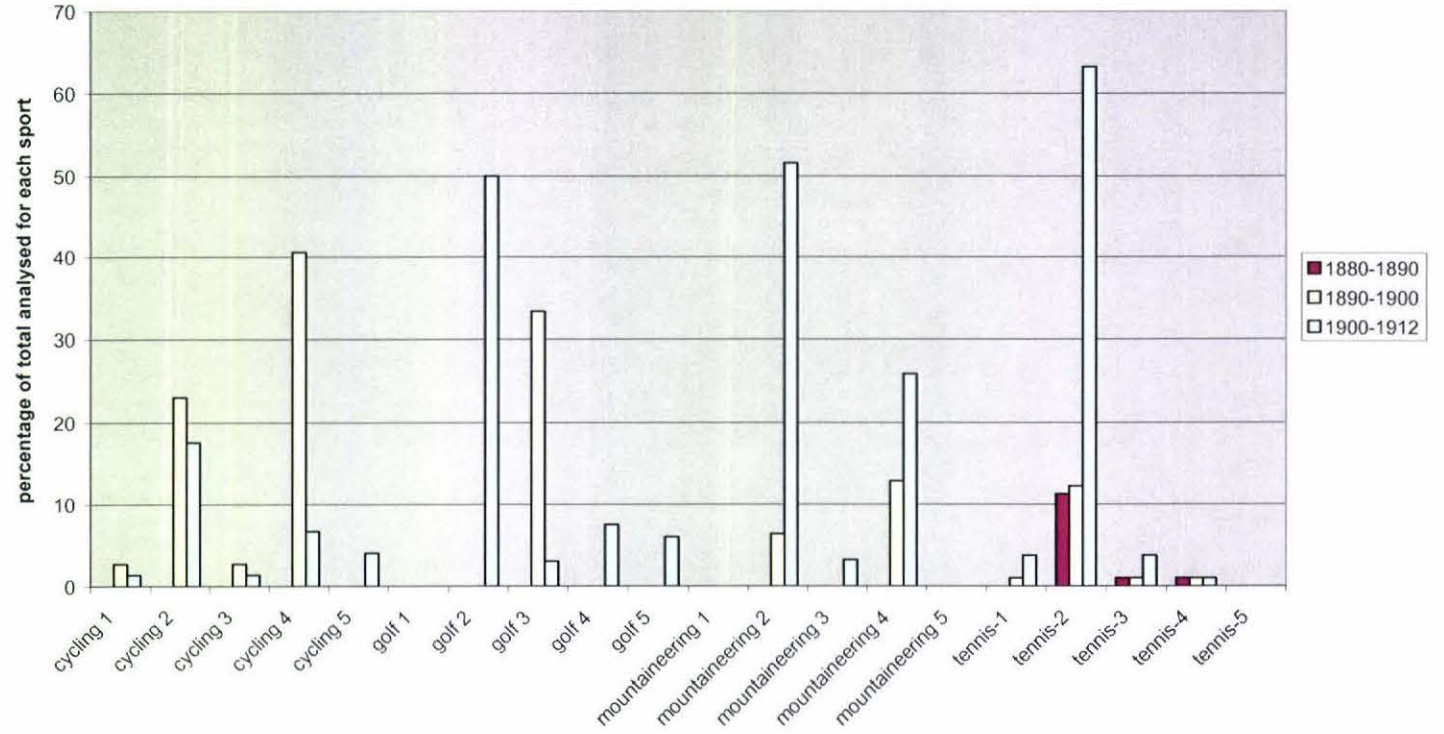


Figure 54: Upper Body Garment Fabric Weight  
 (refer to table 3 for coding descriptors: 1,light - 5,heavy)



**Figure 55: Upper Body Garment Simplicity-Complexity**  
 (refer to table 2 for coding descriptors: 1, simplicity - 5, complexity)

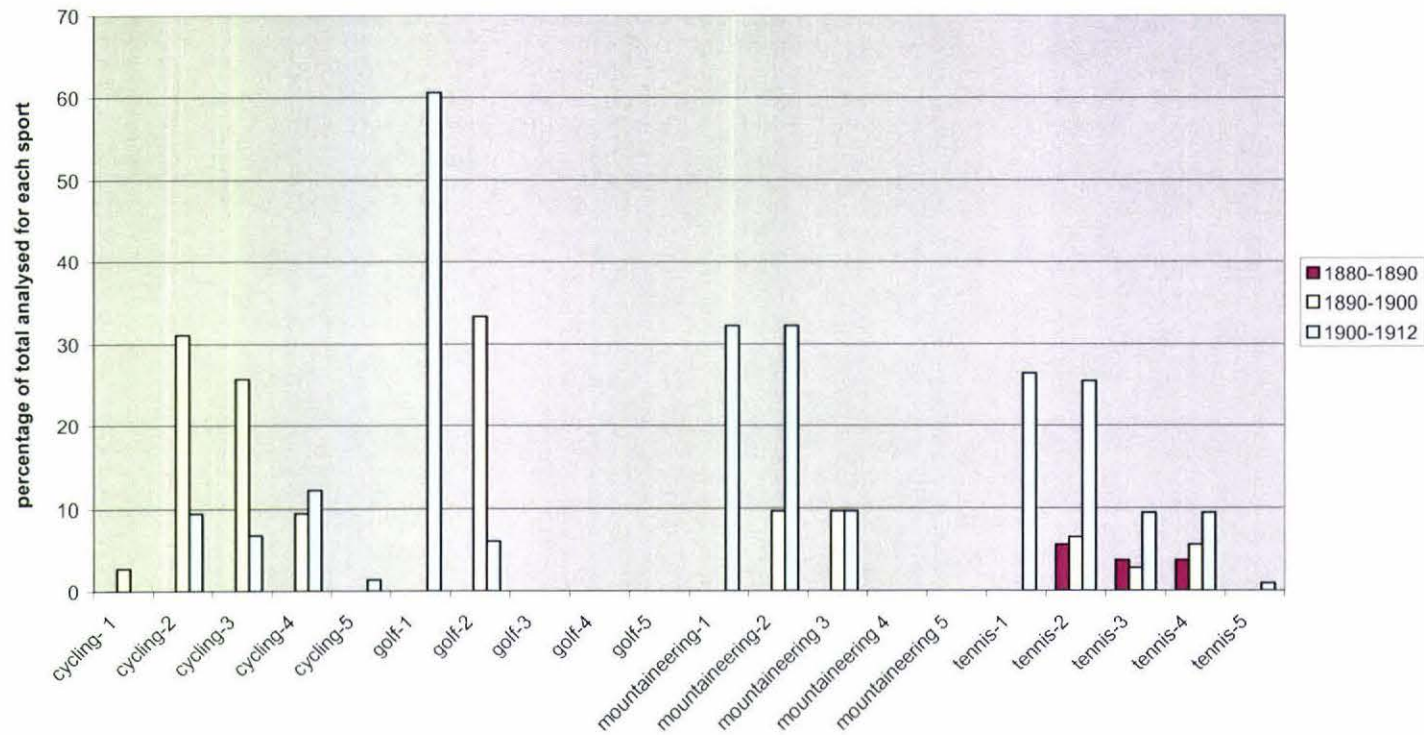


Figure 56: Upper Body Garment Angularity-Roundness  
 (refer to table 2 for coding descriptors: 1, angular- 5, round)

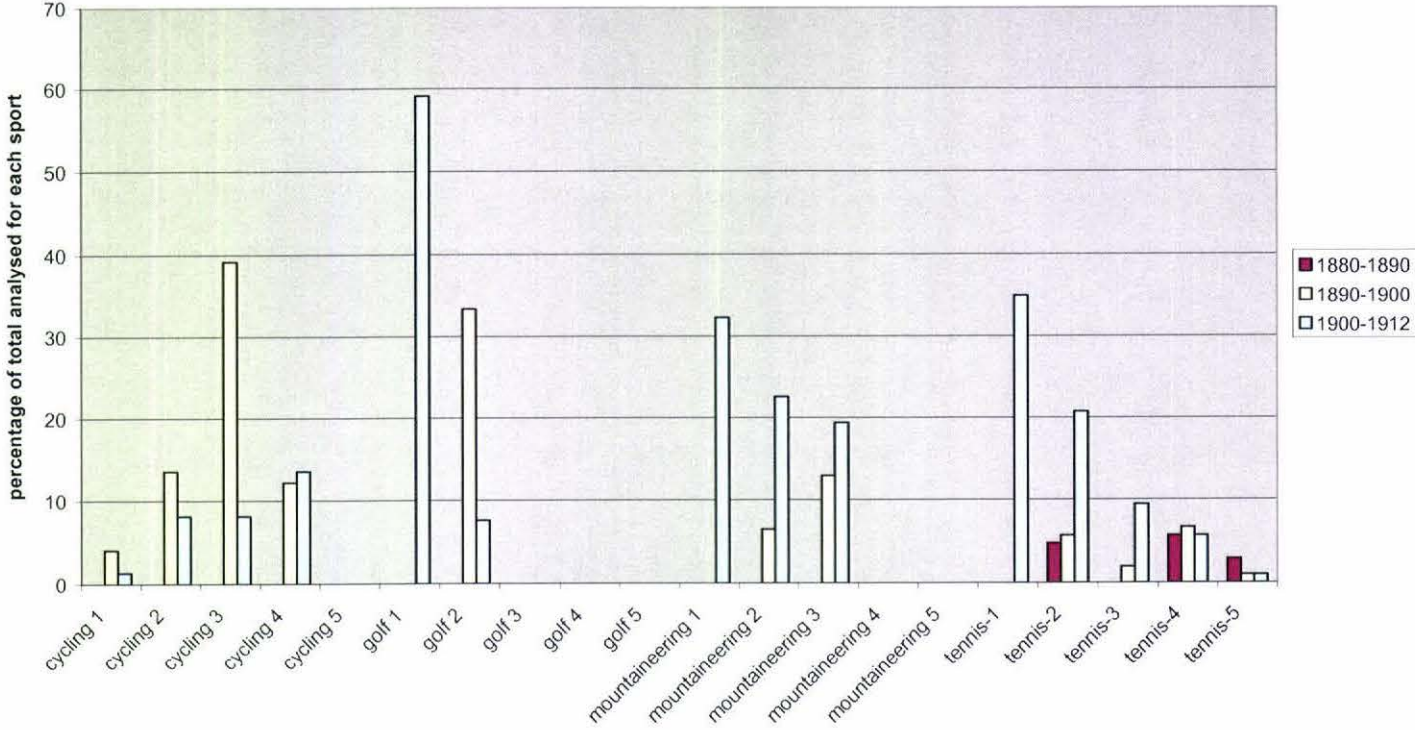


Figure 57: Upper Body Garment-Bodice Characteristics

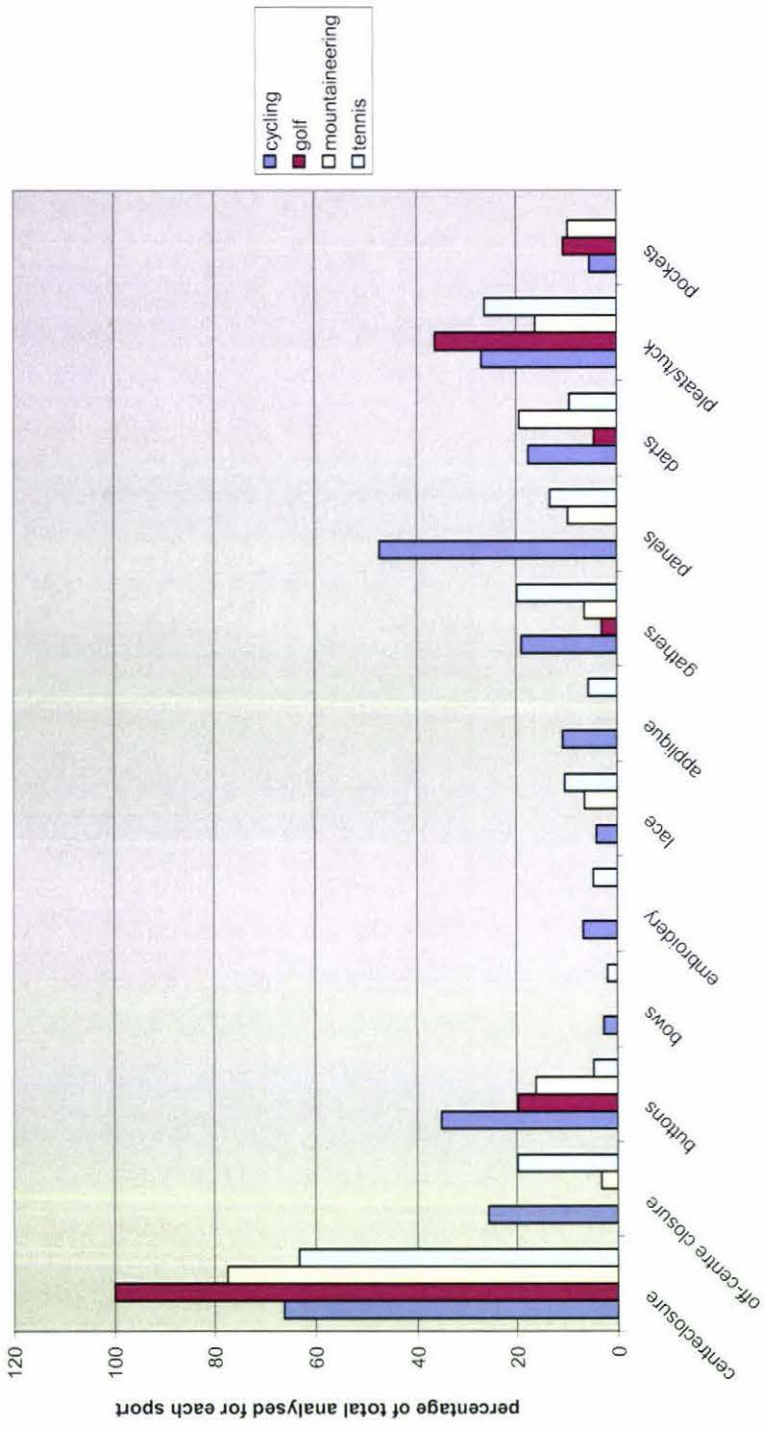


Figure 58: Upper Body Garment-Neckline and Collar Characteristics

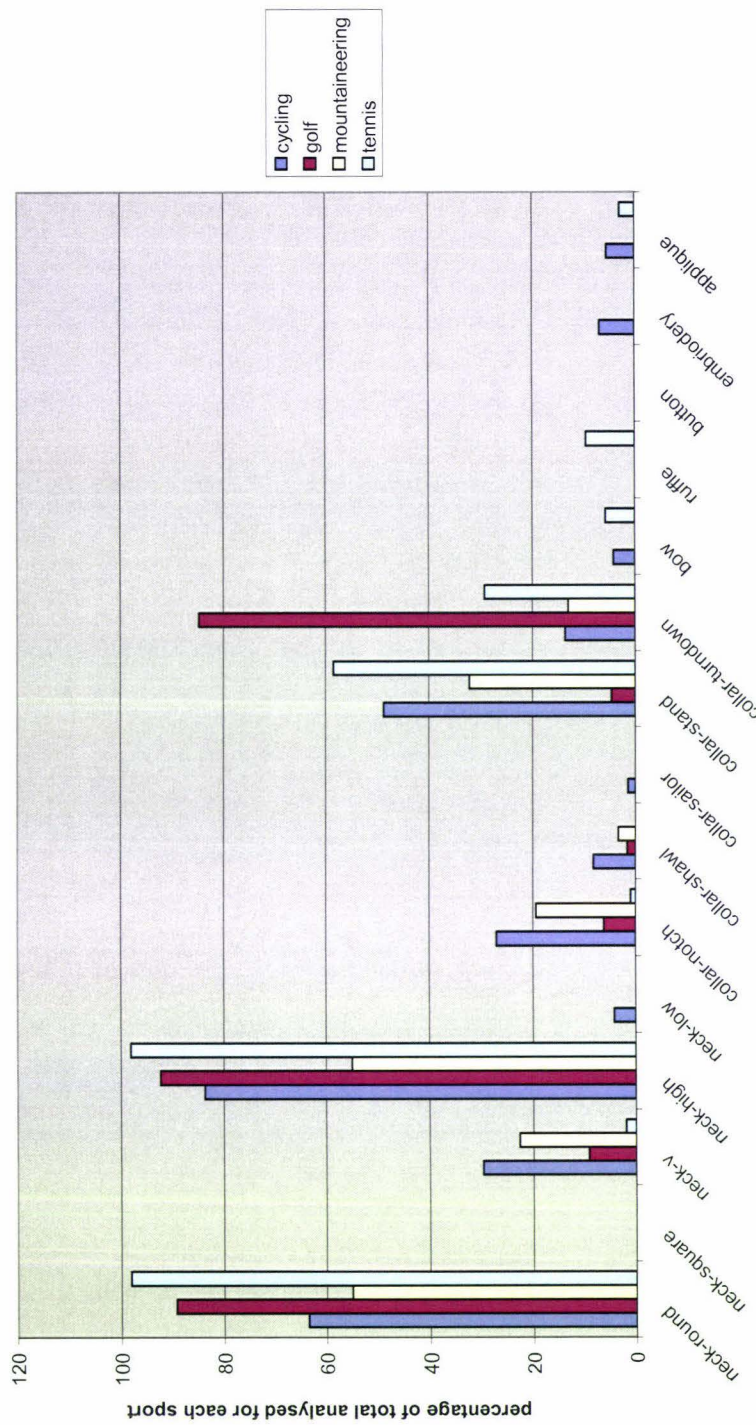


Figure 59: Upper Body Garment-Sleeve Types

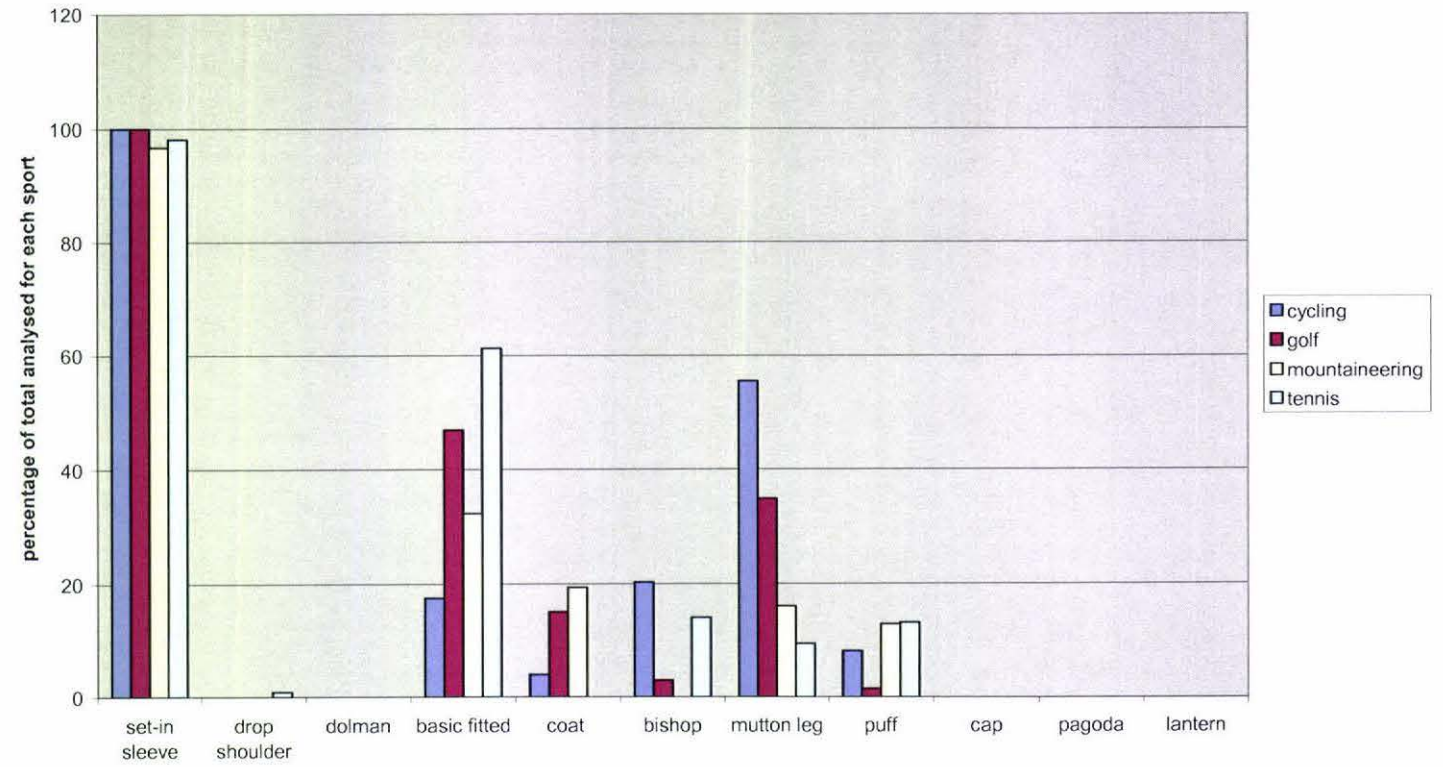


Figure 60: Upper Body Garment-Sleeve and Cuff Characteristics

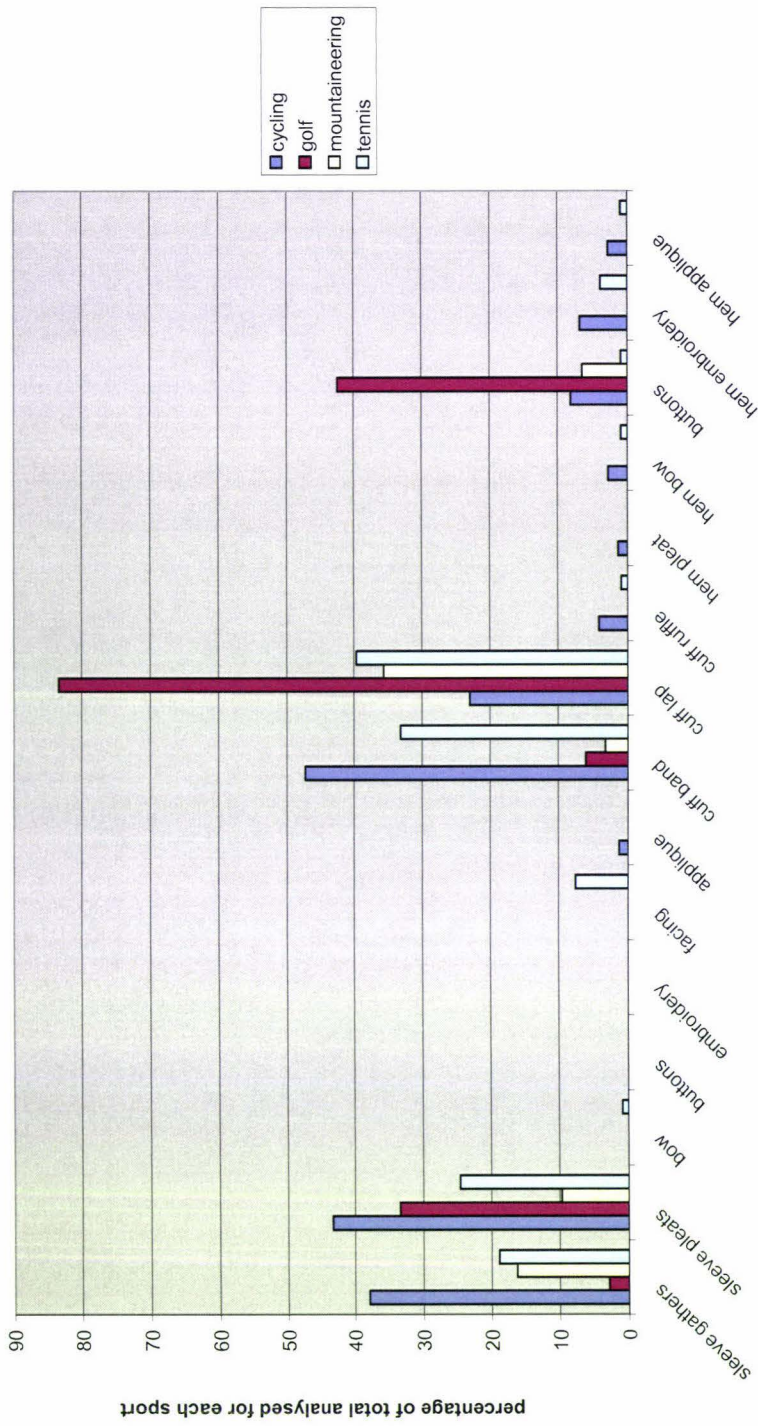


Figure 61: Lower Body Garment Types

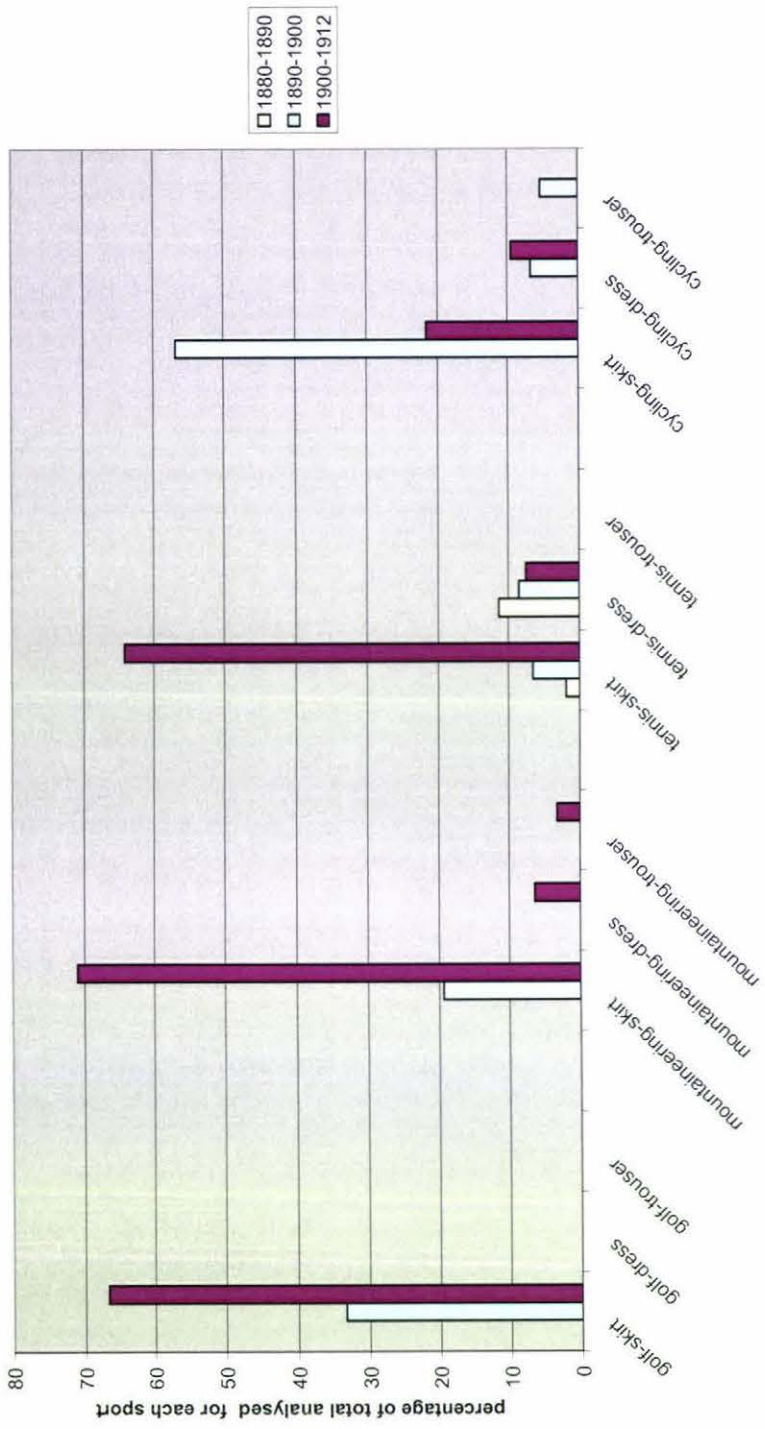


Figure 62: Lower Body Garment Hue  
 (refer to table 3 for coding descriptors: 1, white - 5, black)

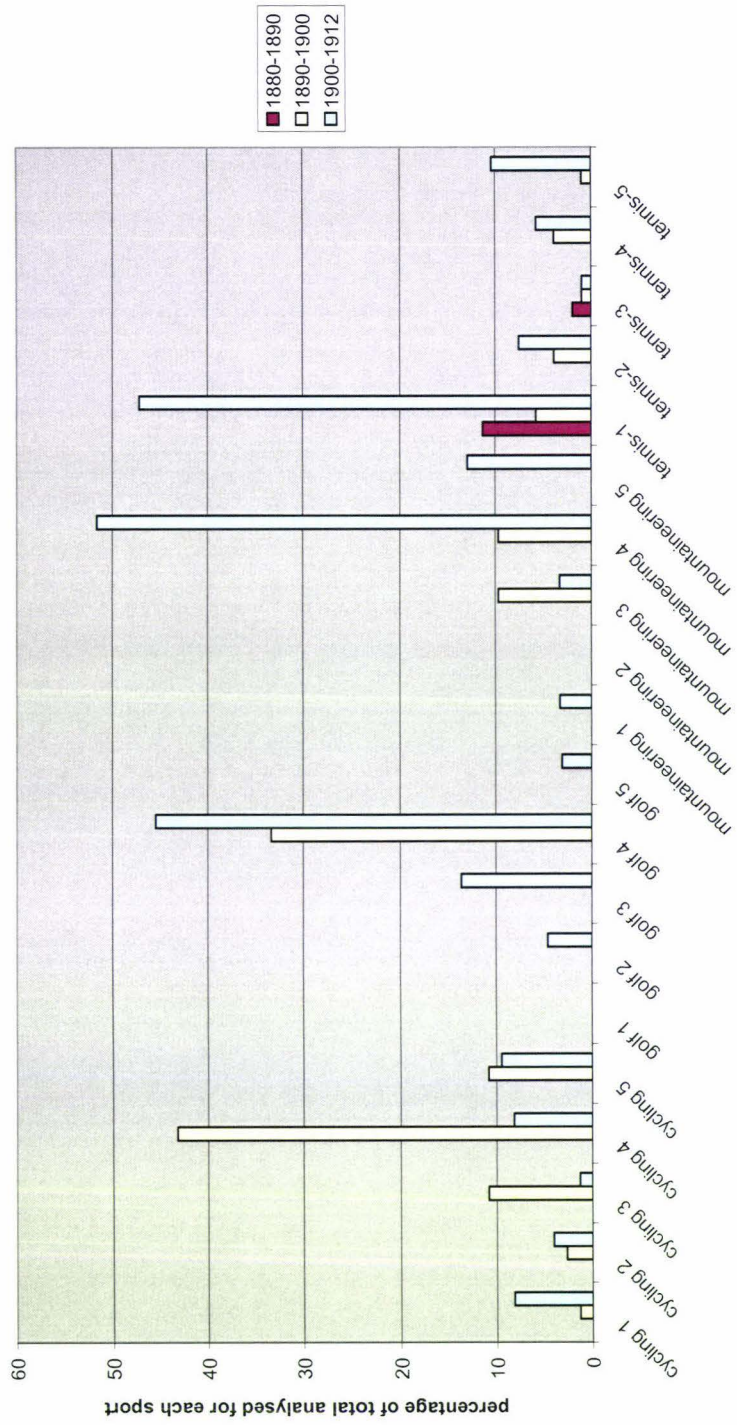


Figure 63: Lower Body Garment Fabric Weight  
 (refer to table 3 for coding descriptors: 1, light - 5, heavy)



Figure 64: Lower Body Garment Simplicity-Complexity  
 (refer to table 2 for coding descriptors: 1, simplicity - 5, complex)

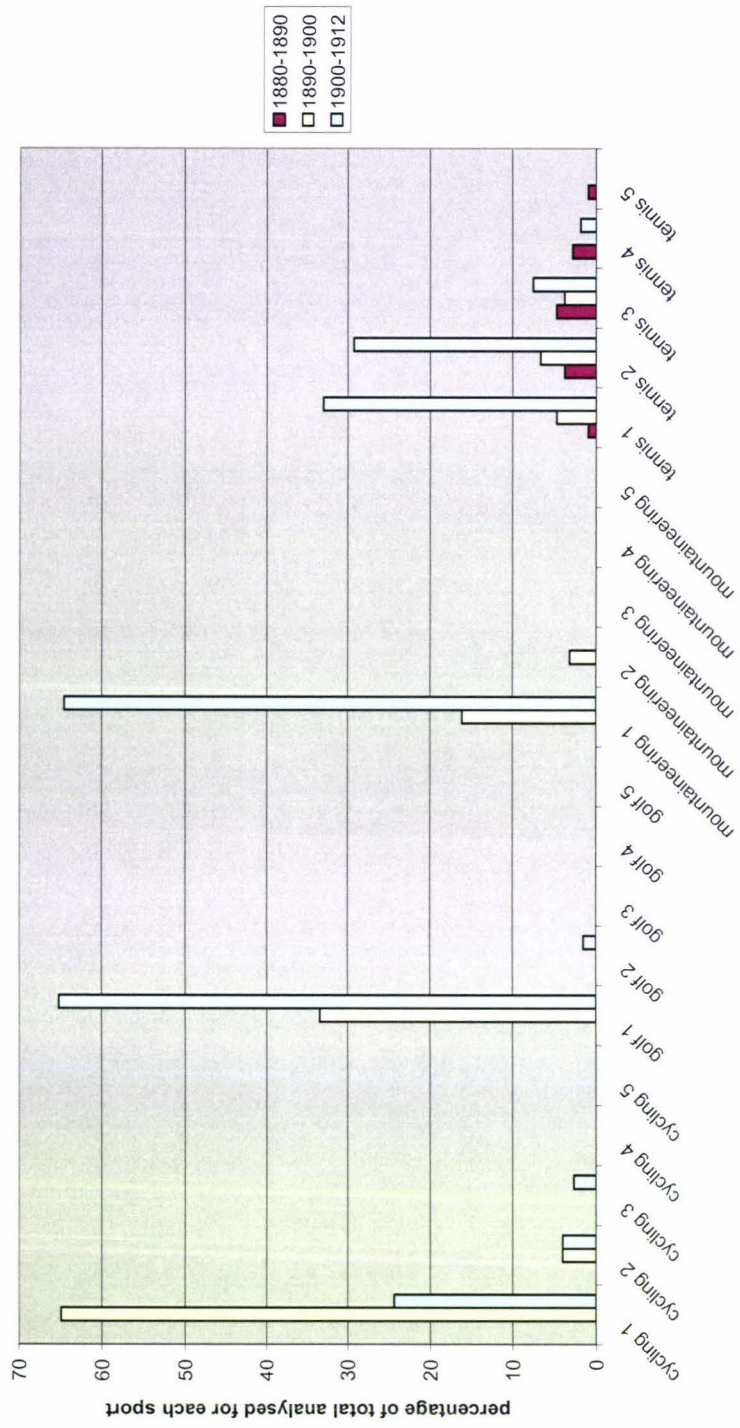


Figure 65: Lower Body Garment Angularity-Roundness  
 (refer to table 2 for coding descriptors: 1, angular - 5, round)

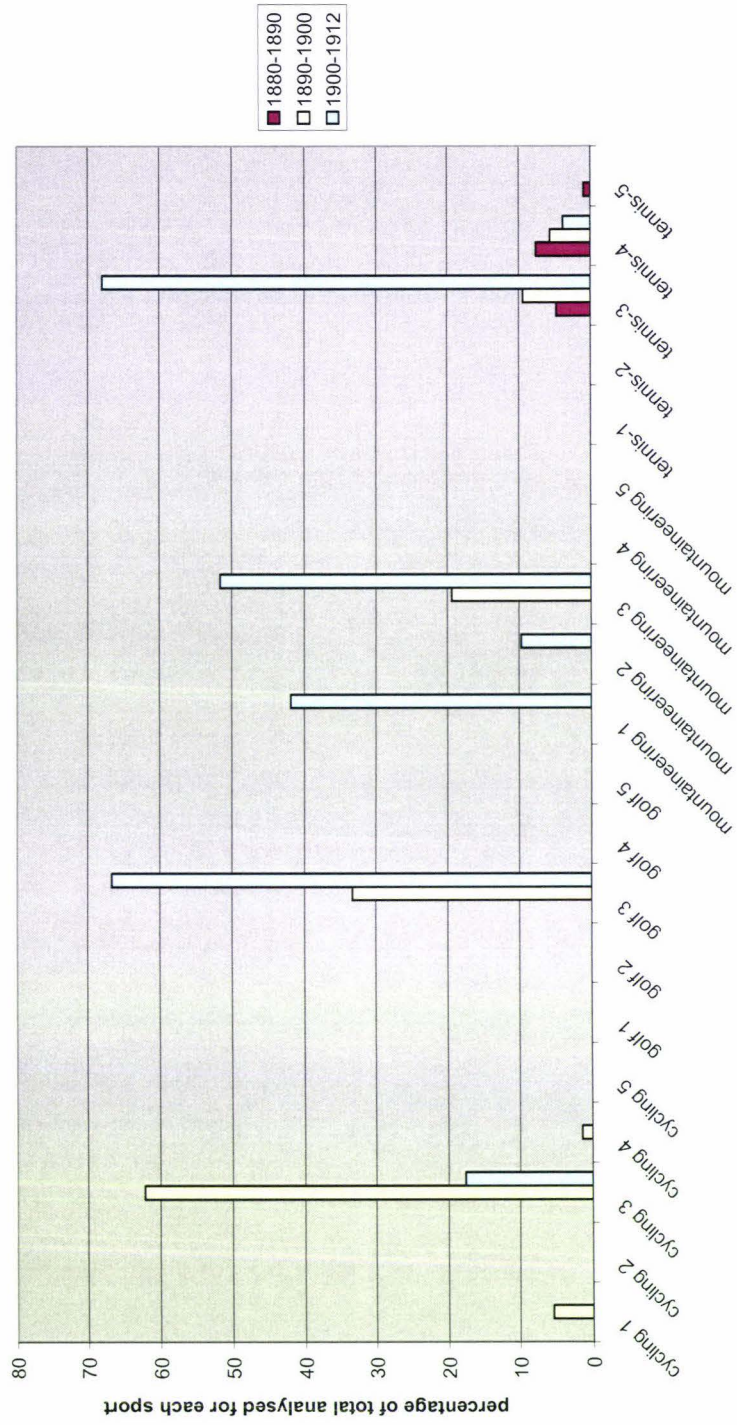


Figure 66: Lower Body Garment - Characteristics

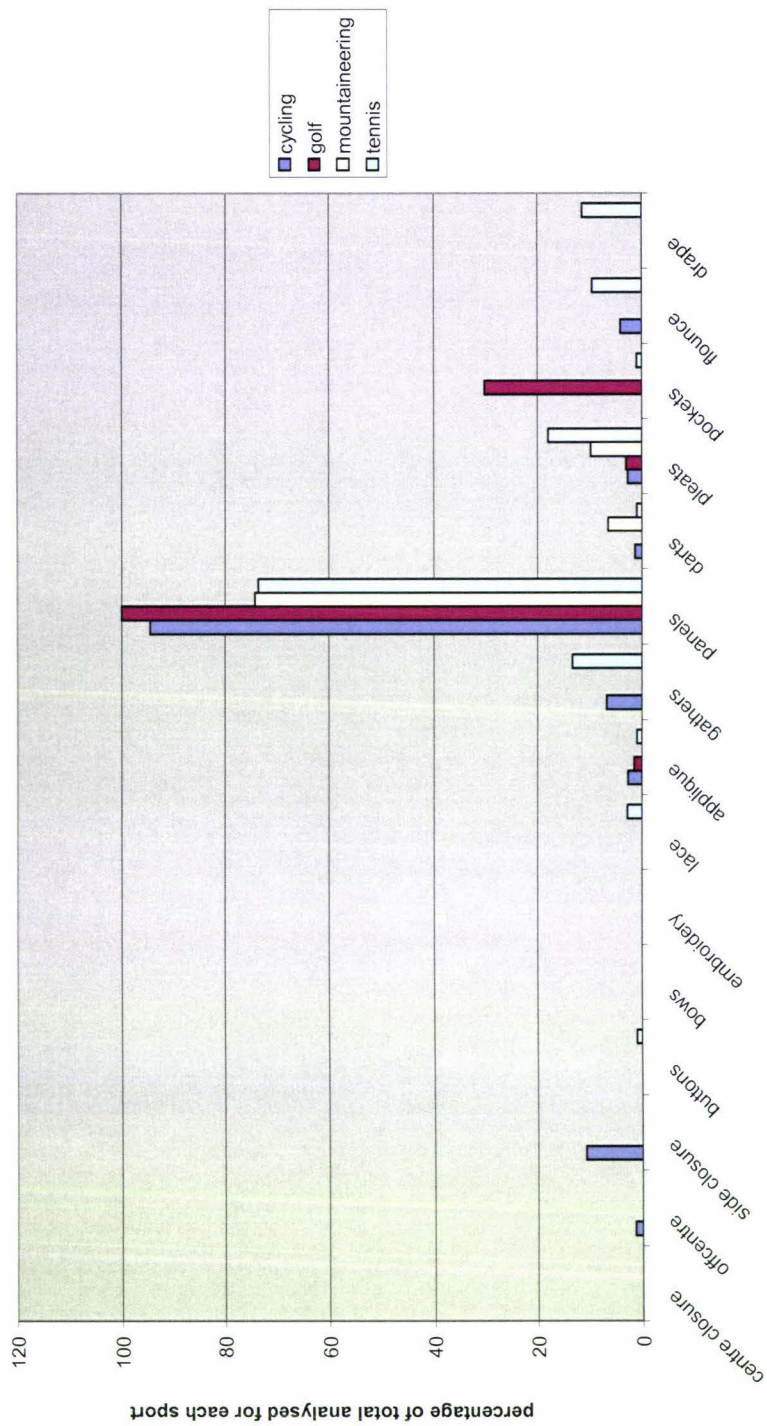


Figure 67: Lower Body Garment Lengths  
 (refer to table 3 for coding descriptors: 1, knee-length - 5, full-length)

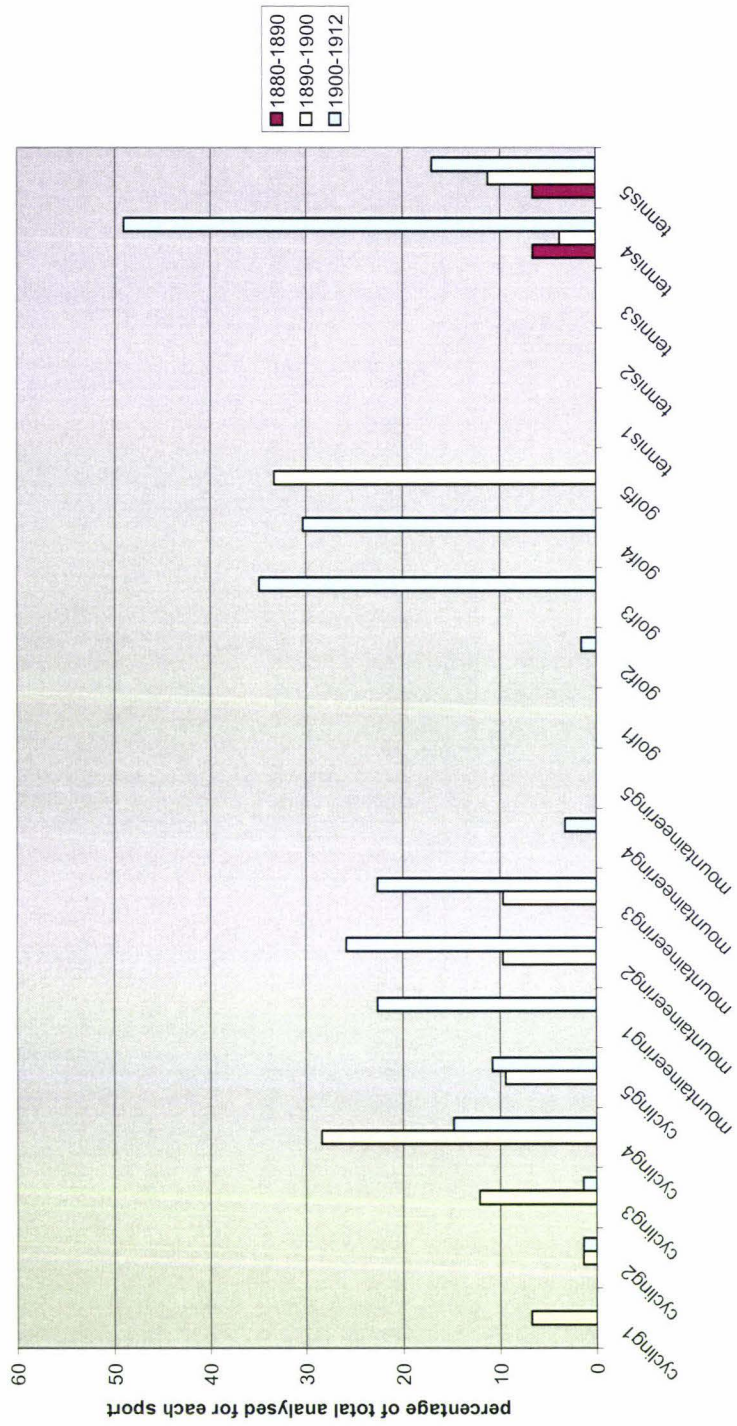
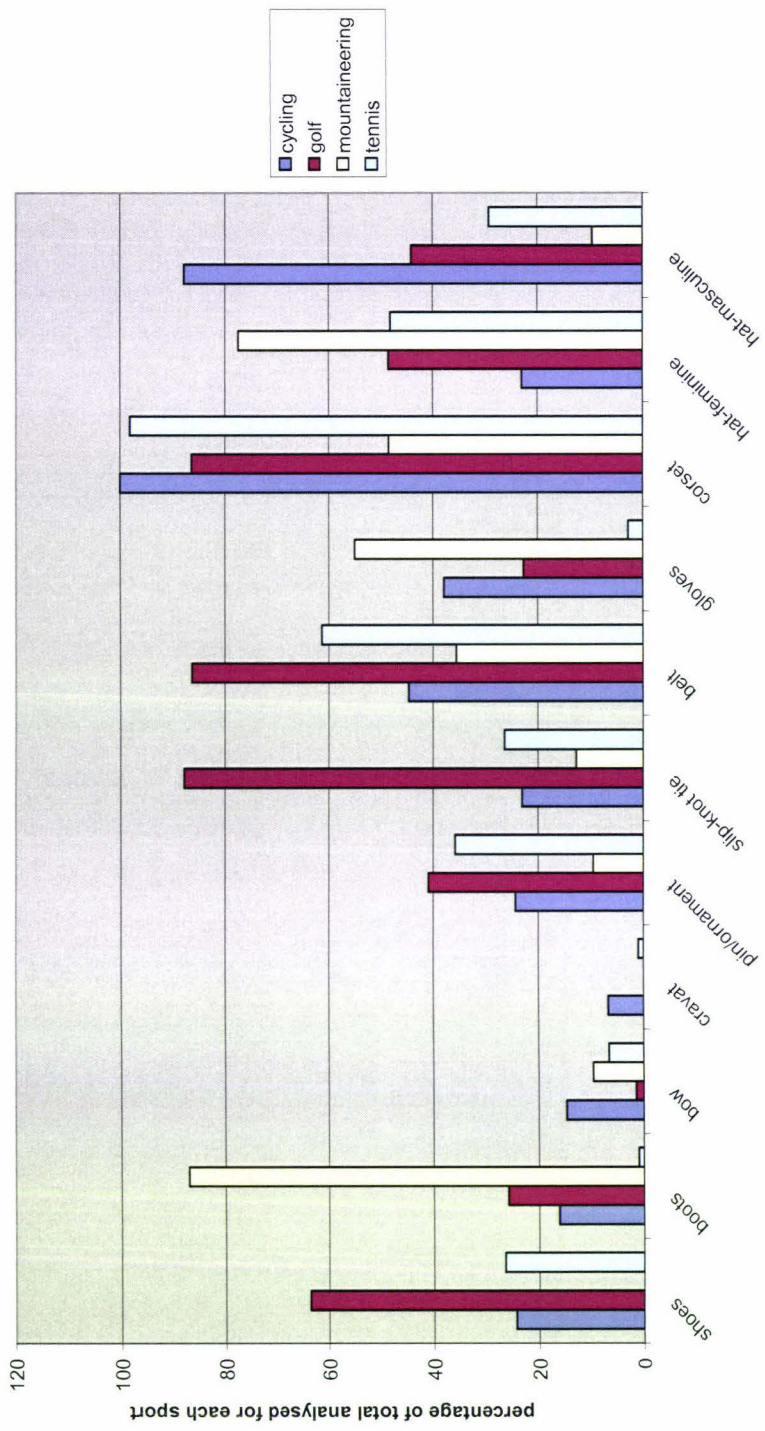


Figure 68: Accessory Types



# Appendix

## A.2 Tables

Table 4: Cycling-Upper Body Aesthetic Rankings								
sport	ref1	decade	date	Upper garment	hue rank	weight rank	simplicity rank	angularity rank
C	3	2	1890	jacket	4	4	2	3
C	7.1	2	1890	jacket	4	4	3	3
C	7.2	2	1890	jacket	4	4	4	4
C	7.3	2	1890	jacket	3	4	3	3
C	7.4	2	1890	jacket	4	4	3	3
C	7.5	2	1890	jacket	5	4	3	3
C	10	2	1890	jacket	4	4	2	3
C	39.1	2	1890	jacket	3	4	1	1
C	39.2	2	1890	jacket	2	4	1	1
C	6.1	2	1892	shirt	1	2	2	3
C	6.2	2	1892	shirt	1	2	2	3
C	4	2	1893	jacket	4	4	2	3
C	5	2	1893	jacket	4	4	3	3
C	9	2	1893	jacket	3	4	3	3
C	9.2	2	1893	jacket	4	4	3	3
C	9.3	2	1893	jacket	4	4	3	3
C	41	2	1894	shirt	3	2	2	2
C	1.1	2	1895	jacket	4	4	3	3
C	1.2	2	1895	jacket	3	4	2	3
C	1.3	2	1895	jacket	4	4	3	4
C	2.1	2	1895	jacket	3	4	3	4
C	2.2	2	1895	jacket	1	4	3	3
C	2.3	2	1895	jacket	4	4	3	3
C	2.4	2	1895	shirt	1	2	3	4
C	2.5	2	1895	jacket	4	4	2	3
C	2.6	2	1895	jacket	4	4	2	3
C	2.7	2	1895	jacket	2	4	3	3
C	2.8	2	1895	shirt	1	1	2	3
C	2.9	2	1895	dress bodice	5	3	4	4
C	14	2	1895	shirt	2	2	4	4
C	15.1	2	1895	dress bodice	5	4	2	3
C	15.2	2	1895	dress bodice	2	3	4	4
C	17	2	1895	shirt	1	2	2	3
C	19	2	1895	jacket	4	4	3	3
C	25	2	1895	shirt	1	2	2	3
C	28.1	2	1895	shirt	1	2	2	1
C	28.2	2	1895	shirt	1	2	2	2
C	2.1	2	1895	shirt	1	1	3	3
C	30.1	2	1896	shirt	1	2	2	2
C	30.2	2	1896	shirt	1	2	2	2
C	34	2	1896	shirt	1	2	2	2
C	35	2	1896	dress bodice	4	4	4	3
C	38	2	1896	shirt	1	2	3	2
C	16	2	1897	dress bodice	4	4	4	4
C	27	2	1897	shirt	1	2	2	2
C	29.1	2	1897	shirt	1	2	2	2
C	29.2	2	1897	shirt	1	2	2	2
C	29.3	2	1897	shirt	1	2	2	2
C	32	2	1899	jacket	4	4	2	3
C	36	2	1899	jacket	2	4	3	3
C	37	2	1899	dress bodice	3	4	4	4
C	8	3	1900	jacket	2	4	3	3
C	11	3	1900	shirt	1	2	4	4
C	12	3	1900	jacket	2	4	3	3
C	18	3	1900	dress bodice	5	4	4	4
C	20	3	1900	shirt	1	2	2	3
C	21.1	3	1900	dress bodice	5	4	4	4
C	21.2	3	1900	dress bodice	5	4	4	4
C	23	3	1900	dress bodice	5	3	4	4
C	26.1	3	1900	dress bodice	1	2	4	4
C	26.2	3	1900	dress bodice	1	1	5	4
C	33.1	3	1900	blouse	2	2	3	2
C	33.2	3	1900	shirt	1	2	3	2
C	33.3	3	1900	shirt	1	2	2	2
C	42.1	3	1900	blouse	1	2	3	3
C	42.2	3	1900	blouse	1	2	2	3
C	13	3	1905	dress bodice	2	2	4	4
C	22.1	3	1908	shirt	1	2	2	2
C	22.2	3	1908	shirt	1	2	2	2
C	24.1	3	1910	shirt	1	2	2	1
C	24.2	3	1910	dress bodice	1	2	2	2
C	40.1	3	1900	shirt	1	2	4	4
C	40.2	3	1900	dress bodice	1	2	4	4
C	40.3	3	1900	shirt	1	2	3	3

Table 5: Golf-Upper Body Aesthetic Rankings									
sport	ref1	decade	date	Upper garment	hue rank	weight rank	simplicity rank	angularity rank	
G	1.1	2	1893	shirt	4	3	2	2	2
G	1.2	2	1893	shirt	4	3	2	2	2
G	1.3	2	1893	shirt	4	3	2	2	2
G	1.4	2	1893	shirt	4	3	2	2	2
G	1.5	2	1893	shirt	4	3	2	2	2
G	1.6	2	1893	shirt	4	3	2	2	2
G	1.7	2	1893	shirt	4	3	2	2	2
G	1.8	2	1893	shirt	4	3	2	2	2
G	1.9	2	1893	shirt	4	3	2	2	2
G	1.1	2	1893	shirt	4	3	2	2	2
G	1.11	2	1893	shirt	4	3	2	2	2
G	1.12	2	1893	shirt	4	3	2	2	2
G	1.13	2	1893	shirt	4	3	2	2	2
G	1.14	2	1893	shirt	4	3	2	2	2
G	1.15	2	1893	shirt	4	3	2	2	2
G	1.16	2	1893	shirt	4	3	2	2	2
G	1.17	2	1893	shirt	4	3	2	2	2
G	1.18	2	1893	shirt	4	3	2	2	2
G	1.19	2	1893	shirt	4	3	2	2	2
G	1.2	2	1893	shirt	4	3	2	2	2
G	1.21	2	1893	shirt	4	3	2	2	2
G	1.22	2	1893	shirt	4	3	2	2	2
G	2.1	3	1910	cardigan	4	4	1	1	1
G	2.2	3	1910	shirt	1	2	1	2	1
G	2.3	3	1910	jacket	2	3	1	1	1
G	2.4	3	1910	shirt	1	2	2	2	1
G	2.5	3	1910	cardigan	2	4	1	1	1
G	2.6	3	1910	shirt	1	2	1	1	1
G	3.1	3	1910	shirt	1	2	1	1	1
G	4.1	3	1910	shirt	1	2	1	1	1
G	4.2	3	1910	shirt	1	2	1	1	1
G	5.1	3	1910	shirt	4	3	2	2	1
G	6.1	3	1910	shirt	1	2	2	2	1
G	7.1	3	1910	shirt	1	2	1	1	1
G	7.2	3	1910	shirt	1	2	1	1	1
G	7.3	3	1910	shirt	1	2	1	1	1
G	8.1	3	1911	cardigan	1	5	1	1	1
G	8.2	3	1911	cardigan	4	5	1	1	1
G	8.3	3	1911	shirt	1	2	1	1	1
G	8.4	3	1911	shirt	1	2	1	1	1
G	8.5	3	1911	shirt	1	2	1	1	1
G	8.6	3	1911	shirt	1	2	2	2	1
G	9	3	1909	shirt	1	2	1	1	1
G	10.1	3	1909	jacket	4	4	1	1	1
G	10.2	3	1909	jacket	4	4	1	1	1
G	10.3	3	1909	jacket	4	4	1	1	1
G	11.1	3	1900	shirt	1	2	1	1	1
G	12.1	3	1910	shirt	1	2	1	1	1
G	12.2	3	1910	shirt	1	2	1	1	1
G	12.3	3	1910	shirt	1	2	1	1	1
G	12.4	3	1910	shirt	1	2	1	1	1
G	12.5	3	1910	shirt	1	2	1	1	1
G	12.6	3	1910	shirt	3	2	1	1	1
G	12.7	3	1910	shirt	1	2	1	1	1
G	12.8	3	1910	shirt	1	2	1	1	1
G	12.9	3	1910	shirt	1	2	1	1	1
G	12.1	3	1910	shirt	1	2	1	1	1
G	12.11	3	1910	cardigan	4	5	1	1	1
G	12.12	3	1910	shirt	1	2	1	1	1
G	12.13	3	1910	shirt	1	2	1	1	1
G	12.14	3	1910	cardigan	4	5	1	1	1
G	12.15	3	1910	shirt	1	2	1	1	1
G	12.16	3	1910	shirt	1	2	1	1	1
G	12.17	3	1910	shirt	1	2	1	1	1
G	12.18	3	1910	shirt	1	2	1	1	1
G	12.19	3	1910	shirt	1	2	1	1	1

Table 6. Mountaineering-Upper Body Aesthetic Rankings								
sport	ref1		date	Upper garment	hue rank	weight rank	simplicity rank	angularity rank
M	1.1	2	1895	jacket	4	4	3	3
M	2	2	1895	shirt	1	2	2	2
M	3	2	1895	shirt	1	2	2	2
M	4.1	2	1895	jacket	3	4	2	3
M	4.3	2	1895	jacket	4	4	3	3
M	4.2	2	1895	jacket	4	4	3	3
M	5.1	3	1900	shirt	1	2	2	2
M	5.2	3	1900	shirt	1	2	2	2
M	6.1	3	1906	shirt	1	2	2	2
M	6.2	3	1906	shirt	1	2	2	2
M	6.3	3	1906	shirt	1	2	2	2
M	7	3	1910	shirt	1	2	1	2
M	8	3	1910	shirt	1	2	1	1
M	9	3	1900	shirt	1	2	1	1
M	10.1	3	1900	jacket	4	4		
M	10.2	3	1900	jacket	4	4		
M	11.1	3	1907	shirt	1	2	1	1
M	11.2	3	1907	dress bodice	1	2	2	2
M	11.3	3	1907	shirt	1	2	3	3
M	11.4	3	1907	shirt	1	2	3	3
M	12	3	1910	dress bodice	5	3	3	3
M	13.1	3	1910	jacket	4	4	2	3
M	13.2	3	1910	jacket	4	4	2	3
M	14.1	3	1910	shirt	1	2	2	1
M	14.2	3	1910	shirt	1	2	1	1
M	14.3	3	1910	shirt	1	2	1	1
M	15.1	3	1900	jacket	5	4	2	3
M	15.2	3	1900	shirt	1	2	1	1
M	16	3	1912	jacket	5	4	1	1
M	17	3	1912	jacket	4	4	1	1
M	18	3	1903	jersey	1	4	1	1

Table 7: Tennis-Upper Body Aesthetic Rankings								
sport	ref1	decade	date	Upper garment	hue rank	weight rank	simplicity rank	angularity rank
T	2	1	1886	dress bodice	1	2	4	5
T	3	1	1886	dress bodice	2	2	4	5
T	4	1	1886	dress bodice	1	2	2	4
T	4	1	1886	dress bodice	1	2	2	4
T	4	1	1886	dress bodice	1	2	2	4
T	4	1	1886	dress bodice	1	2	2	4
T	4	1	1886	dress bodice	1	2	2	4
T	1.1	1	1887	dress bodice	3	4	4	5
T	1.2	1	1887	dress bodice	1	3	4	4
T	26.1	1	1889	dress bodice	1	2	3	2
T	26.2	1	1889	dress bodice	1	2	3	2
T	26.3	1	1889	dress bodice	1	2	3	2
T	26.4	1	1889	dress bodice	1	2	3	2
T	33	1	1889	shirt	1	2	2	2
T	7	2	1890	dress bodice	2	2	4	4
T	27	2	1892	dress bodice	4	2	4	5
T	27.2	2	1892	dress bodice	1	2	2	2
T	27.3	2	1892	shirt	1	2	3	3
T	6	2	1893	jacket	3	4	2	3
T	9	2	1893	shirt	2	1	4	4
T	25.1	2	1893	shirt	1	2	2	2
T	25.2	2	1893	dress bodice	1	2	2	2
T	25.3	2	1893	dress bodice	1	2	2	2
T	25.4	2	1893	dress bodice	1	2	2	2
T	8.1	2	1894	dress bodice	1	2	3	4
T	8.2	2	1894	dress bodice	1	2	3	4
T	10	2	1895	dress bodice	2	3	4	4
T	5.1	2	1896	shirt	2	2	4	4
T	5.1	2	1896	shirt	2	2	4	4
T	31	2	1896	shirt	1	2	2	2
T	11.1	3	1900	shirt	2	2	3	3
T	11.2	3	1900	shirt	1	1	4	4
T	12.1	3	1900	jacket	1	3	2	3
T	12.2	3	1900	shirt	1	2	4	5
T	12.3	3	1900	shirt	1	2	2	2
T	12.4	3	1900	shirt	1	2	4	3
T	12.5	3	1900	shirt	1	1	3	4
T	12.6	3	1900	shirt	1	1	3	4
T	12.7	3	1900	shirt	2	3	4	3
T	12.8	3	1900	shirt	1	2	4	4
T	13.1	3	1900	shirt	1	2	3	2
T	13.2	3	1900	shirt	1	2	3	3
T	28.1	3	1900	shirt	1	2	2	2
T	28.2	3	1900	shirt	1	2	2	2
T	28.3	3	1900	shirt	1	2	2	2
T	28.4	3	1900	shirt	1	2	3	2
T	14.1	3	1904	shirt	1	2	2	2
T	14.2	3	1904	shirt	1	2	2	2
T	14.3	3	1904	shirt	1	2	2	2
T	14.4	3	1904	dress bodice	5	4	4	3
T	14.5	3	1904	dress bodice	2	2	5	4
T	14.6	3	1904	dress bodice	1	2	2	2
T	14.7	3	1904	dress bodice	5	3	4	4
T	14.8	3	1904	dress bodice	1	2	2	2
T	15.1	3	1906	shirt	1	2	2	3
T	15.2	3	1906	shirt	2	2	2	3
T	36.1	3	1906	shirt	1	2	1	1
T	36.2	3	1906	shirt	1	2	1	1
T	36.3	3	1906	shirt	1	2	1	1
T	36.4	3	1906	shirt	1	2	1	1
T	36.5	3	1906	shirt	1	2	2	1
T	36.6	3	1906	shirt	2	2	2	1
T	28.1	3	1907	shirt	1	2	1	1
T	28.2	3	1907	shirt	1	2	1	1
T	19.1	3	1908	shirt	1	2	1	1
T	19.1	3	1908	shirt	1	2	1	1
T	19.11	3	1908	shirt	1	2	1	1
T	19.2	3	1908	shirt	1	2	1	1
T	19.3	3	1908	shirt	1	2	1	1
T	19.4	3	1908	shirt	1	2	1	1
T	19.5	3	1908	shirt	1	2	1	1
T	19.6	3	1908	shirt	1	2	1	1
T	19.7	3	1908	shirt	1	2	1	1
T	19.8	3	1908	shirt	1	2	1	1
T	19.9	3	1908	shirt	1	2	1	1
T	31.1	3	1908	shirt	1	2	1	1
T	31.2	3	1908	shirt	1	2	1	1
T	16	3	1910	dress bodice	4	3	3	3
T	17	3	1910	shirt	1	2	1	1
T	18.1	3	1910	shirt	1	2	2	2
T	18.2	3	1910	shirt	2	2	3	2
T	18.3	3	1910	shirt	1	2	1	1
T	18.4	3	1910	shirt	1	2	1	1
T	20.1	3	1910	shirt	1	2	2	2
T	20.2	3	1910	shirt	1	2	1	1
T	20.3	3	1910	shirt	1	2	3	2
T	20.4	3	1910	shirt	1	2	3	2
T	20.5	3	1910	dress bodice	1	2	4	3
T	20.6	3	1910	shirt	1	2	2	1
T	20.7	3	1910	shirt	1	2	2	2
T	20.8	3	1910	dress bodice	1	2	4	2

sport	ref1	decade	date	Upper garment	hue rank	weight rank	simplicity rank	angularity rank
T	20.9	3	1910	shirt	1	2	2	2
T	20.9	3	1910	shirt	1	2	2	2
T	20.9	3	1910	shirt	1	2	2	2
T	21	3	1911	shirt	1	2	4	2
T	22	3	1911	shirt	1	2	2	1
T	34.1	3	1911	shirt	1	2	1	1
T	34.2	3	1911	shirt	1	2	1	1
T	23	3	1912	shirt	1	2	2	1
T	24	3	1912	shirt	1	2	2	1
T	29	3	1912	shirt	1	1	2	1
T	30	3	1912	shirt	1	2	2	1
T	35.1	3	1912	shirt	1	2	1	1
T	35.2	3	1912	shirt	1	2	1	1
T	35.3	3	1912	shirt	1	2	1	1
T	35.4	3	1912	shirt	1	2	2	1

Table 8: Cycling-Upper Body Garment Feature Identification-Bodice characteristics																	
sport	ref	dec	date	Upgar	centre												
					closure	off-centre	buttons	bows	embroidery	lace	applique	gathers	panels	darts	pleats	pockets	
C		3	2	1890	jacket	1		1						1			
C	7.1	2	1890	jacket	1											1	
C	7.2	2	1890	jacket	1		1					1		1			
C	7.3	2	1890	jacket	1		1							1			
C	7.4	2	1890	jacket	1		1							1		1	
C	7.5	2	1890	jacket	1		1			1				1			
C	10	2	1890	jacket	1									1			
C	39.1	2	1890	jacket	1		1								1		
C	39.2	2	1890	jacket	1		1										
C	6.1	2	1892	shirt	1		1										
C	6.2	2	1892	shirt	1		1										
C	4	2	1893	jacket	1		1								1		
C	5	2	1893	jacket	1		1							1			
C	9	2	1893	jacket	1		1							1			
C	9.2	2	1893	jacket	1		1							1			
C	9.3	2	1893	jacket	1									1		1	
C	41	2	1894	shirt	1												
C	1.2	2	1895	jacket	1		1					1		1			
C	1.2	2	1895	jacket	1		1							1			
C	1.3	2	1895	jacket	1		1			1				1	1		
C	2.1	2	1895	jacket	1		1										
C	2.2	2	1895	jacket	1									1	1		
C	2.3	2	1895	jacket	1												
C	2.4	2	1895	shirt													
C	2.5	2	1895	jacket	1		1							1	1		
C	2.6	2	1895	jacket	1		1							1	1		
C	2.7	2	1895	jacket	1		1							1			
C	2.8	2	1895	shirt	1											1	
C	2.9	2	1895	dress bod									1				
C	14	2	1895	shirt			1							1	1	1	
C	15.1	2	1895	dress bod			1	1									
C	15.2	2	1895	dress bod			1	1						1			
C	17	2	1895	shirt	1												
C	19	2	1895	jacket	1			1							1	1	
C	25	2	1895	shirt	1												
C	28.1	2	1895	shirt	1												
C	28.2	2	1895	shirt	1												
C	2.1	2	1895	shirt	1								1				
C	30.1	2	1896	shirt									1				
C	30.2	2	1896	shirt									1				
C	34	2	1896	shirt	1											1	
C	35	2	1896	dress bod			1				1			1		1	
C	38	2	1896	shirt	1											1	
C	16	2	1897	dress bod			1							1	1		
C	27	2	1897	shirt	1								1	1			
C	29.1	2	1897	shirt	1											1	
C	29.2	2	1897	shirt	1											1	
C	29.3	2	1897	shirt	1											1	
C	32	2	1899	jacket	1			1						1	1		
C	36	2	1899	jacket	1							1		1	1		
C	37	2	1899	dress bod			1	1				1		1		1	
C	8	2	1900	jacket	1								1	1		1	
C	11	3	1900	shirt	1											1	
C	12	3	1900	jacket	1			1								1	
C	18	3	1900	dress bod			1						1				
C	20	3	1900	shirt	1												
C	21.1	3	1900	dress bod			1					1		1			
C	21.2	3	1900	dress bod			1					1		1			
C	23	3	1900	dress bod			1				1		1	1			
C	26.1	3	1900	dress bod	1						1		1	1		1	
C	26.2	3	1900	dress bod			1						1	1			
C	33.1	3	1900	shirt										1			
C	33.2	3	1900	shirt	1								1			1	
C	33.3	3	1900	shirt				1								1	
C	42.1	3	1900	shirt				1								1	
C	42.2	3	1900	shirt				1		1							
C	13	3	1905	dress bod				1					1				
C	22.1	3	1908	shirt				1								1	
C	22.2	3	1908	shirt				1									
C	24.1	3	1910	shirt													
C	24.2	3	1910	dress bod									1				
C	40.1	3	1900	shirt				1		1						1	
C	40.2	3	1900	dress bod	1				1	1		1	1	1		1	
C	40.3	3	1900	shirt				1						1	1	1	
<b>C Count</b>						49	19	26	2	5	3	8	14	35	13	20	4

Table 9: Golf- Upper Body Garment Feature Identification-Bodice characteristics

sport	ref	dec	date	Upgar	centre												
					closure	off-centre	buttons	bows	embroidery	lace	applique	gathers	panels	darts	pleats	pockets	
G	1.1	2	1893	shirt	1												1
G	1.2	2	1893	shirt	1												1
G	1.3	2	1893	shirt	1												1
G	1.4	2	1893	shirt	1												1
G	1.5	2	1893	shirt	1												1
G	1.6	2	1893	shirt	1												1
G	1.7	2	1893	shirt	1												1
G	1.8	2	1893	shirt	1												1
G	1.9	2	1893	shirt	1												1
G	1.10	2	1893	shirt	1												1
G	1.11	2	1893	shirt	1												1
G	1.12	2	1893	shirt	1												1
G	1.13	2	1893	shirt	1												1
G	1.14	2	1893	shirt	1												1
G	1.15	2	1893	shirt	1												1
G	1.16	2	1893	shirt	1												1
G	1.17	2	1893	shirt	1												1
G	1.18	2	1893	shirt	1												1
G	1.19	2	1893	shirt	1												1
G	1.20	2	1893	shirt	1												1
G	1.21	2	1893	shirt	1												1
G	1.22	2	1893	shirt	1												1
G	2.1	3	1910	cardigan	1												1
G	2.2	3	1910	shirt	1											1	
G	2.3	3	1910	jacket	1			1									1
G	2.4	3	1910	shirt	1			1								1	
G	2.5	3	1910	cardigan	1			1									1
G	2.6	3	1910	shirt	1												
G	3.1	3	1910	shirt	1												
G	4.1	3	1910	shirt	1												
G	4.2	3	1910	shirt	1												
G	6.1	3	1910	shirt	1			1			1						
G	7.1	3	1910	shirt	1												
G	7.2	3	1910	shirt	1			1									
G	7.3	3	1910	shirt	1			1									
G	8.1	3	1911	cardigan	1												1
G	8.2	3	1911	cardigan	1												
G	8.3	3	1911	shirt	1												
G	8.4	3	1911	shirt	1			1									
G	8.5	3	1911	shirt	1			1									
G	8.6	3	1911	shirt	1						1						
G	9	3	1909	shirt	1												
G	10.1	3	1909	Jacket	1			1							1		1
G	10.2	3	1909	Jacket	1			1							1		1
G	10.3	3	1909	Jacket	1			1							1		1
G	11.1	3	1900	shirt	1												
G	12.1	3	1910	shirt	1												
G	12.2	3	1910	shirt	1												
G	12.3	3	1910	shirt	1												
G	12.4	3	1910	shirt	1												
G	12.5	3	1910	shirt	1												
G	12.6	3	1910	shirt	1												
G	12.7	3	1910	shirt	1												
G	12.8	3	1910	shirt	1												
G	12.9	3	1910	shirt	1												
G	12.10	3	1910	shirt	1												
G	12.11	3	1910	cardigan	1			1									
G	12.12	3	1910	shirt	1												
G	12.13	3	1910	shirt	1												
G	12.14	3	1910	cardigan	1			1									
G	12.15	3	1910	shirt	1												
G	12.16	3	1910	shirt	1												
G	12.17	3	1910	shirt	1												
G	12.18	3	1910	shirt	1												
G	12.19	3	1910	shirt	1												
G	5.1	3	1910	shirt	1												
<b>G Count</b>					66		0	13	0	0	0	0	2	0	3	24	7

Table 10: Mountaineering- Upper Body Garment Feature Identification-Bodice characteristics																
sport	ref	dec	date	Upgar	centre											
					closure	off-centre	buttons	bows	embroidery	lace	applique	gathers	panels	darts	pleats	pockets
M	1.10	2	1895	jacket	1										1	
M	2.00	2	1895	shirt	1		1									
M	3.00	2	1895	shirt												
M	4.10	2	1895	jacket	1							1	1			
M	4.30	2	1895	jacket	1		1					1		1		
M	4.20	2	1895	jacket								1				
M	5.10	3	1900	shirt	1											
M	5.20	3	1900	shirt	1											
M	9.00	3	1900	shirt	1											
M	10.10	3	1900	jacket												
M	10.20	3	1900	jacket												
M	15.10	3	1900	jacket	1								1			
M	15.20	3	1900	shirt	1											
M	6.10	3	1906	shirt	1											
M	6.20	3	1906	shirt	1											
M	6.30	3	1906	shirt	1											
M	11.10	3	1907	shirt	1											
M	11.20	3	1907	dress bod		1									1	
M	11.30	3	1907	shirt						1		1				
M	11.40	3	1907	shirt	1					1		1				
M	7.00	3	1910	shirt	1											
M	8.00	3	1910	shirt	1											
M	12.00	3	1910	dress bod	1										1	
M	13.10	3	1910	jacket	1		1						1		1	
M	13.20	3	1910	jacket	1								1			
M	14.10	3	1910	shirt	1									1		
M	14.20	3	1910	shirt	1		1									
M	14.30	3	1910	shirt	1											
M	16.00	3	1912	jacket	1		1							1	1	
M	17.00	3	1912	jacket	1									1	1	
M	18.00	3	1903	Jersey												
<b>M Count</b>					24	1	5	0	0	2	0	2	3	6	5	3

Table 11. Tennis- Upper Body Garment Feature Identification-Bodice characteristics															
sport	ref	dec	date	Upgar	centre	off -centre	buttons	bows	embroidery	lace	applique	gathers	panels	darts	pleats
T	1.1	1	1887	dress bod			1	1		1					
T	1.2	1	1887	dress bod			1								
T	2	1	1886	dress bod	1							1			1
T	3	1	1886	dress bod			1			1				1	1
T	4	1	1886	dress bod	1									1	1
T	4	1	1886	dress bod	1									1	1
T	4	1	1886	dress bod	1									1	1
T	4	1	1886	dress bod	1									1	1
T	4	1	1886	dress bod	1									1	1
T	26.1	1	1889	dress bod	1										1
T	26.2	1	1889	dress bod	1										1
T	26.3	1	1889	dress bod	1										1
T	26.4	1	1889	dress bod	1										1
T	33	1	1889	shirt	2										1
T	5.1	2	1896	shirt			1			1	1	1			
T	5.1	2	1896	shirt			1			1	1	1			
T	6	2	1893	jacket	1									1	
T	7	2	1890	dress bod			1		1						1
T	8.1	2	1894	dress bod			1								1
T	8.2	2	1894	dress bod			1					1			
T	9	2	1893	shirt	1							1			
T	10	2	1895	dress bod			1					1			
T	25.1	2	1893	shirt	1										
T	25.2	2	1893	dress bod											
T	25.3	2	1893	dress bod											
T	25.4	2	1893	dress bod	1										
T	27	2	1892	dress bod	1								1		1
T	27.2	2	1892	dress bod	1			1							
T	27.3	2	1892	shirt	1										1
T	31	2	1896	shirt	1			1							1
T	11.1	3	1900	shirt	1					1		1			
T	11.2	3	1900	shirt					1			1			
T	12.1	3	1900	jacket			1	1							
T	12.2	3	1900	shirt								1		1	1
T	12.3	3	1900	shirt	1										
T	12.4	3	1900	shirt	1							1			1
T	12.5	3	1900	shirt	1		1					1			
T	12.6	3	1900	shirt	1		1					1			
T	12.7	3	1900	shirt			1					1			
T	12.8	3	1900	shirt						1		1			
T	13.1	3	1900	shirt	1							1			
T	13.2	3	1900	shirt								1			
T	14.1	3	1904	shirt	1										
T	14.2	3	1904	shirt	1										
T	14.3	3	1904	shirt	1										
T	14.4	3	1904	dress bod			1			1				1	1
T	14.5	3	1904	dress bod			1			1					1
T	14.6	3	1904	dress bod											
T	14.7	3	1904	dress bod						1					1
T	14.8	3	1904	dress bod											
T	15.1	3	1906	shirt	1								1		
T	15.2	3	1906	shirt											1
T	16	3	1910	dress bod						1					
T	17	3	1910	shirt	1										
T	18.1	3	1910	shirt	1										
T	18.2	3	1910	shirt	1			1							
T	18.3	3	1910	shirt	1										
T	18.4	3	1910	shirt	1										
T	19.1	3	1908	shirt	1										
T	19.1	3	1908	shirt	1										
T	19.11	3	1908	shirt	1										
T	19.2	3	1908	shirt	1										
T	19.3	3	1908	shirt	1										
T	19.4	3	1908	shirt	1										
T	19.5	3	1908	shirt	1										
T	19.6	3	1908	shirt	1										
T	19.7	3	1908	shirt	1										
T	19.8	3	1908	shirt	1										
T	19.9	3	1908	shirt	1										
T	20.1	3	1910	shirt			1								
T	20.2	3	1910	shirt			1				1				1
T	20.3	3	1910	shirt	1							1	1		
T	20.4	3	1910	shirt						1					
T	20.5	3	1910	dress bod			1						1		1
T	20.6	3	1910	shirt			1								1
T	20.7	3	1910	shirt			1						1		
T	20.8	3	1910	dress bod						1					1
T	20.9	3	1910	shirt											
T	20.9	3	1910	shirt											
T	21	3	1911	shirt			1					1			1
T	22	3	1911	shirt	1										1
T	23	3	1912	shirt	1										1
T	24	3	1912	shirt	1							1	1		
T	28.1	3	1907	shirt	1										
T	28.1	3	1900	shirt	1										1
T	28.2	3	1907	shirt	1										
T	28.2	3	1900	shirt	1										
T	28.3	3	1900	shirt	1										
T	28.4	3	1900	shirt	1										1
T	29	3	1912	shirt								1	1		
T	30	3	1912	shirt											1
T	31.1	3	1908	shirt	1										



Table 12: Cycling-Upper Body Garment Feature Identification-Neckline and Collar

sport	ref	dec	date	Upgar	neck-round	neck-square	neck-v	neck-high	neck-low	collar-notch	collar-shawl	collar-sailor	collar-stand	collar-turndown	bow	ruffle	button	embroidery	applique
C	1.1	2	1895	jacket				1		1									
C	1.2	2	1895	jacket				1		1									
C	1.3	2	1895	jacket	1						1								1
C	2.1	2	1895	jacket			1		1		1								
C	2.2	2	1895	jacket						1									
C	2.3	2	1895	jacket			1			1									
C	2.4	2	1895	shirt	1			1					1						
C	2.5	2	1895	jacket						1									
C	2.6	2	1895	jacket			1			1									
C	2.7	2	1895	jacket			1			1									
C	2.8	2	1895	shirt	1			1					1		1				
C	2.9	2	1895	dress	1			1											
C	3	2	1890	jacket			1			1									
C	4	2	1893	jacket			1			1									
C	5	2	1893	jacket			1				1								
C	6.1	2	1892	shirt	1			1							1				
C	6.2	2	1892	shirt	1			1							1				
C	7.1	2	1890	jacket			1	1		1									
C	7.2	2	1890	jacket				1			1								1
C	7.3	2	1890	jacket			1	1		1	1								1
C	7.4	2	1890	jacket			1	1		1									
C	7.5	2	1890	jacket			1	1			1								1
C	9	2	1893	jacket			1	1		1									
C	9.2	2	1893	jacket			1	1		1									
C	9.3	2	1893	jacket			1	1											
C	10	2	1890	jacket				1		1									
C	14	2	1895	shirt	1			1							1				
C	15.1	2	1895	dress			1	1							1				
C	15.2	2	1895	dress	1			1					1						
C	16	2	1897	dress	1			1											
C	17	2	1895	shirt	1			1					1						
C	19	2	1895	jacket			1			1									1
C	25	2	1895	shirt	1			1					1						
C	27	2	1897	shirt	1			1					1						
C	28.1	2	1895	shirt	1			1					1						
C	28.2	2	1895	shirt	1			1					1		1				
C	29.1	2	1897	shirt	1			1					1						
C	29.2	2	1897	shirt	1			1					1						
C	29.3	2	1897	shirt	1			1					1						
C	30.1	2	1896	shirt	1			1					1						
C	30.2	2	1896	shirt	1			1					1						
C	32	2	1899	jacket			1	1		1									
C	34	2	1896	shirt	1			1					1						
C	35	2	1896	dress	1			1					1						1
C	36	2	1899	jacket			1	1			1								1
C	37	2	1899	dress	1			1					1						1
C	38	2	1896	shirt	1			1					1						
C	39.1	2	1890	jacket	1			1						1					
C	39.2	2	1890	jacket			1	1		1					1				
C	41	2	1894	shirt	1			1						1					
C	2.1	2	1895	shirt	1			1					1						
C	8	3	1900	jacket			1	1		1									
C	11	3	1900	shirt	1			1					1						
C	12	3	1900	jacket			1	1		1									
C	13	3	1905	dress	1			1					1		1				
C	18	3	1900	dress	1			1					1						
C	20	3	1900	shirt	1			1						1					
C	21.1	3	1900	dress	1			1						1					
C	21.2	3	1900	dress	1			1						1					
C	22.1	3	1908	shirt	1			1					1						
C	22.2	3	1908	shirt	1			1					1			1			
C	23	3	1900	dress	1			1					1						
C	24.1	3	1910	shirt	1			1					1						
C	24.2	3	1910	dress	1			1					1						
C	26.1	3	1900	dress	1			1					1						
C	26.2	3	1900	dress	1			1					1						
C	33.1	3	1900	shirt	1			1					1						
C	33.2	3	1900	shirt	1			1					1						
C	33.3	3	1900	shirt	1			1					1						
C	42.1	3	1900	shirt	1			1					1						1
C	42.2	3	1900	shirt	1			1					1						
C	40.1	3	1900	shirt	1			1					1						
C	40.2	3	1900	dress	1			1					1						
C	40.3	3	1900	shirt	1			1					1						
<b>C Count</b>					47	0	22	62	3	20	6	1	36	10	3	0	0	5	4

Table 13. Golf-Upper Body Garment Feature Identification-Neckline and Collar																		
sport	ref	dec	date	Upgar	neck-round	neck-square	neck-v	neck-high	neck-low	collar-notch	collar-shawl	collar-sailor	collar-stand	collar-turndown	bow	ruffle	button	embroidery
G	1.1	2	1893	shirt	1			1						1				
G	1.2	2	1893	shirt	1			1						1				
G	1.3	2	1893	shirt	1			1						1				
G	1.4	2	1893	shirt	1			1						1				
G	1.5	2	1893	shirt	1			1						1				
G	1.6	2	1893	shirt	1			1						1				
G	1.7	2	1893	shirt	1			1						1				
G	1.8	2	1893	shirt	1			1						1				
G	1.9	2	1893	shirt	1			1						1				
G	1.10	2	1893	shirt	1			1						1				
G	1.11	2	1893	shirt	1			1						1				
G	1.12	2	1893	shirt	1			1						1				
G	1.13	2	1893	shirt	1			1						1				
G	1.14	2	1893	shirt	1			1						1				
G	1.15	2	1893	shirt	1			1						1				
G	1.16	2	1893	shirt	1			1						1				
G	1.17	2	1893	shirt	1			1						1				
G	1.18	2	1893	shirt	1			1						1				
G	1.19	2	1893	shirt	1			1						1				
G	1.20	2	1893	shirt	1			1						1				
G	1.21	2	1893	shirt	1			1						1				
G	1.22	2	1893	shirt	1			1						1				
G	2.1	3	1910	cardigan	1			1					1					
G	2.2	3	1910	shirt	1			1						1				
G	2.3	3	1910	jacket			1			1								
G	2.4	3	1910	shirt	1			1						1				
G	2.5	3	1910	cardigan	1		1							1				
G	2.6	3	1910	shirt	1			1						1				
G	3.1	3	1910	shirt	1			1					1					
G	4.1	3	1910	shirt	1			1						1				
G	4.2	3	1910	shirt	1			1						1				
G	5.1	3	1910	shirt	1			1						1				
G	6.1	3	1910	shirt	1			1						1				
G	7.1	3	1910	shirt	1			1						1				
G	7.2	3	1910	shirt	1			1						1				
G	7.3	3	1910	shirt	1			1						1				
G	8.1	3	1911	cardigan			1				1							
G	8.2	3	1911	cardigan	1			1						1				
G	8.3	3	1911	shirt	1			1						1				
G	8.4	3	1911	shirt	1			1						1				
G	8.5	3	1911	shirt	1			1						1				
G	8.6	3	1911	shirt	1			1						1				
G	9	3	1909	shirt	1			1						1				
G	10.1	3	1909	jacket			1	1		1								
G	10.2	3	1909	jacket			1	1		1								
G	10.3	3	1909	jacket			1	1		1								
G	11.1	3	1900	shirt	1			1						1				
G	12.1	3	1910	shirt	1			1						1				
G	12.2	3	1910	shirt	1			1						1				
G	12.3	3	1910	shirt	1			1						1				
G	12.4	3	1910	shirt	1			1						1				
G	12.5	3	1910	shirt	1			1						1				
G	12.6	3	1910	shirt	1			1					1					
G	12.7	3	1910	shirt	1			1						1				
G	12.8	3	1910	shirt	1			1						1				
G	12.9	3	1910	shirt	1			1						1				
G	12.10	3	1910	shirt	1			1						1				
G	12.11	3	1910	cardigan														
G	12.12	3	1910	shirt	1			1						1				
G	12.13	3	1910	shirt	1			1						1				
G	12.14	3	1910	cardigan														
G	12.15	3	1910	shirt	1			1						1				
G	12.16	3	1910	shirt	1			1						1				
G	12.17	3	1910	shirt	1			1						1				
G	12.18	3	1910	shirt	1			1						1				
G	12.19	3	1910	shirt	1			1						1				
<b>G Count</b>					59	0	6	61	0	4	1	0	3	56	0	0	0	0

Table 14: Mountaineering- Upper Body Garment Feature Identification-Neckline and Collar																		
sport	ref	dec	date	Upgar	neck-round	neck-square	neck-v	neck-high	neck-low	collar-notch	collar-shawl	collar-sailor	collar-stand	collar-turndown	bow	ruffle	button	embroidery
M	1.10	2	1895	jacket			1					1						
M	2.00	2	1895	shirt	1			1						1				
M	3.00	2	1895	shirt	1			1										
M	4.10	2	1895	jacket			1				1							
M	4.30	2	1895	jacket			1				1							
M	4.20	2	1895	jacket			1				1							
M	5.10	3	1900	shirt	1			1							1			
M	5.20	3	1900	shirt	1			1							1			
M	6.10	3	1906	shirt														
M	6.20	3	1906	shirt														
M	6.30	3	1906	shirt														
M	7.00	3	1910	shirt	1			1						1				
M	8.00	3	1910	shirt	1			1						1				
M	9.00	3	1900	shirt	1			1						1				
M	10.10	3	1900	jacket														
M	10.20	3	1900	jacket														
M	11.10	3	1907	shirt	1			1						1				
M	11.20	3	1907	dress	1			1						1				
M	11.30	3	1907	shirt	1			1						1				
M	11.40	3	1907	shirt	1			1						1				
M	12.00	3	1910	dress	1			1							1			
M	13.10	3	1910	jacket			1				1							
M	13.20	3	1910	jacket			1				1							
M	14.10	3	1910	shirt	1			1						1				
M	14.20	3	1910	shirt	1			1						1				
M	14.30	3	1910	shirt	1			1							1			
M	15.10	3	1900	jacket														
M	15.20	3	1900	shirt	1			1										
M	16.00	3	1912	jacket			1				1							
M	17.00	3	1912	jacket														
M	18.00	3	1903	Jersey	1			1										
<b>M Count</b>					17	0	7	17	0	6	1	0	10	4	0	0	0	0

Table 15: Tennis-0Upper Body Garment Feature Identification-Neckline and Collar

sport	ref	dec	date	Upgar	neck-round	neck-square	neck-v	neck-high	neck-low	collar-notch	collar-shawl	collar-sailor	collar-stand	collar-turndown	bow	ruffle	button	embroidery
T	1.1	1	1887	dress	1			1					1					
T	1.2	1	1887	dress	1			1					1					
T	2	1	1886	dress	1			1					1					
T	3	1	1886	dress	1			1					1					
T	4	1	1886	dress	1			1						1				
T	4	1	1886	dress	1			1						1				
T	4	1	1886	dress	1			1						1				
T	4	1	1886	dress	1			1						1				
T	4	1	1886	dress	1			1						1				
T	26.1	1	1889	dress	1			1						1				
T	26.2	1	1889	dress	1			1						1				
T	26.3	1	1889	dress	1			1						1				
T	26.4	1	1889	dress	1			1						1				
T	33	1	1889	shirt	1			1					1					
T	5.1	2	1896	shirt	1			1					1					
T	5.1	2	1896	shirt	1			1					1					
T	6	2	1893	jacket			1											
T	7	2	1890	dress	1			1									1	
T	8.1	2	1894	dress	1			1							1			
T	8.2	2	1894	dress	1			1							1			
T	9	2	1893	shirt	1			1					1				1	
T	10	2	1895	dress	1			1					1				1	
T	25.1	2	1893	shirt	1			1					1					
T	25.2	2	1893	dress	1			1					1					
T	25.3	2	1893	dress	1			1					1					
T	25.4	2	1893	dress	1			1					1					
T	27	2	1892	dress	1			1						1	1			
T	27.2	2	1892	dress	1			1						1	1			
T	27.3	2	1892	shirt	1			1					1				1	
T	31	2	1896	shirt	1			1										
T	11.1	3	1900	shirt	1			1					1					
T	11.2	3	1900	shirt	1			1					1		1			
T	12.1	3	1900	jacket			1			1								
T	12.2	3	1900	shirt	1			1										
T	12.3	3	1900	shirt	1			1					1					
T	12.4	3	1900	shirt	1			1										
T	12.5	3	1900	shirt	1			1					1					
T	12.6	3	1900	shirt	1			1					1					
T	12.7	3	1900	shirt	1			1										
T	12.8	3	1900	shirt	1			1						1				
T	13.1	3	1900	shirt	1			1					1					
T	13.2	3	1900	shirt	1			1					1					
T	14.1	3	1904	shirt	1			1					1					
T	14.2	3	1904	shirt	1			1					1					
T	14.3	3	1904	shirt	1			1						1				
T	14.4	3	1904	dress	1			1					1					
T	14.5	3	1904	dress	1			1					1					
T	14.6	3	1904	dress	1			1					1					
T	14.7	3	1904	dress	1			1					1					
T	14.8	3	1904	dress	1			1					1					
T	15.1	3	1906	shirt	1			1					1					
T	15.2	3	1906	shirt	1			1					1					
T	16	3	1910	dress	1			1					1					
T	17	3	1910	shirt	1			1						1				
T	18.1	3	1910	shirt	1			1					1				1	
T	18.2	3	1910	shirt	1			1										
T	18.3	3	1910	shirt	1			1					1					
T	18.4	3	1910	shirt	1			1						1				
T	19.1	3	1908	shirt	1			1					1					
T	19.1	3	1908	shirt	1			1					1					
T	19.1	3	1908	shirt	1			1					1					
T	19.2	3	1908	shirt	1			1					1					
T	19.3	3	1908	shirt	1			1					1					
T	19.4	3	1908	shirt	1			1					1					
T	19.5	3	1908	shirt	1			1					1					
T	19.6	3	1908	shirt	1			1					1					
T	19.7	3	1908	shirt	1			1					1					
T	19.8	3	1908	shirt	1			1					1					
T	19.9	3	1908	shirt	1			1					1					
T	20.1	3	1910	shirt	1			1					1					
T	20.2	3	1910	shirt	1			1					1					
T	20.3	3	1910	shirt	1			1					1					
T	20.4	3	1910	shirt	1			1					1				1	
T	20.5	3	1910	dress	1			1					1					
T	20.6	3	1910	shirt	1			1					1				1	
T	20.7	3	1910	shirt	1			1					1					
T	20.8	3	1910	dress	1			1					1			1		
T	20.9	3	1910	shirt	1			1					1					
T	20.9	3	1910	shirt	1			1					1					
T	20.9	3	1910	shirt	1			1					1					
T	21	3	1911	shirt	1			1					1				1	
T	22	3	1911	shirt	1			1					1					
T	23	3	1912	shirt	1			1					1					
T	24	3	1912	shirt	1			1					1				1	
T	28.1	3	1907	shirt	1			1					1					
T	28.1	3	1900	shirt	1			1					1					
T	28.2	3	1907	shirt	1			1					1					
T	28.2	3	1900	shirt	1			1					1					
T	28.3	3	1900	shirt	1			1					1					

sport	ref	dec	date	Upgar	neck-round	neck-square	neck-v	neck-high	neck-low	collar-notch	collar-shawl	collar-sailor	collar-stand	collar-turndown	bow	ruffle	button	embroidery	applique
T	28.4	3	1900	shirt	1			1					1			1			
T	29	3	1912	shirt	1			1											
T	30	3	1912	shirt	1			1											
T	31.1	3	1908	shirt	1			1							1				
T	31.2	3	1908	shirt	1			1							1				
T	34.1	3	1911	shirt	1			1							1				
T	34.2	3	1911	shirt	1			1							1				
T	35.1	3	1912	shirt	1			1											
T	35.2	3	1912	shirt	1			1							1				
T	35.3	3	1912	shirt	1			1							1				
T	35.4	3	1912	shirt	1			1					1						
T	36.1	3	1906	shirt	1			1							1				
T	36.2	3	1906	shirt	1			1							1				
T	36.3	3	1906	shirt	1			1							1				
T	36.4	3	1906	shirt	1			1							1				
T	36.5	3	1906	shirt	1			1					1						
T	36.6	3	1906	shirt	1			1					1						
<b>T Count</b>					104	0	2	104	0	1	0	0	62	31	6	10	0	0	3

Table 16: Cycling-Upper Body Garment Feature Identification-Sleeve Types													
Sport	ref	date	Upgar	set-in sleeve	drop shoulder	dolman	basic fitted	coat	bishop	mutton leg	puff cap	pagoda	
C	1.2	1895	jacket	1							1		
C	1.2	1895	jacket	1							1		
C	1.3	1895	jacket	1							1		
C	2.1	1895	jacket	1			1				1		
C	2.2	1895	jacket	1							1		
C	2.3	1895	jacket	1							1		
C	2.4	1895	shirt	1							1		
C	2.5	1895	jacket	1							1		
C	2.6	1895	jacket	1							1		
C	2.7	1895	jacket	1							1		
C	2.8	1895	shirt	1							1		
C	2.9	1895	dress bod	1							1		
C	3	1890	jacket	1							1		
C	4	1893	jacket	1							1		
C	5	1893	jacket	1							1		
C	6.1	1892	shirt	1								1	
C	6.2	1892	shirt	1								1	
C	7.1	1890	jacket	1							1		
C	7.2	1890	jacket	1							1		
C	7.3	1890	jacket	1							1		
C	7.4	1890	jacket	1							1		
C	7.5	1890	jacket	1							1		
C	9	1893	jacket	1							1		
C	9.2	1893	jacket	1							1		
C	9.3	1893	jacket	1							1		
C	10	1890	jacket	1							1		
C	14	1895	shirt	1							1		
C	15.1	1895	dress bod	1					1				
C	15.2	1895	dress bod	1								1	
C	16	1897	dress bod	1								1	
C	17	1895	shirt	1					1				
C	19	1895	jacket	1					1				
C	25	1895	shirt	1								1	
C	27	1897	shirt	1					1				
C	28.1	1895	shirt	1			1						
C	28.2	1895	shirt	1							1		
C	29.1	1897	shirt	1							1		
C	29.2	1897	shirt	1							1		
C	29.3	1897	shirt	1							1		
C	30.1	1896	shirt	1							1		
C	30.2	1896	shirt	1							1		
C	32	1899	jacket	1							1		
C	34	1896	shirt	1							1		
C	35	1896	dress bod	1							1		
C	36	1899	jacket	1				1					
C	37	1899	dress bod	1								1	
C	38	1896	shirt	1					1				
C	39.1	1890	jacket	1				1					
C	39.2	1890	jacket	1				1					
C	41	1894	shirt	1							1		
C	2.1	1895	shirt	1			1						
C	8	1900	jacket	1							1		
C	11	1900	shirt	1							1		
C	12	1900	jacket	1							1		
C	13	1905	dress bod	1					1				
C	18	1900	dress bod	1							1		
C	20	1900	shirt	1							1		
C	21.1	1900	dress bod	1			1		1				
C	21.2	1900	dress bod	1			1		1				
C	22.1	1908	shirt	1			1						
C	22.2	1908	shirt	1			1		1				
C	23	1900	dress bod	1							1		
C	24.1	1910	shirt	1									
C	24.2	1910	dress bod	1			1						
C	26.1	1900	dress bod	1			1		1				
C	26.2	1900	dress bod	1					1				
C	33.1	1900	blouse	1					1				
C	33.2	1900	shirt	1			1						
C	33.3	1900	shirt	1			1						
C	42.1	1900	blouse	1			1						
C	42.2	1900	blouse	1					1				
C	40.1	1900	shirt	1					1				
C	40.2	1900	dress bod	1			1						
C	40.3	1900	shirt	1					1				
C Total				74	0	0	13	3	15	41	6	0	0

Table 17: Golf-Upper Body Garment Feature Identification-Sleeve Types														
Sport	ref	date	Uppgar	set-in sleeve	drop shirtoulder	dolman	basic fitted	coat	bishirto	mutton leg	puff	cap	pagoda	lantern
G	1.1	1893	shirt	1							1			
G	1.2	1893	shirt	1							1			
G	1.3	1893	shirt	1							1			
G	1.4	1893	shirt	1							1			
G	1.5	1893	shirt	1							1			
G	1.6	1893	shirt	1							1			
G	1.7	1893	shirt	1							1			
G	1.8	1893	shirt	1							1			
G	1.9	1893	shirt	1							1			
G	1.10	1893	shirt	1							1			
G	1.11	1893	shirt	1							1			
G	1.12	1893	shirt	1							1			
G	1.13	1893	shirt	1							1			
G	1.14	1893	shirt	1							1			
G	1.15	1893	shirt	1							1			
G	1.16	1893	shirt	1							1			
G	1.17	1893	shirt	1							1			
G	1.18	1893	shirt	1							1			
G	1.19	1893	shirt	1							1			
G	1.20	1893	shirt	1							1			
G	1.21	1893	shirt	1							1			
G	1.22	1893	shirt	1							1			
G	11.1	1900	shirt	1										
G	9	1909	shirt	1				1						
G	10.1	1909	jacket	1				1						
G	10.2	1909	jacket	1				1						
G	10.3	1909	jacket	1				1						
G	2.1	1910	cardigan	1				1						
G	2.2	1910	shirt	1					1					
G	2.3	1910	jacket	1				1						
G	2.4	1910	shirt	1					1					
G	2.5	1910	cardigan	1				1	1					
G	2.6	1910	shirt	1				1						
G	3.1	1910	shirt	1				1						
G	4.1	1910	shirt	1				1						
G	4.2	1910	shirt	1				1						
G	6.1	1910	shirt	1							1			
G	7.1	1910	shirt	1				1						
G	7.2	1910	shirt	1				1						
G	7.3	1910	shirt	1				1						
G	12.1	1910	shirt	1				1						
G	12.2	1910	shirt	1				1						
G	12.3	1910	shirt	1				1						
G	12.4	1910	shirt	1				1						
G	12.5	1910	shirt	1				1						
G	12.6	1910	shirt	1				1						
G	12.7	1910	shirt	1				1						
G	12.8	1910	shirt	1				1						
G	12.9	1910	shirt	1				1						
G	12.10	1910	shirt	1				1						
G	12.11	1910	cardigan	1					1					
G	12.12	1910	shirt	1				1						
G	12.13	1910	shirt	1				1						
G	12.14	1910	cardigan	1					1					
G	12.15	1910	shirt	1				1						
G	12.16	1910	shirt	1				1						
G	12.17	1910	shirt	1				1						
G	12.18	1910	shirt	1				1						
G	12.19	1910	shirt	1				1						
G	8.1	1911	cardigan	1					1					
G	8.2	1911	cardigan	1					1					
G	8.3	1911	shirt	1				1						
G	8.4	1911	shirt	1				1						
G	8.5	1911	shirt	1				1						
G	8.6	1911	shirt	1				1						
G	5.1	1910	shirt	1							1			
<b>G Total</b>				66		0	0	31	10	2	23	1	0	0

Table18: Mountaineering-Upper Body Garment Feature Identification-Sleeve Types															
Sport	ref	date	Uppgar	set-in sleeve	drop shirt	ouider	dolman	basic fitted	coat	bishirto	mutton leg	puff	cap	pagoda	lantern
M	1.10	1895	jacket	1							1				
M	2.00	1895	shirt	1							1				
M	3.00	1895	shirt	1							1				
M	4.10	1895	jacket	1					1						
M	4.30	1895	jacket	1							1				
M	4.20	1895	jacket	1							1				
M	5.10	1900	shirt	1				1							
M	5.20	1900	shirt	1				1							
M	9.00	1900	shirt	1				1							
M	10.10	1900	jacket	1											
M	10.20	1900	jacket	1											
M	15.10	1900	jacket	1					1						
M	15.20	1900	shirt	1				1							
M	6.10	1906	shirt	1											
M	6.20	1906	shirt	1											
M	6.30	1906	shirt	1											
M	11.10	1907	shirt	1								1			
M	11.20	1907	dress bod	1				1							
M	11.30	1907	shirt	1								1			
M	11.40	1907	shirt	1								1			
M	7.00	1910	shirt	1				1							
M	8.00	1910	shirt	1				1							
M	12.00	1910	dress bod	1								1			
M	13.10	1910	jacket	1					1						
M	13.20	1910	jacket	1					1						
M	14.10	1910	shirt	1				1							
M	14.20	1910	shirt	1				1							
M	14.30	1910	shirt	1				1							
M	16.00	1912	jacket	1					1						
M	17.00	1912	jacket	1					1						
M	18.00	1903	Jersey												
<b>M Total</b>				30	0	0		10	6	0	5	4	0	0	0

Table 19: Tennis-Upper Body Garment Feature Identification-Sleeve Types														
Sport	ref	date	Upgar	set-in sleeve	drop shirtoolder	dolman	basic fitted	coat	bishirto	mutton leg	puff	cap	pagoda	lantern
T	2	1886	dress bod	1			1							
T	3	1886	dress bod	1			1							
T	4	1886	dress bod	1			1							
T	4	1886	dress bod	1			1							
T	4	1886	dress bod	1			1							
T	4	1886	dress bod	1			1							
T	4	1886	dress bod	1			1							
T	1.1	1887	dress bod	1			1							
T	1.2	1887	dress bod	1					1					
T	26.1	1889	dress bod	1			1							
T	26.2	1889	dress bod	1			1							
T	26.3	1889	dress bod	1			1							
T	26.4	1889	dress bod	1			1							
T	33	1889	shirt	1							1			
T	7	1890	dress bod	1			1							
T	27	1892	dress bod	1			1							
T	27.2	1892	dress bod	1							1			
T	27.3	1892	shirt	1					1					
T	6	1893	jacket	1							1			
T	9	1893	shirt	1							1			
T	25.1	1893	shirt	1			1							
T	25.2	1893	dress bod	1								1		
T	25.3	1893	dress bod	1								1		
T	25.4	1893	dress bod	1							1			
T	8.1	1894	dress bod	1			1							
T	8.2	1894	dress bod		1				1					
T	10	1895	dress bod	1										
T	5.1	1896	shirt	1							1			
T	5.1	1896	shirt	1							1			
T	31	1896	shirt	1							1			
T	11.1	1900	shirt	1					1					
T	11.2	1900	shirt						1					
T	12.1	1900	jacket	1								1		
T	12.2	1900	shirt	1								1		
T	12.3	1900	shirt	1			1							
T	12.4	1900	shirt	1								1		
T	12.5	1900	shirt	1								1		
T	12.6	1900	shirt	1								1		
T	12.7	1900	shirt	1							1			
T	12.8	1900	shirt	1					1					
T	13.1	1900	shirt	1			1							
T	13.2	1900	shirt	1								1		
T	28.1	1900	shirt	1								1		
T	28.2	1900	shirt	1							1			
T	28.3	1900	shirt	1			1					1		
T	28.4	1900	shirt	1							1			
T	14.1	1904	shirt	1					1					
T	14.2	1904	shirt	1					1					
T	14.3	1904	shirt	1			1							
T	14.4	1904	dress bod	1					1					
T	14.5	1904	dress bod	1					1					
T	14.6	1904	dress bod	1					1					
T	14.7	1904	dress bod	1			1							
T	14.8	1904	dress bod	1					1					
T	15.1	1906	shirt	1			1							
T	15.2	1906	shirt	1							1			
T	36.1	1906	shirt	1			1							
T	36.2	1906	shirt	1			1							
T	36.3	1906	shirt	1			1							
T	36.4	1906	shirt	1			1							
T	36.5	1906	shirt	1			1							
T	36.6	1906	shirt	1			1							
T	28.1	1907	shirt	1			1							
T	28.2	1907	shirt	1			1							
T	19.1	1908	shirt	1			1							
T	19.1	1908	shirt	1			1							
T	19.11	1908	shirt	1			1							
T	19.2	1908	shirt	1			1							
T	19.3	1908	shirt	1			1							
T	19.4	1908	shirt	1			1							
T	19.5	1908	shirt	1			1							
T	19.6	1908	shirt	1			1							
T	19.7	1908	shirt	1			1							
T	19.8	1908	shirt	1			1							
T	19.9	1908	shirt	1			1							
T	31.1	1908	shirt	1			1							
T	31.2	1908	shirt	1			1							
T	16	1910	dress bod	1			1							
T	17	1910	shirt	1			1							
T	18.1	1910	shirt	1			1							
T	18.2	1910	shirt	1			1							
T	18.3	1910	shirt	1					1					
T	18.4	1910	shirt	1			1							
T	20.1	1910	shirt	1			1							
T	20.2	1910	shirt	1										
T	20.3	1910	shirt	1							1			
T	20.4	1910	shirt	1			1							
T	20.5	1910	dress bod	1			1							
T	20.6	1910	shirt	1			1							
T	20.7	1910	shirt	1					1					
T	20.8	1910	dress bod	1					1					
T	20.9	1910	shirt	1			1							

Sport	ref	date	Uppgar	set-in sleeve	drop shirtoulder	dolman	basic fitted	coat	bishirto	mutton leg	puff cap	pagoda	lantern		
T	20.9	1910	shirt	1			1								
T	20.9	1910	shirt	1			1								
T	21	1911	shirt	1			1								
T	22	1911	shirt	1			1								
T	34.1	1911	shirt	1			1								
T	34.2	1911	shirt	1			1								
T	23	1912	shirt	1			1								
T	24	1912	shirt	1						1					
T	29	1912	shirt	1			1								
T	30	1912	shirt	1			1								
T	35.1	1912	shirt	1			1								
T	35.2	1912	shirt	1											
T	35.3	1912	shirt	1			1								
T	35.4	1912	shirt	1			1								
<b>T Total</b>				104		1	0	65	0	15	10	14	0	0	0

Table 20: Cycling-Upper Body Garment Feature Identification-Sleeve and Cuff Characteristics																			
sport	ref	date	Upgar	gathers	pleats	bow	button	embroidery	facing	applique	cuff band	cuff lap	cuff ruffle	hem pleat	hem bow	hem buttons	hem embroidery	hem applique	
C	1.2	1895	jacket												1				
C	1.2	1895	jacket												1				
C	1.3	1895	jacket			1					1							1	
C	2.1	1895	jacket			1													
C	2.2	1895	jacket			1													
C	2.3	1895	jacket			1													
C	2.4	1895	shirt								1								
C	2.5	1895	jacket			1					1								
C	2.6	1895	jacket			1													
C	2.7	1895	jacket		1	1					1								
C	2.8	1895	shirt			1					1								
C	2.9	1895	dress		1									1					
C	3	1890	jacket			1													
C	4	1893	jacket																
C	5	1893	jacket		1						1								
C	6.1	1892	shirt		1						1						1		
C	6.2	1892	shirt		1						1								
C	7.1	1890	jacket			1					1					1		1	
C	7.2	1890	jacket		1	1					1							1	
C	7.3	1890	jacket		1	1					1							1	
C	7.4	1890	jacket			1													
C	7.5	1890	jacket			1					1							1	
C	9	1893	jacket			1													
C	9.2	1893	jacket			1													
C	9.3	1893	jacket			1													
C	10	1890	jacket			1													
C	14	1895	shirt		1														
C	15.1	1895	dress		1						1								
C	15.2	1895	dress		1						1			1					
C	16	1897	dress		1														
C	17	1895	shirt								1								
C	19	1895	jacket		1														
C	25	1895	shirt		1						1								
C	27	1897	shirt		1								1						
C	28.1	1895	shirt										1						
C	28.2	1895	shirt			1							1						
C	29.1	1897	shirt			1							1		1				
C	29.2	1897	shirt			1					1								
C	29.3	1897	shirt			1							1						
C	30.1	1896	shirt		1	1							1						
C	30.2	1896	shirt			1							1						
C	32	1899	jacket			1													
C	34	1896	shirt			1							1						
C	35	1896	dress			1													
C	36	1899	jacket															1	
C	37	1899	dress			1					1							1	
C	38	1896	shirt																
C	39.1	1890	jacket														1		
C	39.2	1890	jacket																
C	41	1894	shirt			1							1						
C	2.1	1895	shirt		1						1								
C	8	1900	jacket		1						1						1		
C	11	1900	shirt		1	1					1								
C	12	1900	jacket			1					1								
C	13	1905	dress		1						1	1					1		
C	18	1900	dress		1						1								
C	20	1900	shirt		1						1								
C	21.1	1900	dress								1								
C	21.2	1900	dress								1								
C	22.1	1908	shirt								1	1							
C	22.2	1908	shirt		1						1	1							
C	23	1900	dress		1														
C	24.1	1910	shirt		1														
C	24.2	1910	dress								1								
C	26.1	1900	dress								1								
C	26.2	1900	dress		1						1								
C	33.1	1900	shirt		1						1								
C	33.2	1900	shirt										1						
C	33.3	1900	shirt										1						
C	42.1	1900	shirt										1				1		
C	42.2	1900	shirt			1							1						
C	40.1	1900	shirt		1						1								
C	40.2	1900	dress								1	1		1					
C	40.3	1900	shirt		1								1						
<b>C Total</b>				28	32	0	0	0	0	0	1	35	17	3	1	2	6	5	2

Table 21: Golf Upper Body Garment Feature Identification-Sleeve and Cuff Characteristics

sport	ref	date	Uppgar	gathers	pleats	bow	button	embroidery	facing	applique	cuff band	cuff lap	cuff ruffle	hem pleat	hem bow	hem buttons	hem embroidery	
G	1.1	1893	shirt			1							1				1	
G	1.2	1893	shirt			1							1				1	
G	1.3	1893	shirt			1							1				1	
G	1.4	1893	shirt			1							1				1	
G	1.5	1893	shirt			1							1				1	
G	1.6	1893	shirt			1							1				1	
G	1.7	1893	shirt			1							1				1	
G	1.8	1893	shirt			1							1				1	
G	1.9	1893	shirt			1							1				1	
G	1.10	1893	shirt			1							1				1	
G	1.11	1893	shirt			1							1				1	
G	1.12	1893	shirt			1							1				1	
G	1.13	1893	shirt			1							1				1	
G	1.14	1893	shirt			1							1				1	
G	1.15	1893	shirt			1							1				1	
G	1.16	1893	shirt			1							1				1	
G	1.17	1893	shirt			1							1				1	
G	1.18	1893	shirt			1							1				1	
G	1.19	1893	shirt			1							1				1	
G	1.20	1893	shirt			1							1				1	
G	1.21	1893	shirt			1							1				1	
G	1.22	1893	shirt			1							1				1	
G	11.1	1900	shirt										1					
G	9	1909	shirt										1					
G	10.1	1909	jacket								1							
G	10.2	1909	jacket								1							
G	10.3	1909	jacket								1							
G	2.1	1910	cardigan															
G	2.2	1910	shirt								1						1	
G	2.3	1910	jacket															
G	2.4	1910	shirt										1				1	
G	2.5	1910	cardigan															
G	2.6	1910	shirt										1					
G	3.1	1910	shirt										1					
G	4.1	1910	shirt										1					
G	4.2	1910	shirt										1					
G	6.1	1910	shirt			1							1				1	
G	7.1	1910	shirt										1				1	
G	7.2	1910	shirt										1				1	
G	7.3	1910	shirt										1					
G	12.1	1910	shirt										1					
G	12.2	1910	shirt										1					
G	12.3	1910	shirt										1					
G	12.4	1910	shirt										1					
G	12.5	1910	shirt										1					
G	12.6	1910	shirt										1					
G	12.7	1910	shirt										1					
G	12.8	1910	shirt										1					
G	12.9	1910	shirt										1					
G	12.10	1910	shirt										1					
G	12.11	1910	cardigan															
G	12.12	1910	shirt										1					
G	12.13	1910	shirt										1					
G	12.14	1910	cardigan															
G	12.15	1910	shirt										1					
G	12.16	1910	shirt										1					
G	12.17	1910	shirt										1					
G	12.18	1910	shirt										1					
G	12.19	1910	shirt										1					
G	8.1	1911	cardigan															
G	8.2	1911	cardigan															
G	8.3	1911	shirt										1				1	
G	8.4	1911	shirt										1					
G	8.5	1911	shirt										1					
G	8.6	1911	shirt										1					
G	5.1	1910	shirt			1							1					
G Total					2	22	0	0	0	0	0	4	55	0	0	0	28	0

Table 22: Mountaineering Upper Body Garment Feature Identification-Sleeve and Cuff Characteristics																		
sport	ref	date	Upgar	gathers	pleats	bow	button	embroidery	facing	applique	cuff band	cuff lap	cuff ruffle	hem pleat	hem bow	hem buttons	hem embroidery	hem applique
M	1.10	1895	jacket		1													
M	2.00	1895	shirt		1												1	
M	3.00	1895	shirt															
M	4.10	1895	jacket															
M	4.30	1895	jacket															
M	4.20	1895	jacket															
M	5.10	1900	shirt									1						
M	5.20	1900	shirt									1						
M	9.00	1900	shirt									1						
M	10.10	1900	jacket															
M	10.20	1900	jacket															
M	15.10	1900	jacket															
M	15.20	1900	shirt		1							1						
M	6.10	1906	shirt															
M	6.20	1906	shirt															
M	6.30	1906	shirt															
M	11.10	1907	shirt	1									1					
M	11.20	1907	dress										1				1	
M	11.30	1907	shirt	1														
M	11.40	1907	shirt	1														
M	7.00	1910	shirt										1					
M	8.00	1910	shirt										1					
M	12.00	1910	dress	1							1							
M	13.10	1910	jacket															
M	13.20	1910	jacket	1														
M	14.10	1910	shirt										1					
M	14.20	1910	shirt										1					
M	14.30	1910	shirt										1					
M	16.00	1912	jacket															
M	17.00	1912	jacket															
M	18.00	1903	Jersey															
<b>M Total</b>				5	3	0	0	0	0	0	1	11	0	0	0	2	0	0

Table 23: Tennis-Upper Body Garment Feature Identification-Sleeve and Cuff Characteristics

sport	ref	date	Uppgar	gathers	pleats	bow	button	embroidery	facing	applique	cuff band	cuff lap	cuff ruffle	hem pleat	hem bow	hem buttons	hem embroidery	hem applique
T	2	1886	dress															
T	3	1886	dress															
T	4	1886	dress									1						
T	4	1886	dress									1						
T	4	1886	dress									1						
T	4	1886	dress									1						
T	4	1886	dress									1						
T	1.1	1887	dress									1					1	1
T	1.2	1887	dress	1							1							
T	26.1	1889	dress		1				1									
T	26.2	1889	dress			1			1									
T	26.3	1889	dress			1			1									
T	26.4	1889	dress			1			1									
T	33	1889	shirt	1							1				1			
T	7	1890	dress		1						1							
T	27	1892	dress			1					1							
T	27.2	1892	dress			1					1							
T	27.3	1892	shirt	1							1							
T	6	1893	jacket		1													
T	9	1893	shirt	1							1							
T	25.1	1893	shirt								1							
T	25.2	1893	dress	1					1									
T	25.3	1893	dress	1					1									
T	25.4	1893	dress	1														
T	8.1	1894	dress															
T	8.2	1894	dress	1							1							
T	10	1895	dress	1														
T	5.1	1896	shirt		1													
T	5.1	1896	shirt		1													1
T	31	1896	shirt	1							1	1						
T	11.1	1900	shirt								1							
T	11.2	1900	shirt								1							1
T	12.1	1900	jacket	1					1									
T	12.2	1900	shirt	1					1									
T	12.3	1900	shirt								1							
T	12.4	1900	shirt	1							1							
T	12.5	1900	shirt										1					
T	12.6	1900	shirt										1					
T	12.7	1900	shirt			1												
T	12.8	1900	shirt								1							
T	13.1	1900	shirt										1					
T	13.2	1900	shirt	1									1					
T	28.1	1900	shirt		1													
T	28.2	1900	shirt		1													
T	28.3	1900	shirt	1							1							
T	28.4	1900	shirt		1													
T	14.1	1904	shirt	1									1					
T	14.2	1904	shirt	1							1							
T	14.3	1904	shirt										1					
T	14.4	1904	dress	1							1							
T	14.5	1904	dress								1							
T	14.6	1904	dress								1						1	
T	14.7	1904	dress								1							
T	14.8	1904	dress								1							
T	15.1	1906	shirt								1							
T	15.2	1906	shirt										1					
T	36.1	1906	shirt										1					
T	36.2	1906	shirt										1					
T	36.3	1906	shirt										1					
T	36.4	1906	shirt										1					
T	36.5	1906	shirt										1					
T	36.6	1906	shirt										1					
T	28.1	1907	shirt										1					
T	28.2	1907	shirt										1					
T	19.1	1908	shirt		1								1					
T	19.1	1908	shirt		1								1					
T	19.1	1908	shirt		1								1					
T	19.2	1908	shirt		1								1					
T	19.3	1908	shirt		1								1					
T	19.4	1908	shirt		1								1					
T	19.5	1908	shirt		1								1					
T	19.6	1908	shirt		1								1					
T	19.7	1908	shirt		1								1					
T	19.8	1908	shirt		1								1					
T	19.9	1908	shirt		1								1					
T	31.1	1908	shirt										1					
T	31.2	1908	shirt										1					
T	16	1910	dress								1							
T	17	1910	shirt										1					
T	18.1	1910	shirt										1					
T	18.2	1910	shirt								1							
T	18.3	1910	shirt										1					
T	18.4	1910	shirt															
T	20.1	1910	shirt											1				
T	20.2	1910	shirt		1								1			1		
T	20.3	1910	shirt								1							
T	20.4	1910	shirt								1							
T	20.5	1910	dress			1												
T	20.6	1910	shirt										1					
T	20.7	1910	shirt										1					
T	20.8	1910	dress	1														

sport	ref	date	Upgar	gathers	pleats	bow	button	embroidery	facing	applique	cuff band	cuff lap	cuff ruffle	hem pleat	hem bow	hem buttons	hem embroidery	hem applique
T	20.9	1910	shirt									1						
T	20.9	1910	shirt									1						
T	20.9	1910	shirt									1						
T	21	1911	shirt									1						
T	22	1911	shirt									1						
T	34.1	1911	shirt									1						
T	34.2	1911	shirt									1						
T	23	1912	shirt									1						
T	24	1912	shirt	1							1							
T	29	1912	shirt									1						
T	30	1912	shirt								1							
T	35.1	1912	shirt															
T	35.2	1912	shirt															
T	35.3	1912	shirt									1						
T	35.4	1912	shirt									1						
<b>T Total</b>				20	26	1	0	0	8	0	35	42	1	0	1	1	4	1

Table 24: Cycling - Upper Body Garment Feature Identification-Sleeve Characteristics							Sleeve length and width ranking			
sport	ref	dec	date	Upgar	sleeve length	sleeve width-shoulder	sleeve width-elbow	sleeve width-forearm	sleeve width-wrist	
C	1.2	2	1895	jacket	5	5	3	1	1	
C	1.2	2	1895	jacket	5	5	3	1	1	
C	1.3	2	1895	jacket	5	5	2	1	1	
C	2.1	2	1895	jacket	5	5	2	1	1	
C	2.2	2	1895	jacket	5	5	3	2	2	
C	2.3	2	1895	jacket	5	5	3	2	2	
C	2.4	2	1895	shirt	5	5	2	1	1	
C	2.5	2	1895	jacket	5	5	3	2	2	
C	2.6	2	1895	jacket	5	5	3	2	1	
C	2.7	2	1895	jacket	5	5	4	3	3	
C	2.8	2	1895	shirt	5	4	4	4	2	
C	2.9	2	1895	dress	5	5	3	2	1	
C	3	2	1890	jacket	5	5	3	2	2	
C	4	2	1893	jacket	5	5	3	2	2	
C	5	2	1893	jacket	5	5	3	2	1	
C	6.1	2	1892	shirt	5	4	4	3	1	
C	6.2	2	1892	shirt	5	4	4	3	1	
C	7.1	2	1890	jacket	5	5	3	2	2	
C	7.2	2	1890	jacket	5	5	1	1	1	
C	7.3	2	1890	jacket	5	5	2	2	2	
C	7.4	2	1890	jacket	5	5	3	2	2	
C	7.5	2	1890	jacket	5	5	3	2	2	
C	9	2	1893	jacket	5	5	3	2	2	
C	9.2	2	1893	jacket	5	5	3	2	2	
C	9.3	2	1893	jacket	5	5	2	1	1	
C	10	2	1890	jacket	5	5	3	2	2	
C	14	2	1895	shirt	5	5	2	1	1	
C	15.1	2	1895	dress	5	5	4	4	1	
C	15.2	2	1895	dress	5	3	2	1	1	
C	16	2	1897	dress	5	3	1	1	1	
C	17	2	1895	shirt	5	3	3	3	1	
C	19	2	1895	jacket	5	4	3	2	2	
C	25	2	1895	shirt	5	3	3	2	1	
C	27	2	1897	shirt	5	3	3	3	1	
C	28.1	2	1895	shirt	5	2	3	3	2	
C	28.2	2	1895	shirt	5	4	4	3	2	
C	29.1	2	1897	shirt	5	5	5	2	1	
C	29.2	2	1897	shirt	5	3	3	2	1	
C	29.3	2	1897	shirt	5	5	5	2	1	
C	30.1	2	1896	shirt	5	5	5	4	1	
C	30.2	2	1896	shirt	5	5	5	4	1	
C	32	2	1899	jacket	5	4	3	2	2	
C	34	2	1896	shirt	5	5	5	3	1	
C	35	2	1896	dress	5	5	1	1	1	
C	36	2	1899	jacket	5					
C	37	2	1899	dress	5	2	2	2	1	
C	38	2	1896	shirt	5	4	4	1	1	
C	39.1	2	1890	jacket	5	2	2	2	2	
C	39.2	2	1890	jacket	5	2	2	2	2	
C	41	2	1894	shirt	5	4	3	2	2	
C	2.1	2	1895	shirt	5	5	4	4	1	
C	8	3	1900	jacket	5	5	3	2	2	
C	11	3	1900	shirt	5	5	3	3	1	
C	12	3	1900	jacket	5	5	3	2	1	
C	13	3	1905	dress	5	5	4	3	1	
C	18	3	1900	dress	5	5	3	2	2	
C	20	3	1900	shirt	5	5	4	4	1	
C	21.1	3	1900	dress	5	2	3	3	1	
C	21.2	3	1900	dress	5	2	3	3	1	
C	22.1	3	1908	shirt	5	2	2	2	1	
C	22.2	3	1908	shirt	5	2	3	3	1	
C	23	3	1900	dress	5	4	3	1	1	
C	24.1	3	1910	shirt	5	3	2	2	2	
C	24.2	3	1910	dress	5	2	2	2	1	
C	26.1	3	1900	dress	5	3	3	3	1	
C	26.2	3	1900	dress	5	3	3	3	1	
C	33.1	3	1900	shirt	5	2	3	3	1	
C	33.2	3	1900	shirt	5	2	2	2	1	
C	33.3	3	1900	shirt	5	3	2	2	1	
C	42.1	3	1900	shirt	5	2	2	2	1	
C	42.2	3	1900	shirt	5	2	3	3	1	
C	40.1	3	1900	shirt	5	2	3	4	2	
C	40.2	3	1900	dress	5	2	2	2	2	
C	40.3	3	1900	shirt	5	2	2	3	1	

Table 25: Golf - Upper Body Garment Feature Identification-Sleeve Characteristics								Sleeve length and width ranking	
sport	ref	dec	date	Upgar	sleeve length	sleeve width-shoulder	sleeve width-elbow	sleeve width-forearm	sleeve width-wrist
G	1.1	2	1893	shirt	5	4	3	3	2
G	1.2	2	1893	shirt	5	4	3	3	2
G	1.3	2	1893	shirt	5	4	3	3	2
G	1.4	2	1893	shirt	5	4	3	3	2
G	1.5	2	1893	shirt	5	4	3	3	2
G	1.6	2	1893	shirt	5	4	3	3	2
G	1.7	2	1893	shirt	5	4	3	3	2
G	1.8	2	1893	shirt	5	4	3	3	2
G	1.9	2	1893	shirt	5	4	3	3	2
G	1.10	2	1893	shirt	5	4	3	3	2
G	1.11	2	1893	shirt	5	4	3	3	2
G	1.12	2	1893	shirt	5	4	3	3	2
G	1.13	2	1893	shirt	5	4	3	3	2
G	1.14	2	1893	shirt	5	4	3	3	2
G	1.15	2	1893	shirt	5	4	3	3	2
G	1.16	2	1893	shirt	5	4	3	3	2
G	1.17	2	1893	shirt	5	4	3	3	2
G	1.18	2	1893	shirt	5	4	3	3	2
G	1.19	2	1893	shirt	5	4	3	3	2
G	1.20	2	1893	shirt	5	4	3	3	2
G	1.21	2	1893	shirt	5	4	3	3	2
G	1.22	2	1893	shirt	5	4	3	3	2
G	11.1	3	1900	shirt	5	3	3	2	2
G	9	3	1909	shirt	5	2	3	3	2
G	10.1	3	1909	jacket	5	3	3	2	2
G	10.2	3	1909	jacket	5	3	3	3	2
G	10.3	3	1909	jacket	5	3	3	3	2
G	2.1	3	1910	cardigar	5	3	2	2	2
G	2.2	3	1910	shirt	5	2	3	3	1
G	2.3	3	1910	jacket	5	3	3	3	2
G	2.4	3	1910	shirt	5	2	3	3	1
G	2.5	3	1910	cardigar	5	3	2	2	1
G	2.6	3	1910	shirt	5	2	3	3	1
G	3.1	3	1910	shirt	5	2	3	3	1
G	4.1	3	1910	shirt	5	2	3	2	1
G	4.2	3	1910	shirt	5	2	3	2	1
G	6.1	3	1910	shirt	5	4	4	4	1
G	7.1	3	1910	shirt	5	2	3	1	1
G	7.2	3	1910	shirt	5	2	3	3	1
G	7.3	3	1910	shirt	5	2	3	2	1
G	12.1	3	1910	shirt	5	3	3	3	2
G	12.2	3	1910	shirt	5	3	3	3	2
G	12.3	3	1910	shirt	5	3	3	3	2
G	12.4	3	1910	shirt	5	3	3	3	2
G	12.5	3	1910	shirt	5	3	3	3	2
G	12.6	3	1910	shirt	5	3	3	3	2
G	12.7	3	1910	shirt	5	3	3	3	2
G	12.8	3	1910	shirt	5	3	3	3	2
G	12.9	3	1910	shirt	5	3	3	3	2
G	12.10	3	1910	shirt	5	3	3	3	2
G	12.11	3	1910	cardigar	5	3	3	2	2
G	12.12	3	1910	shirt	5	3	3	3	2
G	12.13	3	1910	shirt	5	3	3	3	2
G	12.14	3	1910	cardigar	5	3	3	2	2
G	12.15	3	1910	shirt	5	3	3	3	2
G	12.16	3	1910	shirt	5	3	3	3	2
G	12.17	3	1910	shirt	5	3	3	3	2
G	12.18	3	1910	shirt	5	3	3	3	2
G	12.19	3	1910	shirt	5	3	3	3	2
G	8.1	3	1911	cardigar	5	3	3	2	2
G	8.2	3	1911	cardigar	5	3	3	2	2
G	8.3	3	1911	shirt	5	2	3	2	2
G	8.4	3	1911	shirt	5	2	3	2	2
G	8.5	3	1911	shirt	5	2	3	3	2
G	8.6	3	1911	shirt	5	2	3	3	2
G	5.1	3	1910	shirt	5	3	3	2	1

Table 26: Mountaineering-Upper Body Garment Feature Identification-Sleeve Characteristics								Sleeve length and width ranking	
sport	ref	dec	date	Uppgar	sleeve length	sleeve width-shoulder	sleeve width-elbow	sleeve width-forearm	sleeve width-wrist
M	1.10	2	1895	jacket	5	5	3	2	2
M	2.00	2	1895	shirt	5	4	3	3	2
M	3.00	2	1895	shirt	5	4	3	2	2
M	4.10	2	1895	jacket	5	3	3	3	3
M	4.30	2	1895	jacket	5	4	2	2	2
M	4.20	2	1895	jacket	5	4	2	2	2
M	5.10	3	1900	shirt	5	3	2	2	2
M	5.20	3	1900	shirt	5	3	2	2	2
M	9.00	3	1900	shirt	5	3	3	2	2
M	10.10	3	1900	jacket	5				
M	10.20	3	1900	jacket					
M	15.10	3	1900	jacket	5	3	3	2	2
M	15.20	3	1900	shirt	5	3	3	3	2
M	6.10	3	1906	shirt	5	3	2	2	2
M	6.20	3	1906	shirt	5	3	2	2	2
M	6.30	3	1906	shirt	5	3	2	2	2
M	11.10	3	1907	shirt	5	3	3	3	1
M	11.20	3	1907	dress	5	3	3	3	2
M	11.30	3	1907	shirt	5	4	5	2	2
M	11.40	3	1907	shirt	5	4	5	2	2
M	7.00	3	1910	shirt	5	3	3	3	2
M	8.00	3	1910	shirt	5	3	2	2	2
M	12.00	3	1910	dress	5	4	3	3	2
M	13.10	3	1910	jacket	5	3	3	2	2
M	13.20	3	1910	jacket	5	3	3	2	2
M	14.10	3	1910	shirt	5	3	3	3	2
M	14.20	3	1910	shirt	5	2	2	2	1
M	14.30	3	1910	shirt	5	3	3	2	2
M	16.00	3	1912	jacket	5	3	3	2	2
M	17.00	3	1912	jacket	5	3	3	3	2
M	18.00	3	1903	Jersey					

Table 27: Tennis - Upper Body Garment Feature Identification-Sleeve Characteristics							Sleeve length and width ranking			
sport	ref	dec	date	Upgar	sleeve length	sleeve width-shoulder	sleeve width-elbow	sleeve width-forearm	sleeve width-wrist	
T	2	1	1886	dress	5	2	1	1	1	
T	3		1886	dress	4	2	2	1	1	
T	4	1	1886	dress	4	2	2	2	2	
T	4	1	1886	dress	4	2	2	2	2	
T	4	1	1886	dress	4	2	2	2	2	
T	4	1	1886	dress	4	2	2	2	2	
T	4	1	1886	dress	4	2	2	2	2	
T	1.1	1	1887	dress	4	1	1	1	1	
T	1.2	1	1887	dress	4	2	3	3	1	
T	26.1	1	1889	dress	4	3	2	2	2	
T	26.2	1	1889	dress	4	3	2	2	2	
T	26.3	1	1889	dress	4	3	2	2	2	
T	26.4	1	1889	dress	4	3	2	2	2	
T	33	1	1889	shirt	5	4	3		3	
T	7	2	1890	dress	4	2	2	2	2	
T	27	2	1892	dress	4	3	2	2	2	
T	27.2	2	1892	dress	4	3	2	2	2	
T	27.3	2	1892	shirt	4	3	3	3	1	
T	6	2	1893	jacket	5	5	3	2	2	
T	9	2	1893	shirt	4	4	4	3	1	
T	25.1	2	1893	shirt	4	2	2	2	2	
T	25.2	2	1893	dress	4	2	2	2	2	
T	25.3	2	1893	dress	4	2	2	2	2	
T	25.4	2	1893	dress	4	3	2	2	2	
T	8.1	2	1894	dress	4	2	2	2	2	
T	8.2	2	1894	dress	5	2	2	2	1	
T	10	2	1895	dress	5	5	5	1	1	
T	5.1	2	1896	shirt	5	5	3	1	1	
T	5.1	2	1896	shirt	5	5	2	1	1	
T	31	2	1896	shirt	5	5	5	4	2	
T	11.1	3	1900	shirt	5	2	3	3	1	
T	11.2	3	1900	shirt	5	3	3	2	1	
T	12.1	3	1900	jacket	5	3	2	2	2	
T	12.2	3	1900	shirt	5	5	2	2	2	
T	12.3	3	1900	shirt	5	2	2	2	2	
T	12.4	3	1900	shirt	5	4	4	4	2	
T	12.5	3	1900	shirt	5	3	3	2	2	
T	12.6	3	1900	shirt	5	3	3	2	2	
T	12.7	3	1900	shirt	5	4	2	2	1	
T	12.8	3	1900	shirt	5	2	3	3	1	
T	13.1	3	1900	shirt	5	3	3	2	2	
T	13.2	3	1900	shirt	5	4	3	3	1	
T	28.1	3	1900	shirt	5	4	3	3	2	
T	28.2	3	1900	shirt	5	4	2	2	2	
T	28.3	3	1900	shirt	5	3	4	4	2	
T	28.4	3	1900	shirt	5	4	3	3	2	
T	14.1	3	1904	shirt	5	2	3	3	1	
T	14.2	3	1904	shirt	5	2	2	2	1	
T	14.3	3	1904	shirt	5	2	3	3	1	
T	14.4	3	1904	dress	5	2	2	2	1	
T	14.5	3	1904	dress	5	2	3	5	1	
T	14.6	3	1904	dress	5	2	3	3	1	
T	14.7	3	1904	dress	5	2	2	2	1	
T	14.8	3	1904	dress	5	2	2	3	1	
T	15.1	3	1906	shirt	5	2	3	2	1	
T	15.2	3	1906	shirt	5	3	3	3	1	
T	36.1	3	1906	shirt	5	3	3	2	1	
T	36.2	3	1906	shirt	5	2	3	3	1	
T	36.3	3	1906	shirt	5	2	3	2		
T	36.4	3	1906	shirt	5	3	3	2	1	
T	36.5	3	1906	shirt	5	3	3	2	1	
T	36.6	3	1906	shirt	5	3	3	2	1	
T	28.1	3	1907	shirt	5	3	3	3	1	
T	28.2	3	1907	shirt	5	2	3	3		
T	19.1	3	1908	shirt	5	2	3	3	2	
T	19.1	3	1908	shirt	5	2	3	3	2	
T	19.11	3	1908	shirt	5	2	3	3	2	
T	19.2	3	1908	shirt	5	2	3	3	2	
T	19.3	3	1908	shirt	5	2	3	3	2	
T	19.4	3	1908	shirt	5	2	3	3	2	
T	19.5	3	1908	shirt	5	2	3	3	2	
T	19.6	3	1908	shirt	5	2	3	3	2	
T	19.7	3	1908	shirt	5	2	3	3	2	
T	19.8	3	1908	shirt	5	2	3	3	2	
T	19.9	3	1908	shirt	5	2	3	3	2	
T	31.1	3	1908	shirt	5	3	3	3	1	
T	31.2	3	1908	shirt	5	2	3	3		
T	16	3	1910	dress	5	2	2	2	1	
T	17	3	1910	shirt	5	2	3	3	2	
T	18.1	3	1910	shirt	5	2	3	2	2	
T	18.2	3	1910	shirt	5	2	2	2	1	
T	18.3	3	1910	shirt	5	2	3	3	2	
T	18.4	3	1910	shirt	5	2	3	3	2	
T	20.1	3	1910	shirt	5	2	3	3	2	
T	20.2	3	1910	shirt	5	3	2	2	1	
T	20.3	3	1910	shirt	5	4	3	3	1	
T	20.4	3	1910	shirt	5	2	3	2	1	
T	20.5	3	1910	dress	5	2	3	2	2	
T	20.6	3	1910	shirt	5	2	3	2	1	

sport	ref	dec	date	Uppgar	sleeve length	sleeve width-shoulder	sleeve width-elbow	sleeve width-forearm	sleeve width-wrist
T	20.7	3	1910	shirt	5	2	3	3	1
T	20.8	3	1910	dress	5	2	3	3	1
T	20.9	3	1910	shirt	5	2	3	3	2
T	20.9	3	1910	shirt	5	2	3	3	2
T	20.9	3	1910	shirt	5	2	3	3	2
T	21	3	1911	shirt	5	2	2	2	1
T	22	3	1911	shirt	5	2	3	3	1
T	34.1	3	1911	shirt	5	2	3	2	1
T	34.2	3	1911	shirt	5	2	3	2	
T	23	3	1912	shirt	5	2	3	3	2
T	24	3	1912	shirt	5	4	3	3	2
T	29	3	1912	shirt	5	2	2	2	1
T	30	3	1912	shirt	5	2	3	3	2
T	35.1	3	1912	shirt		2	3	3	
T	35.2	3	1912	shirt	5	2	3	3	2
T	35.3	3	1912	shirt	5	2	3	3	2
T	35.4	3	1912	shirt	5	2	3	3	2
		3							

Table 28: Cycling - Lower Body Garment Aesthetics Ranking								
sport	ref	decade	date	lower garment	hue rank	weight rank	simplicity rank	angularity rank
C	39.1	2	1890	trouser	3	3	1	3
C	39.2	2	1890	trouser	3	4	1	1
C	7.3	2	1890	skirt	3	4	1	1
C	3	2	1890	trouser	4	4	1	3
C	7.1	2	1890	skirt	4	4	1	3
C	7.2	2	1890	skirt	4	4	1	3
C	7.4	2	1890	skirt	4	4	1	3
C	10	2	1890	skirt	4	4	1	3
C	7.5	2	1890	skirt	5	4	1	3
C	6.1	2	1892	skirt	4	4	1	3
C	6.2	2	1892	skirt	4	4	1	3
C	9	2	1893	skirt	3	4	2	1
C	4	2	1893	trouser	4	4	1	3
C	5	2	1893	skirt	4	4	1	3
C	9.2	2	1893	skirt	4	4	1	3
C	9.3	2	1893	skirt	4	4	1	3
C	41	2	1894	skirt	5	4	1	3
C	15.2	2	1895	dress	2	3	1	3
C	2.7	2	1895	skirt	2	3	1	3
C	1.2	2	1895	skirt	3	4	2	1
C	2.1	2	1895	skirt	3	4	1	3
C	1.1	2	1895	skirt	4	4	1	3
C	1.3	2	1895	skirt	4	4	1	3
C	2.3	2	1895	skirt	4	4	1	3
C	2.5	2	1895	skirt	4	4	1	3
C	2.6	2	1895	skirt	4	4	1	3
C	2.8	2	1895	skirt	4	4	1	3
C	14	2	1895	skirt	4	4	1	3
C	17	2	1895	skirt	4	4	1	3
C	19	2	1895	skirt	4	4	1	3
C	25	2	1895	skirt	4	4	1	3
C	28.1	2	1895	skirt	4	4	1	3
C	28.2	2	1895	skirt	4	4	1	3
C	2.9	2	1895	skirt	5	4	1	3
C	2.2	2	1895	skirt	5	4	1	3
C	2.4	2	1895	skirt	5	4	1	3
C	15.1	2	1895	dress	5	4	1	3
C	2.10	2	1895	skirt	5	4	1	3
C	30.2	2	1896	skirt	1	2	1	3
C	38	2	1896	skirt	4	4	1	3
C	30.1	2	1896	skirt	4	4	1	3
C	34	2	1896	skirt	4	4	1	3
C	35	2	1896	dress	4	4	1	3
C	27	2	1897	skirt	4	4	1	3
C	29.1	2	1897	skirt	4	4	1	3
C	29.3	2	1897	skirt	4	4	1	3
C	16	2	1897	dress	4	4	1	3
C	29.2	2	1897	skirt	5	4	2	4
C	36	2	1899	skirt	3	4	1	3
C	37	2	1899	dress	3	4	1	3
C	32	2	1899	skirt	4	4	1	3
C	26.1	3	1900	dress	1	2	2	3
C	26.2	3	1900	dress	1	2	3	3
C	8	3	1900	skirt	2	3	1	3
C	12	3	1900	skirt	2	3	1	3
C	33.2	3	1900	skirt	3	3	2	3
C	21.1	3	1900	skirt	4	4	1	3
C	21.2	3	1900	skirt	4	4	1	3
C	11	3	1900	skirt	4	4	1	3
C	18	3	1900	dress	4	4	1	3
C	33.1	3	1900	skirt	4	4	1	3
C	23	3	1900	dress	5	4	1	3
C	20	3	1900	skirt	5	4	1	3
C	33.3	3	1900	skirt	5	4	1	3
C	42.1	3	1900	skirt	5	4	1	3
C	42.2	3	1900	skirt	5	4	1	3
C	13	3	1905	dress	2	2	3	3
C	22.2	3	1908	skirt	4	4	1	3
C	22.1	3	1908	skirt	5	4	1	3
C	24.2	3	1910	dress	1	2	1	3
C	24.1	3	1910	skirt	5	4	1	3
C	40.1	3	1900	skirt	1	2	1	3
C	40.3	3	1900	skirt	1	2	1	3
C	40.2	3	1900	dress	1	2	2	3

Table 29: Golf - Lower Body Garment Aesthetics Ranking									
sport	ref	decade	date	lower garment	hue rank	weight rank	simplicity rank	angularity rank	
G	1.1	2	1893	skirt	4	3	1	3	
G	1.2	2	1893	skirt	4	3	1	3	
G	1.3	2	1893	skirt	4	3	1	3	
G	1.4	2	1893	skirt	4	3	1	3	
G	1.5	2	1893	skirt	4	3	1	3	
G	1.6	2	1893	skirt	4	3	1	3	
G	1.7	2	1893	skirt	4	3	1	3	
G	1.8	2	1893	skirt	4	3	1	3	
G	1.9	2	1893	skirt	4	3	1	3	
G	1.10	2	1893	skirt	4	3	1	3	
G	1.11	2	1893	skirt	4	3	1	3	
G	1.12	2	1893	skirt	4	3	1	3	
G	1.13	2	1893	skirt	4	3	1	3	
G	1.14	2	1893	skirt	4	3	1	3	
G	1.15	2	1893	skirt	4	3	1	3	
G	1.16	2	1893	skirt	4	3	1	3	
G	1.17	2	1893	skirt	4	3	1	3	
G	1.18	2	1893	skirt	4	3	1	3	
G	1.19	2	1893	skirt	4	3	1	3	
G	1.20	2	1893	skirt	4	3	1	3	
G	1.21	2	1893	skirt	4	3	1	3	
G	1.22	2	1893	skirt	4	3	1	3	
G	11.1	3	1900	skirt	2	3	1	3	
G	9	3	1909	skirt	3	4	1	3	
G	10.1	3	1909	skirt	3	4	1	3	
G	10.2	3	1909	skirt	4	4	1	3	
G	10.3	3	1909	skirt	4	4	1	3	
G	12.11	3	1910	skirt	2	3	1	3	
G	12.14	3	1910	skirt	2	3	1	3	
G	2.3	3	1910	skirt	3	4	1	3	
G	7.2	3	1910	skirt	3	4	1	3	
G	2.1	3	1910	skirt	3	4	1	3	
G	2.5	3	1910	skirt	3	4	1	3	
G	4.1	3	1910	skirt	3	4	1	3	
G	7.1	3	1910	skirt	3	4	1	3	
G	2.2	3	1910	skirt	4	4	1	3	
G	2.4	3	1910	skirt	4	4	1	3	
G	2.6	3	1910	skirt	4	4	1	3	
G	3.1	3	1910	skirt	4	4	1	3	
G	4.2	3	1910	skirt	4	4	1	3	
G	7.3	3	1910	skirt	4	4	1	3	
G	12.1	3	1910	skirt	4	4	1	3	
G	12.2	3	1910	skirt	4	4	1	3	
G	12.3	3	1910	skirt	4	4	1	3	
G	12.4	3	1910	skirt	4	4	1	3	
G	12.5	3	1910	skirt	4	4	1	3	
G	12.7	3	1910	skirt	4	4	1	3	
G	12.8	3	1910	skirt	4	4	1	3	
G	12.9	3	1910	skirt	4	4	1	3	
G	12.10	3	1910	skirt	4	4	1	3	
G	12.12	3	1910	skirt	4	4	1	3	
G	12.13	3	1910	skirt	4	4	1	3	
G	12.15	3	1910	skirt	4	4	1	3	
G	12.16	3	1910	skirt	4	4	1	3	
G	12.17	3	1910	skirt	4	4	1	3	
G	12.18	3	1910	skirt	4	4	1	3	
G	12.19	3	1910	skirt	4	4	1	3	
G	6.1	3	1910	skirt	5	4	1	3	
G	12.6	3	1910	skirt	5	4	2	3	
G	8.3	3	1911	skirt	3	4	1	3	
G	8.1	3	1911	skirt	4	4	1	3	
G	8.2	3	1911	skirt	4	4	1	3	
G	8.4	3	1911	skirt	4	4	1	3	
G	8.5	3	1911	skirt	4	4	1	3	
G	8.6	3	1911	skirt	4	4	1	3	
G	5.1	3	1910	skirt	4	3	1	3	

Table 30: Mountaineering - Lower Body Garment Aesthetics Ranking								
sport	ref	decade	date	lower garment	hue rank	weight rank	simplicity rank	angularity rank
M	1.10	2	1895	skirt	3	4	1	3
M	2.00	2	1895	skirt	3	4	1	3
M	4.10	2	1895	skirt	3	4	1	3
M	3.00	2	1895	skirt	4	4	1	3
M	4.30	2	1895	skirt	4	4	1	3
M	4.20	2	1895	skirt	4	4	2	3
M	5.10	3	1900	skirt	4	4	1	2
M	5.20	3	1900	skirt	4	4	1	3
M	9.00	3	1900	skirt	4	4	1	3
M	10.10	3	1900	skirt	4	4	1	3
M	10.20	3	1900	skirt	4	4	1	3
M	15.10	3	1900	skirt	5	4		
M	15.20	3	1900	skirt	5	4		
M	6.10	3	1906	skirt				
M	6.20	3	1906	skirt				
M	6.30	3	1906	skirt				
M	11.20	3	1907	dress	1	2	1	3
M	11.30	3	1907	skirt	3	3	1	3
M	11.10	3	1907	skirt	4	4	1	3
M	11.40	3	1907	skirt	4	4	1	3
M	8.00	3	1910	skirt	4	4	1	2
M	7.00	3	1910	skirt	4	4	1	3
M	13.10	3	1910	skirt	4	4	1	3
M	13.20	3	1910	skirt	4	4	1	3
M	14.10	3	1910	skirt	4	4	1	3
M	14.20	3	1910	skirt	4	4	1	3
M	14.30	3	1910	skirt	4	4	1	3
M	12.00	3	1910	dress	5	4	1	3
M	17.00	3	1912	skirt	4	4	1	2
M	16.00	3	1912	skirt	5	4	1	3
M	18.00	3	1903	trouser	4	4	1	1

Table 31: Tennis - Lower Body Garment Aesthetics Ranking								
sport	ref	decade	date	lower garment	hue rank	weight rank	simplicity rank	angularity rank
T	4	1	1886	dress	1	2	3	4
T	4	1	1886	dress	1	2	3	4
T	4	1	1886	dress	1	2	3	4
T	4	1	1886	dress	1	2	3	4
T	4	1	1886	dress	1	2	3	4
T	3	1	1886	skirt	1	2	4	4
T	2	1	1886	dress	1	2	5	5
T	1.2	1	1887	dress	1	3	4	4
T	1.1	1	1887	dress	3	4	4	4
T	26.1	1	1889	dress	1	2	2	3
T	26.2	1	1889	dress	1	2	2	3
T	26.3	1	1889	dress	1	2	2	3
T	26.4	1	1889	dress	1	2	2	3
T	33	1	1889	skirt	3	4	1	3
T	7	2	1890	dress	2	2	3	4
T	27.2	2	1892	dress	1	2	2	3
T	27.3	2	1892	skirt	2	2	3	4
T	27	2	1892	dress	5	4	2	3
T	25.4	2	1893	dress	1	2	2	3
T	25.2	2	1893	dress	1	2	2	4
T	25.3	2	1893	dress	1	2	2	4
T	25.1	2	1893	skirt	2	2	3	4
T	6	2	1893	skirt	3	3	2	3
T	9	2	1893	skirt	4	4	1	3
T	8.2	2	1894	dress	1	2	2	3
T	8.1	2	1894	dress	1	2	3	4
T	10	2	1895	dress	2	3	1	3
T	31	2	1896	skirt	4	4	1	3
T	5.1	2	1896	skirt	4	4	1	3
T	5.1	2	1896	skirt	4	4	1	3
T	12.8	3	1900	skirt	1	2	1	3
T	28.1	3	1900	skirt	1	2	1	3
T	28.2	3	1900	skirt	1	2	1	3
T	13.2	3	1900	skirt	1	2	1	3
T	28.4	3	1900	skirt	1	2	1	3
T	12.1	3	1900	skirt	1	2	3	4
T	12.5	3	1900	skirt	2	3	1	3
T	12.6	3	1900	skirt	2	3	1	3
T	12.7	3	1900	skirt	2	3	2	3
T	12.4	3	1900	skirt	3	3	2	3
T	11.1	3	1900	skirt	4	3	2	4
T	28.3	3	1900	skirt	5	4	1	3
T	12.2	3	1900	skirt	5	4	2	3
T	12.3	3	1900	skirt	5	4	2	3
T	13.1	3	1900	skirt	5	4	2	3
T	11.2	3	1900	skirt	5	4	2	3
T	14.6	3	1904	dress	1	2	3	3
T	14.8	3	1904	dress	1	2	3	3
T	14.5	3	1904	dress	2	3	1	3
T	14.7	3	1904	dress	5	4	1	3
T	14.1	3	1904	skirt	5	4	2	3
T	14.2	3	1904	skirt	5	4	2	3
T	14.3	3	1904	skirt	5	4	3	3
T	14.4	3	1904	dress	5	4	4	3
T	36.1	3	1906	skirt	1	2	1	3
T	36.2	3	1906	skirt	1	2	1	3
T	36.3	3	1906	skirt	1	2	1	3
T	36.4	3	1906	skirt	1	2	1	3
T	36.5	3	1906	skirt	1	2	1	3
T	15.1	3	1906	skirt	2	3	1	3
T	36.6	3	1906	skirt	2	3	1	3
T	15.2	3	1906	skirt	4	3	2	4
T	28.1	3	1907	skirt	1	2	1	3
T	28.2	3	1907	skirt	1	2	1	3
T	31.1	3	1908	skirt	1	2	1	3
T	31.2	3	1908	skirt	1	2	1	3
T	19.1	3	1908	skirt	1	2	2	3
T	19.1	3	1908	skirt	1	2	2	3
T	19.11	3	1908	skirt	1	2	2	3
T	19.2	3	1908	skirt	1	2	2	3
T	19.3	3	1908	skirt	1	2	2	3
T	19.4	3	1908	skirt	1	2	2	3
T	19.5	3	1908	skirt	1	2	2	3
T	19.6	3	1908	skirt	1	2	2	3
T	19.7	3	1908	skirt	1	2	2	3
T	19.8	3	1908	skirt	1	2	2	3
T	19.9	3	1908	skirt	1	2	2	3
T	17	3	1910	skirt	1	2	2	3
T	18.3	3	1910	skirt	1	2	2	3
T	18.4	3	1910	skirt	1	2	2	3
T	20.2	3	1910	skirt	1	2	2	3
T	20.4	3	1910	skirt	1	2	2	3
T	20.8	3	1910	dress	1	2	2	3
T	20.9	3	1910	skirt	1	2	3	3
T	20.9	3	1910	skirt	1	2	3	3
T	20.9	3	1910	skirt	1	2	3	3
T	18.1	3	1910	skirt	1	2	4	3
T	18.2	3	1910	dress	2	3	2	3
T	20.5	3	1910	skirt	2	3	2	3
T	16	3	1910	dress	4	3	2	3
T	20.3	3	1910	skirt	4	3	2	3

sport	ref	decade	date	lower garment	hue rank	weight rank	simplicity rank	angularity rank
T	20.1	3	1910	skirt	4	4	1	3
T	20.7	3	1910	skirt	4	4	1	3
T	20.6	3	1910	skirt	5	4	1	3
T	21	3	1911	skirt	1	2	1	3
T	22	3	1911	skirt	1	2	1	3
T	34.1	3	1911	skirt	1	2	1	3
T	34.2	3	1911	skirt	1	2	1	3
T	23	3	1912	skirt	1	2	1	3
T	29	3	1912	skirt	1	2	1	3
T	30	3	1912	skirt	1	2	1	3
T	35.1	3	1912	skirt	1	2	1	3
T	35.2	3	1912	skirt	1	2	1	3
T	35.3	3	1912	skirt	1	2	1	3
T	35.4	3	1912	skirt	1	2	1	3
T	24	3	1912	skirt	1	2	3	4

Table 32: Cycling - Lower Body Garment Feature Identification																				
sport	ref	dec	date	lowgar	centre clos	off centre	side clos	button	bows	embroidery	lace	applique	gathers	panels	darts	pleats	pockets	flounce	drape	
C		3	2	1890	trous			1					1							
C	7.1	2	1890	skirt				1						1						
C	7.2	2	1890	skirt										1						
C	7.3	2	1890	skirt				1						1						
C	7.4	2	1890	skirt										1						
C	7.5	2	1890	skirt				1						1						
C	10	2	1890	skirt				1						1						
C	39.1	2	1890	trous									1							
C	39.2	2	1890	trous									1							
C	6.1	2	1892	skirt										1						
C	6.2	2	1892	skirt										1						
C	4	2	1893	trous									1							
C	5	2	1893	skirt									1	1						
C	9	2	1893	skirt										1						
C	9.2	2	1893	skirt										1						
C	9.3	2	1893	skirt										1						
C	41	2	1894	skirt										1						
C	1.2	2	1895	skirt					1					1						
C	1.2	2	1895	skirt					1					1						
C	1.3	2	1895	skirt					1					1		1				
C	2.1	2	1895	skirt										1						
C	2.2	2	1895	skirt										1						
C	2.3	2	1895	skirt										1						
C	2.4	2	1895	skirt										1						
C	2.5	2	1895	skirt										1						
C	2.6	2	1895	skirt										1						
C	2.7	2	1895	skirt										1						
C	2.8	2	1895	skirt										1						
C	2.9	2	1895	skirt										1						
C	14	2	1895	skirt										1						
C	15.1	2	1895	dress									1	1						
C	15.2	2	1895	dress									1	1						
C	17	2	1895	skirt										1						
C	19	2	1895	skirt										1						
C	25	2	1895	skirt										1						
C	28.1	2	1895	skirt										1						
C	28.2	2	1895	skirt										1						
C	2.1	2	1895	skirt										1						
C	30.1	2	1896	skirt										1						
C	30.2	2	1896	skirt										1						
C	34	2	1896	skirt										1						
C	35	2	1896	dress										1						
C	38	2	1896	skirt										1						
C	16	2	1897	dress										1		1				
C	27	2	1897	skirt										1						
C	29.1	2	1897	skirt										1						
C	29.2	2	1897	skirt										1						
C	29.3	2	1897	skirt										1						
C	32	2	1899	skirt										1						
C	36	2	1899	skirt										1						
C	37	2	1899	dress										1						
C	8	3	1900	skirt										1						
C	11	3	1900	skirt										1						
C	12	3	1900	skirt										1						
C	18	3	1900	dress										1						
C	20	3	1900	skirt			1		1					1						
C	21.1	3	1900	skirt										1						
C	21.2	3	1900	skirt										1						
C	23	3	1900	dress										1						
C	26.1	3	1900	dress										1						
C	26.2	3	1900	dress										1					1	
C	33.1	3	1900	skirt										1						
C	33.2	3	1900	skirt										1						
C	33.3	3	1900	skirt										1						
C	42.1	3	1900	skirt										1						
C	42.2	3	1900	skirt										1						
C	13	3	1905	dress										1		1				
C	22.1	3	1908	skirt										1						
C	22.2	3	1908	skirt										1						
C	24.1	3	1910	skirt										1						
C	24.2	3	1910	dress										1					1	
C	40.1	3	1900	skirt										1						
C	40.2	3	1900	dress									1	1					1	
C	40.3	3	1900	skirt										1						
C Total					0	1	1	8	0	0	0	0	2	5	70	1	2	0	3	0

Table 33: Golf - Lower Body Garment Feature Identification																				
sport	ref	dec	date	lowgar	centre clos	off centre	side clos	button	bows	embroi dery	lace	applique	gathers	panels	darts	pleats	pockets	frounce	drape	
G	1.1	2	1893	skirt										1						
G	1.2	2	1893	skirt										1						
G	1.3	2	1893	skirt										1						
G	1.4	2	1893	skirt										1						
G	1.5	2	1893	skirt										1						
G	1.6	2	1893	skirt										1						
G	1.7	2	1893	skirt										1						
G	1.8	2	1893	skirt										1						
G	1.9	2	1893	skirt										1						
G	1.10	2	1893	skirt										1						
G	1.11	2	1893	skirt										1						
G	1.12	2	1893	skirt										1						
G	1.13	2	1893	skirt										1						
G	1.14	2	1893	skirt										1						
G	1.15	2	1893	skirt										1						
G	1.16	2	1893	skirt										1						
G	1.17	2	1893	skirt										1						
G	1.18	2	1893	skirt										1						
G	1.19	2	1893	skirt										1						
G	1.20	2	1893	skirt										1						
G	1.21	2	1893	skirt										1						
G	1.22	2	1893	skirt										1						
G	2.1	3	1910	skirt										1						
G	2.2	3	1910	skirt										1			1			
G	2.3	3	1910	skirt										1						
G	2.4	3	1910	skirt										1						
G	2.5	3	1910	skirt										1						
G	2.6	3	1910	skirt										1						
G	3.1	3	1910	skirt										1						
G	4.1	3	1910	skirt										1						
G	4.2	3	1910	skirt										1						
G	5.1	3	1910	skirt										1						
G	6.1	3	1910	skirt										1						
G	7.1	3	1910	skirt										1			1			
G	7.2	3	1910	skirt										1		1				
G	7.3	3	1910	skirt										1			1			
G	8.1	3	1911	skirt								1		1						
G	8.2	3	1911	skirt										1						
G	8.3	3	1911	skirt										1						
G	8.4	3	1911	skirt										1						
G	8.5	3	1911	skirt										1						
G	8.6	3	1911	skirt										1						
G	9	3	1909	skirt										1						
G	10.1	3	1909	skirt										1			1			
G	10.2	3	1909	skirt										1			1			
G	10.3	3	1909	skirt										1						
G	11.1	3	1900	skirt										1		1	1			
G	12.1	3	1910	skirt										1			1			
G	12.2	3	1910	skirt										1			1			
G	12.3	3	1910	skirt										1			1			
G	12.4	3	1910	skirt										1						
G	12.5	3	1910	skirt										1			1			
G	12.6	3	1910	skirt										1						
G	12.7	3	1910	skirt										1			1			
G	12.8	3	1910	skirt										1			1			
G	12.9	3	1910	skirt										1			1			
G	12.10	3	1910	skirt										1			1			
G	12.11	3	1910	skirt										1						
G	12.12	3	1910	skirt										1			1			
G	12.13	3	1910	skirt										1			1			
G	12.14	3	1910	skirt										1						
G	12.15	3	1910	skirt										1			1			
G	12.16	3	1910	skirt										1			1			
G	12.17	3	1910	skirt										1			1			
G	12.18	3	1910	skirt										1			1			
G	12.19	3	1910	skirt										1			1			
<b>G Total</b>					0	0	0	0	0	0	0	0	1	0	66	0	2	20	0	0

Table 34: Mountaineering - Lower Body Garment Feature Identification																												
sport	ref	dec	date	lowgar	centre clos	off centre	side clos	button	bows	embroi dery	lace	applique	gathers	panels	darts	pleats	pockets	flounce	drape									
M	1.10		2	1895 skirt										1														
M	2.00		2	1895 skirt										1														
M	3.00		2	1895 skirt												1												
M	4.10		2	1895 skirt										1														
M	4.30		2	1895 skirt										1														
M	4.20		2	1895 skirt										1		1												
M	5.10		3	1900 skirt																								
M	5.20		3	1900 skirt																								
M	9.00		3	1900 skirt										1														
M	10.10		3	1900 skirt																								
M	10.20		3	1900 skirt										1														
M	15.10		3	1900 skirt										1														
M	15.20		3	1900 skirt										1														
M	6.10		3	1906 skirt										1														
M	6.20		3	1906 skirt										1														
M	6.30		3	1906 skirt										1														
M	11.10		3	1907 skirt																								
M	11.20		3	1907 dress										1														
M	11.30		3	1907 skirt										1														
M	11.40		3	1907 skirt										1														
M	7.00		3	1910 skirt										1														
M	8.00		3	1910 skirt											1													
M	12.00		3	1910 dress										1														
M	13.10		3	1910 skirt										1														
M	13.20		3	1910 skirt										1														
M	14.10		3	1910 skirt										1														
M	14.20		3	1910 skirt										1														
M	14.30		3	1910 skirt										1														
M	16.00		3	1912 skirt										1														
M	17.00		3	1912 skirt											1													
M	18.00		3	1903 trouser													1											
<b>M Total</b>					0	0	0	0	0	0	0	0	0	23	2	3	0	0	0	0								

Table 35: Tennis - Lower Body Garment Feature Identification

sport	ref	dec	date	lowgar	centre clos	off centre	side clos	button	bows	embroi dery	lace	applique	gathers	panels	darts	pleats	pockets	flounce	drape
T		2	1	1886	dress								1			1		1	1
T		3	1	1886	skirt								1	1		1		1	1
T		4	1	1886	dress								1					1	1
T		4	1	1886	dress								1					1	1
T		4	1	1886	dress								1					1	1
T		4	1	1886	dress								1					1	1
T		4	1	1886	dress								1					1	1
T		4	1	1886	dress								1					1	1
T		1.1	1	1887	dress							1				1			
T		1.2	1	1887	dress											1			1
T		26.1	1	1889	dress											1			
T		26.2	1	1889	dress											1			
T		26.3	1	1889	dress											1			
T		26.4	1	1889	dress											1			
T		33	1	1889	akrit												1		
T		7	2	1890	dress								1			1			
T		27	2	1892	dress									1		1			
T		27.2	2	1892	dress									1					
T		27.3	2	1892	skirt									1		1			
T		6	2	1893	skirt									1					
T		9	2	1893	skirt									1					
T		25.1	2	1893	skirt														1
T		25.2	2	1893	dress								1			1			1
T		25.3	2	1893	dress								1			1			1
T		25.4	2	1893	dress									1					
T		8.1	2	1894	dress											1			1
T		8.2	2	1894	dress								1						
T		10	2	1895	dress									1					
T		5.1	2	1896	skirt									1					
T		5.1	2	1896	skirt									1					
T		31	2	1896	skirt									1					
T		11.1	3	1900	skirt									1					
T		11.2	3	1900	skirt									1					1
T		12.1	3	1900	skirt								1	1					1
T		12.2	3	1900	skirt									1					
T		12.3	3	1900	skirt									1					
T		12.4	3	1900	skirt									1					
T		12.5	3	1900	skirt									1					
T		12.6	3	1900	skirt									1					
T		12.7	3	1900	skirt									1					
T		12.8	3	1900	skirt									1					
T		13.1	3	1900	skirt									1					
T		13.2	3	1900	skirt									1					
T		28.1	3	1900	skirt									1		1			
T		28.2	3	1900	skirt									1		1			
T		28.3	3	1900	skirt									1					
T		28.4	3	1900	skirt									1		1			
T		14.1	3	1904	skirt									1					
T		14.2	3	1904	skirt									1					
T		14.3	3	1904	skirt									1					
T		14.4	3	1904	dress								1	1					
T		14.5	3	1904	dress									1		1			1
T		14.6	3	1904	dress						1			1					
T		14.7	3	1904	dress									1					
T		14.8	3	1904	dress						1			1					
T		15.1	3	1906	skirt									1					
T		15.2	3	1906	skirt									1					
T		36.1	3	1906	skirt									1					
T		36.2	3	1906	skirt									1					
T		36.3	3	1906	skirt									1					
T		36.4	3	1906	skirt									1					
T		36.5	3	1906	skirt									1					
T		36.6	3	1906	skirt									1					
T		28.1	3	1907	skirt									1					
T		28.2	3	1907	skirt									1					
T		19.1	3	1908	skirt									1					
T		19.1	3	1908	skirt									1					
T		19.11	3	1908	skirt									1					
T		19.2	3	1908	skirt									1					
T		19.3	3	1908	skirt									1					
T		19.4	3	1908	skirt									1					
T		19.5	3	1908	skirt									1					
T		19.6	3	1908	skirt									1					
T		19.7	3	1908	skirt									1					
T		19.8	3	1908	skirt									1					
T		19.9	3	1908	skirt									1					
T		31.1	3	1908	skirt									1					
T		31.2	3	1908	skirt									1					
T		16	3	1910	dress									1					
T		17	3	1910	skirt									1					
T		18.1	3	1910	skirt									1					
T		18.2	3	1910	dress				1					1					
T		18.3	3	1910	skirt									1					
T		18.4	3	1910	skirt									1					
T		20.1	3	1910	skirt									1					
T		20.2	3	1910	skirt									1					
T		20.3	3	1910	skirt									1					
T		20.4	3	1910	skirt									1					
T		20.5	3	1910	skirt									1					
T		20.6	3	1910	skirt									1					
T		20.7	3	1910	skirt									1					
T		20.8	3	1910	dress						1		1	1					
T		20.9	3	1910	skirt									1					
T		20.9	3	1910	skirt									1					
T		20.9	3	1910	skirt									1					
T		21	3	1911	skirt									1					
T		22	3	1911	skirt									1		1			
T		34.1	3	1911	skirt									1	1				
T		34.2	3	1911	skirt									1					

sport	ref	dec	date	lowgar	centre clos	off centre	side clos	button	bows	embroi dery	lace	applique	gathers	panels	darts	pleats	pockets	founce	drape
T	23	3	1912	skirt										1					
T	24	3	1912	skirt										1					
T	29	3	1912	skirt										1					
T	30	3	1912	skirt										1					
T	35.1	3	1912	skirt										1					
T	35.2	3	1912	skirt										1					
T	35.3	3	1912	skirt										1					
T	35.4	3	1912	skirt										1					
<b>T Total</b>					0	0	0	1	0	0	3	1	14	78	1	19	1	10	12

Table 36: Cycling - Lower Body Garment Length Rankings					
sport	ref	dec	date	lowgar	length ranking
C	3	2	1890	trous	1
C	7.5	2	1890	skirt	1
C	39.1	2	1890	trous	1
C	39.2	2	1890	trous	1
C	4	2	1893	trous	1
C	41	2	1894	skirt	2
C	7.1	2	1890	skirt	3
C	10	2	1890	skirt	3
C	9.3	2	1893	skirt	3
C	2.8	2	1895	skirt	3
C	14	2	1895	skirt	3
C	28.2	2	1895	skirt	3
C	27	2	1897	skirt	3
C	29.1	2	1897	skirt	3
C	29.3	2	1897	skirt	3
C	7.2	2	1890	skirt	4
C	7.3	2	1890	skirt	4
C	7.4	2	1890	skirt	4
C	6.1	2	1892	skirt	4
C	6.2	2	1892	skirt	4
C	9	2	1893	skirt	4
C	9.2	2	1893	skirt	4
C	1.2	2	1895	skirt	4
C	1.2	2	1895	skirt	4
C	1.3	2	1895	skirt	4
C	2.1	2	1895	skirt	4
C	2.2	2	1895	skirt	4
C	25	2	1895	skirt	4
C	28.1	2	1895	skirt	4
C	30.1	2	1896	skirt	4
C	30.2	2	1896	skirt	4
C	34	2	1896	skirt	4
C	35	2	1896	dress	4
C	29.2	2	1897	skirt	4
C	32	2	1899	skirt	4
C	36	2	1899	skirt	4
C	15.1	2	1895	dress	5
C	15.2	2	1895	dress	5
C	17	2	1895	skirt	5
C	19	2	1895	skirt	5
C	38	2	1896	skirt	5
C	16	2	1897	dress	5
C	37	2	1899	dress	5
C	5	2	1893	skirt	
C	2.3	2	1895	skirt	
C	2.4	2	1895	skirt	
C	2.5	2	1895	skirt	
C	2.6	2	1895	skirt	
C	2.7	2	1895	skirt	
C	2.9	2	1895	skirt	
C	2.1	2	1895	skirt	
C	26.2	3	1900	dress	2
C	20	3	1900	skirt	3
C	8	3	1900	skirt	4
C	11	3	1900	skirt	4
C	26.1	3	1900	dress	4
C	33.1	3	1900	skirt	4
C	33.2	3	1900	skirt	4
C	33.3	3	1900	skirt	4
C	24.1	3	1910	skirt	4
C	24.2	3	1910	dress	4
C	12	3	1900	skirt	5
C	18	3	1900	dress	5
C	21.1	3	1900	skirt	5
C	21.2	3	1900	skirt	5
C	23	3	1900	dress	5
C	13	3	1905	dress	5
C	22.1	3	1908	skirt	5
C	22.2	3	1908	skirt	5
C	42.1	3	1900	skirt	
C	42.2	3	1900	skirt	
C	40.1	3	1900	skirt	4
C	40.2	3	1900	dress	4
C	40.3	3	1900	skirt	4

Table 37: Golf - Lower Body Garment Length Rankings					
sport	ref	dec	date	lowgar	length ranking
G	1.1	2	1893	skirt	5
G	1.2	2	1893	skirt	5
G	1.3	2	1893	skirt	5
G	1.4	2	1893	skirt	5
G	1.5	2	1893	skirt	5
G	1.6	2	1893	skirt	5
G	1.7	2	1893	skirt	5
G	1.8	2	1893	skirt	5
G	1.9	2	1893	skirt	5
G	1.10	2	1893	skirt	5
G	1.11	2	1893	skirt	5
G	1.12	2	1893	skirt	5
G	1.13	2	1893	skirt	5
G	1.14	2	1893	skirt	5
G	1.15	2	1893	skirt	5
G	1.16	2	1893	skirt	5
G	1.17	2	1893	skirt	5
G	1.18	2	1893	skirt	5
G	1.19	2	1893	skirt	5
G	1.20	2	1893	skirt	5
G	1.21	2	1893	skirt	5
G	1.22	2	1893	skirt	5
G	7.2	3	1910	skirt	2
G	2.2	3	1910	skirt	3
G	2.3	3	1910	skirt	3
G	2.4	3	1910	skirt	3
G	2.5	3	1910	skirt	3
G	2.6	3	1910	skirt	3
G	8.5	3	1911	skirt	3
G	8.6	3	1911	skirt	3
G	11.1	3	1900	skirt	3
G	12.1	3	1910	skirt	3
G	12.2	3	1910	skirt	3
G	12.5	3	1910	skirt	3
G	12.6	3	1910	skirt	3
G	12.7	3	1910	skirt	3
G	12.9	3	1910	skirt	3
G	12.10	3	1910	skirt	3
G	12.11	3	1910	skirt	3
G	12.12	3	1910	skirt	3
G	12.13	3	1910	skirt	3
G	12.14	3	1910	skirt	3
G	12.15	3	1910	skirt	3
G	12.16	3	1910	skirt	3
G	12.17	3	1910	skirt	3
G	12.18	3	1910	skirt	3
G	2.1	3	1910	skirt	4
G	3.1	3	1910	skirt	4
G	4.1	3	1910	skirt	4
G	4.2	3	1910	skirt	4
G	6.1	3	1910	skirt	4
G	7.1	3	1910	skirt	4
G	7.3	3	1910	skirt	4
G	8.1	3	1911	skirt	4
G	8.2	3	1911	skirt	4
G	8.3	3	1911	skirt	4
G	8.4	3	1911	skirt	4
G	9	3	1909	skirt	4
G	10.1	3	1909	skirt	4
G	10.2	3	1909	skirt	4
G	10.3	3	1909	skirt	4
G	12.3	3	1910	skirt	4
G	12.4	3	1910	skirt	4
G	12.8	3	1910	skirt	4
G	12.19	3	1910	skirt	4
G	5.1	3	1910	skirt	4

Table 38: Mountaineering - Lower Body Garment Length Rankings

sport	ref	dec	date	lowgar	length ranking
M	1.10	2	1895	skirt	2
M	2.00	2	1895	skirt	2
M	4.20	2	1895	skirt	2
M	3.00	2	1895	skirt	3
M	4.10	2	1895	skirt	3
M	4.30	2	1895	skirt	3
M	10.20	3	1900	skirt	1
M	15.10	3	1900	skirt	1
M	11.30	3	1907	skirt	1
M	8.00	3	1910	skirt	1
M	16.00	3	1912	skirt	1
M	17.00	3	1912	skirt	1
M	5.10	3	1900	skirt	2
M	5.20	3	1900	skirt	2
M	12.00	3	1910	dress	2
M	13.10	3	1910	skirt	2
M	13.20	3	1910	skirt	2
M	14.10	3	1910	skirt	2
M	14.20	3	1910	skirt	2
M	14.30	3	1910	skirt	2
M	10.10	3	1900	skirt	3
M	15.20	3	1900	skirt	3
M	6.10	3	1906	skirt	3
M	6.20	3	1906	skirt	3
M	6.30	3	1906	skirt	3
M	11.20	3	1907	dress	3
M	9.00	3	1900	skirt	4
M	11.10	3	1907	skirt	
M	11.40	3	1907	skirt	
M	7.00	3	1910	skirt	
M	18.00	3	1903	trouser	1

Table 39: Tennis - Lower Body Garment Length Rankings						
sport	ref	dec	date	lowgar	length ranking	
T		3	1	1886	skirt	4
T		4	1	1886	dress	4
T		4	1	1886	dress	4
T		4	1	1886	dress	4
T		4	1	1886	dress	4
T		4	1	1886	dress	4
T		33	1	1889	akrit	4
T		2	1	1886	dress	5
T		1.1	1	1887	dress	5
T		1.2	1	1887	dress	5
T		26.1	1	1889	dress	5
T		26.2	1	1889	dress	5
T		26.3	1	1889	dress	5
T		26.4	1	1889	dress	5
T		25.1	2	1893	skirt	4
T		8.1	2	1894	dress	4
T		10	2	1895	dress	4
T		31	2	1896	skirt	4
T		7	2	1890	dress	5
T		27	2	1892	dress	5
T		27.2	2	1892	dress	5
T		27.3	2	1892	skirt	5
T		6	2	1893	skirt	5
T		9	2	1893	skirt	5
T		25.2	2	1893	dress	5
T		25.3	2	1893	dress	5
T		25.4	2	1893	dress	5
T		8.2	2	1894	dress	5
T		5.1	2	1896	skirt	5
T		5.1	2	1896	skirt	5
T		12.1	3	1900	skirt	4
T		12.2	3	1900	skirt	4
T		12.3	3	1900	skirt	4
T		12.5	3	1900	skirt	4
T		12.6	3	1900	skirt	4
T		28.1	3	1900	skirt	4
T		28.2	3	1900	skirt	4
T		28.3	3	1900	skirt	4
T		28.4	3	1900	skirt	4
T		15.1	3	1906	skirt	4
T		15.2	3	1906	skirt	4
T		36.1	3	1906	skirt	4
T		36.2	3	1906	skirt	4
T		36.3	3	1906	skirt	4
T		36.4	3	1906	skirt	4
T		36.5	3	1906	skirt	4
T		36.6	3	1906	skirt	4
T		28.1	3	1907	skirt	4
T		28.2	3	1907	skirt	4
T		19.1	3	1908	skirt	4
T		19.1	3	1908	skirt	4
T		19.11	3	1908	skirt	4
T		19.2	3	1908	skirt	4
T		19.3	3	1908	skirt	4
T		19.4	3	1908	skirt	4
T		19.5	3	1908	skirt	4
T		19.6	3	1908	skirt	4
T		19.7	3	1908	skirt	4
T		19.8	3	1908	skirt	4
T		19.9	3	1908	skirt	4
T		31.1	3	1908	skirt	4
T		31.2	3	1908	skirt	4
T		17	3	1910	skirt	4
T		20.1	3	1910	skirt	4
T		20.2	3	1910	skirt	4
T		20.3	3	1910	skirt	4
T		20.4	3	1910	skirt	4
T		20.5	3	1910	skirt	4
T		20.6	3	1910	skirt	4
T		20.7	3	1910	skirt	4
T		21	3	1911	skirt	4
T		22	3	1911	skirt	4
T		34.1	3	1911	skirt	4
T		34.2	3	1911	skirt	4
T		23	3	1912	skirt	4
T		24	3	1912	skirt	4
T		29	3	1912	skirt	4
T		30	3	1912	skirt	4
T		35.1	3	1912	skirt	4
T		35.2	3	1912	skirt	4
T		35.3	3	1912	skirt	4
T		35.4	3	1912	skirt	4
T		11.1	3	1900	skirt	5
T		11.2	3	1900	skirt	5
T		12.4	3	1900	skirt	5
T		12.7	3	1900	skirt	5
T		12.8	3	1900	skirt	5
T		13.1	3	1900	skirt	5
T		13.2	3	1900	skirt	5
T		14.4	3	1904	dress	5

sport	ref	dec	date	lowgar	length	ranking
T	14.5	3	1904	dress		5
T	14.6	3	1904	dress		5
T	14.7	3	1904	dress		5
T	14.8	3	1904	dress		5
T	16	3	1910	dress		5
T	18.1	3	1910	skirt		5
T	18.2	3	1910	dress		5
T	18.3	3	1910	skirt		5
T	18.4	3	1910	skirt		5
T	20.8	3	1910	dress		5
T	14.1	3	1904	skirt		
T	14.2	3	1904	skirt		
T	14.3	3	1904	skirt		
T	20.9	3	1910	skirt		
T	20.9	3	1910	skirt		
T	20.9	3	1910	skirt		

Table 40: Cycling - Accessory Types				shoes	boots	hat-masculine	hat-feminine	bow	cravat	pin/ornament	slip-knot tie	belt	gloves	corset	
sport	ref	dec	date												
C		3	2	1890	1		1		1					1	
C		7.1	2	1890			1						1	1	
C		7.2	2	1890			1					1		1	
C		7.3	2	1890	1	1	1		1			1	1	1	
C		7.4	2	1890	1	1	1				1			1	
C		7.5	2	1890	1		1						1	1	
C		10	2	1890			1						1	1	
C		39.1	2	1890	1						1			1	
C		39.2	2	1890	1						1			1	
C		6.1	2	1892	1	1	1		1	1			1	1	
C		6.2	2	1892	1	1	1		1	1			1	1	
C		4	2	1893	1		1							1	
C		5	2	1893	1		1			1		1	1	1	
C		9	2	1893				1				1	1	1	
C		9.2	2	1893				1					1	1	
C		9.3	2	1893			1				1	1		1	
C		41	2	1894		1		1			1			1	
C		1.1	2	1895		1	1	1			1	1		1	
C		1.2	2	1895	1			1			1		1	1	
C		1.3	2	1895		1		1						1	
C		2.1	2	1895			1						1	1	
C		2.2	2	1895			1						1	1	
C		2.3	2	1895			1			1	1	1		1	
C		2.4	2	1895				1				1		1	
C		2.5	2	1895			1				1		1	1	
C		2.6	2	1895			1				1		1	1	
C		2.7	2	1895			1							1	
C		2.8	2	1895		1	1					1		1	
C		2.9	2	1895			1					1		1	
C		14	2	1895	1		1							1	
C		15.1	2	1895			1				1	1	1	1	
C		15.2	2	1895			1							1	
C		17	2	1895			1				1			1	
C		19	2	1895			1			1			1	1	
C		25	2	1895				1			1	1		1	
C		28.1	2	1895			1					1		1	
C		28.2	2	1895		1	1		1			1		1	
C		2.1	2	1895			1		1			1		1	
C		30.1	2	1896		1	1					1		1	
C		30.2	2	1896			1			1		1		1	
C		34	2	1896		1	1				1			1	
C		35	2	1896				1						1	
C		38	2	1896				1		1		1		1	
C		16	2	1897				1					1	1	
C		27	2	1897			1				1	1		1	
C		29.1	2	1897			1			1	1	1		1	
C		29.2	2	1897			1		1					1	
C		29.3	2	1897			1			1	1	1		1	
C		32	2	1899			1				1		1	1	
C		36	2	1899			1						1	1	
C		37	2	1899			1						1	1	
C		8	3	1900			1		1				1	1	
C		11	3	1900			1		1			1	1	1	
C		12	3	1900			1		1			1	1	1	
C		18	3	1900			1			1				1	
C		20	3	1900	1		1							1	
C		21.1	3	1900			1			1			1	1	
C		21.2	3	1900				1		1			1	1	
C		23	3	1900			1					1		1	
C		26.1	3	1900	1	1	1					1		1	
C		26.2	3	1900				1		1				1	
C		33.1	3	1900			1		1	1				1	
C		33.2	3	1900			1		1					1	
C		33.3	3	1900			1			1				1	
C		42.1	3	1900				1				1		1	
C		42.2	3	1900				1		1		1		1	
C		13	3	1905			1					1		1	
C		22.1	3	1908				1				1		1	
C		22.2	3	1908				1		1		1		1	
C		24.1	3	1910	1			1						1	
C		24.2	3	1910				1						1	
C		40.1	3	1900	1		1					1	1	1	
C		40.2	3	1900	1		1		1	1		1	1	1	
C		40.3	3	1900	1		1			1		1	1	1	
74					18	12	55	17	11	5	18	17	33	28	74

Table 41: Golf - Accessory Types														
sport	ref	dec	date	shoes	boots	hat-masculine	hat-feminine	bow	cravat	pin/ornament	slip-knot tie	belt	gloves	corset
G	1.1	2	1893	1		1				1	1	1		1
G	1.2	2	1893	1		1				1	1	1		1
G	1.3	2	1893	1		1				1	1	1		1
G	1.4	2	1893	1		1				1	1	1		1
G	1.5	2	1893	1		1				1	1	1		1
G	1.6	2	1893	1		1				1	1	1		1
G	1.7	2	1893	1		1				1	1	1		1
G	1.8	2	1893	1		1				1	1	1		1
G	1.9	2	1893	1		1				1	1	1		1
G	1.10	2	1893	1		1				1	1	1		1
G	1.11	2	1893	1		1				1	1	1		1
G	1.12	2	1893	1		1				1	1	1		1
G	1.13	2	1893	1		1				1	1	1		1
G	1.14	2	1893	1		1				1	1	1		1
G	1.15	2	1893	1		1				1	1	1		1
G	1.16	2	1893	1		1				1	1	1		1
G	1.17	2	1893	1		1				1	1	1		1
G	1.18	2	1893	1		1				1	1	1		1
G	1.19	2	1893	1		1				1	1	1		1
G	1.20	2	1893	1		1				1	1	1		1
G	1.21	2	1893	1		1				1	1	1		1
G	1.22	2	1893	1						1	1	1		1
G	11.1	3	1900	1				1			1	1		1
G	9	3	1909	1							1	1		
G	10.1	3	1909	1				1			1			
G	10.2	3	1909	1		1					1			
G	10.3	3	1909			1								
G	2.1	3	1910	1			1			1		1		1
G	2.2	3	1910				1				1			1
G	2.3	3	1910	1			1							
G	2.4	3	1910		1		1				1	1		1
G	2.5	3	1910		1		1			1	1	1		1
G	2.6	3	1910				1			1	1	1		1
G	3.1	3	1910	1										
G	4.1	3	1910	1				1			1	1		
G	4.2	3	1910	1				1			1	1		1
G	6.1	3	1910	1		1						1		1
G	7.1	3	1910	1				1			1	1		1
G	7.2	3	1910		1			1			1	1		1
G	7.3	3	1910	1		1					1	1		1
G	12.1	3	1910	1				1			1	1	1	1
G	12.2	3	1910	1				1			1	1	1	1
G	12.3	3	1910	1							1	1	1	1
G	12.4	3	1910		1		1				1	1		1
G	12.5	3	1910		1		1				1	1	1	1
G	12.6	3	1910		1		1			1	1	1	1	1
G	12.7	3	1910		1		1				1	1	1	1
G	12.8	3	1910	1							1	1	1	1
G	12.9	3	1910		1			1			1	1	1	1
G	12.10	3	1910		1			1			1	1	1	1
G	12.11	3	1910		1	1					1			
G	12.12	3	1910	1				1			1	1	1	1
G	12.13	3	1910	1				1			1	1	1	1
G	12.14	3	1910		1	1					1			
G	12.15	3	1910		1			1			1	1	1	1
G	12.16	3	1910		1			1			1	1	1	1
G	12.17	3	1910		1			1			1	1	1	1
G	12.18	3	1910		1			1			1	1	1	1
G	12.19	3	1910		1			1			1	1		1
G	8.1	3	1911	1				1			1	1		1
G	8.2	3	1911					1			1	1		1
G	8.3	3	1911					1			1	1		1
G	8.4	3	1911					1			1	1		1
G	8.5	3	1911	1		1					1	1		1
G	8.6	3	1911					1	1		1	1		1
G	5.1	3	1910		1	1				1	1	1		1
66				42	17	29	32	1	0	27	58	57	15	57

Table 42: Mountaineering - Accessory Types														
sport	ref	dec	date	shoes	boots	hat-masculine	hat-feminine	bow	cravat	pin/ornament	slip-knot tie	belt	gloves	corset
M	1.10	2	1895		1	1				1			1	1
M	2.00	2	1895		1	1		1				1	1	1
M	3.00	2	1895		1		1					1	1	
M	4.10	2	1895		1		1						1	
M	4.30	2	1895		1		1				1		1	1
M	4.20	2	1895		1		1						1	1
M	5.10	2	1900		1		1				1		1	1
M	5.20	3	1900		1		1				1		1	1
M	9.00	3	1900				1						1	1
M	10.10	3	1900		1		1							
M	10.20	3	1900		1		1							
M	15.10	3	1900		1		1					1	1	1
M	15.20	3	1900		1		1						1	1
M	6.10	3	1906		1		1							
M	6.20	3	1906		1		1	1						
M	6.30	3	1906		1		1							
M	11.10	3	1907				1					1		
M	11.20	3	1907									1		
M	11.30	3	1907		1									
M	11.40	3	1907		1			1						
M	7.00	3	1910											
M	8.00	3	1910		1					1		1		
M	12.00	3	1910		1		1						1	
M	13.10	3	1910		1		1						1	1
M	13.20	3	1910		1		1						1	1
M	14.10	3	1910		1		1			1		1		1
M	14.20	3	1910		1		1	1				1		1
M	14.30	3	1910		1		1				1	1		
M	16.00	3	1912		1		1					1	1	1
M	17.00	3	1912		1		1					1	1	1
M	18.00	3	1903		1	1							1	
31				0	27	3	24	3	0	3	4	11	17	15

Table 43: Tennis - Accessory Types														
sport	ref	dec	date	shoes	boots	hat-masculine	hat-feminine	bow	cravat	pin/ornament	slip-knot tie	belt	gloves	corset
T		2	1	1886				1					1	1
T		3	1	1886		1						1		1
T		4	1	1886		1		1						1
T		4	1	1886		1								1
T		4	1	1886		1								1
T		4	1	1886		1								1
T		4	1	1886		1								1
T		1.1	1	1887						1				1
T		1.2	1	1887						1				1
T		26.1	1	1889				1			1	1		1
T		26.2	1	1889				1			1	1		1
T		26.3	1	1889				1			1	1		1
T		26.4	1	1889				1			1	1		1
T		33	1	1889	1	1				1	1	1		1
T		7	2	1890				1						1
T		27	2	1892						1				1
T		27.2	2	1892					1			1		1
T		27.3	2	1892						1		1		1
T		6	2	1893		1				1	1			1
T		9	2	1893	1			1				1		1
T		25.1	2	1893				1		1		1		1
T		25.2	2	1893				1				1		1
T		25.3	2	1893				1				1		1
T		25.4	2	1893		1						1		1
T		8.1	2	1894		1						1		1
T		8.2	2	1894		1							1	1
T		10	2	1895		1							1	1
T		5.1	2	1896		1				1		1		1
T		5.1	2	1896		1								1
T		31	2	1896	1				1			1		1
T		11.1	3	1900				1						1
T		11.2	3	1900										1
T		12.1	3	1900				1	1					1
T		12.2	3	1900		1								1
T		12.3	3	1900		1					1	1		1
T		12.4	3	1900										1
T		12.5	3	1900		1				1				1
T		12.6	3	1900		1				1				1
T		12.7	3	1900				1		1				1
T		12.8	3	1900		1								1
T		13.1	3	1900						1		1		1
T		13.2	3	1900		1								1
T		28.1	3	1900				1		1		1		1
T		28.2	3	1900		1					1	1		1
T		28.3	3	1900				1	1			1		1
T		28.4	3	1900		1						1		1
T		14.1	3	1904		1				1		1		1
T		14.2	3	1904		1				1				1
T		14.3	3	1904		1					1			1
T		14.4	3	1904				1						1
T		14.5	3	1904				1		1				1
T		14.6	3	1904						1				1
T		14.7	3	1904						1				1
T		14.8	3	1904						1				1
T		15.1	3	1906	1					1				1
T		15.2	3	1906		1								1
T		36.1	3	1906	1			1				1		1
T		36.2	3	1906	1			1		1		1		1
T		36.3	3	1906	1			1		1		1		1
T		36.4	3	1906	1			1			1	1		1
T		36.5	3	1906	1			1		1		1		1
T		36.6	3	1906	1			1			1	1		1
T		28.1	3	1907	1			1			1	1		1
T		28.2	3	1907	1			1		1		1		1
T		19.1	3	1908				1	1			1		1
T		19.1	3	1908				1			1	1		1
T		19.11	3	1908				1			1	1		1
T		19.2	3	1908				1	1			1		1
T		19.3	3	1908				1			1	1		1
T		19.4	3	1908		1					1	1		1
T		19.5	3	1908				1			1	1		1
T		19.6	3	1908				1			1	1		1
T		19.7	3	1908				1			1	1		1
T		19.8	3	1908				1			1	1		1
T		19.9	3	1908				1			1	1		1
T		31.1	3	1908	1			1			1	1		1
T		31.2	3	1908	1			1		1		1		1
T		16	3	1910		1						1		1
T		17	3	1910	1						1	1		1
T		18.1	3	1910	1					1				1
T		18.2	3	1910				1				1		1
T		18.3	3	1910						1				1
T		18.4	3	1910	1			1			1			1
T		20.1	3	1910				1		1				1
T		20.2	3	1910		1				1				1
T		20.3	3	1910				1		1				1
T		20.4	3	1910						1				1
T		20.5	3	1910						1		1		1
T		20.6	3	1910		1						1		1
T		20.7	3	1910			1					1	1	1

sport	ref	dec	date	shoes	boots	hat-masculine	hat-feminine	bow	cravat	pin/ornament	slip-knot tie	belt	gloves	corset
T	20.8	3	1910				1	1				1		1
T	20.9	3	1910			1						1		1
T	20.9	3	1910					1			1	1		1
T	20.9	3	1910					1			1	1		1
T	21	3	1911	1				1			1			1
T	22	3	1911	1						1	1	1		1
T	34.1	3	1911	1				1			1	1		1
T	34.2	3	1911	1				1				1		1
T	23	3	1912	1						1	1	1		1
T	24	3	1912		1			1				1		1
T	29	3	1912	1								1		1
T	30	3	1912	1				1				1		1
T	35.1	3	1912	1				1				1		1
T	35.2	3	1912	1					1			1		1
T	35.3	3	1912	1						1		1		1
T	35.4	3	1912	1						1	1	1		1
107				29	2	32	52	8	2	39	29	66	4	105