

Methodology for the Study of Historic Clothing and Textiles — Qualitative and Quantitative Methods —

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복식 연구를 위한 연구방법론에 관한 고찰
— 질적 연구방법과 양적 연구방법 —

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Abstract

본 연구의 목적은 지난 20여 년간 발표되었던 복식사 연구 논문의 연구방법을 검토, 분석함으로써 복식 연구의 학문적 기초를 다지며, 아울러 미래의 복식 연구가 나아가야 할 바람직한 연구 방향을 모색하는데 있다.

본 연구를 위하여 1977년부터 1996년 사이미국의 복식관련 학술지에 발표된 총 34편의 복식 연구 논문을 수집하여, 각 논문의 연구방법과 주제, 사용된 자료, 다른 학문과의 연계성에 관한 내용을 분석하였다. 본 논문에서는 복식연구의 방법을 질적(Qualitative) 연구방법으로 서술형(Narrative)과 해석형(Interpretive), 그리고 양적(Quantitative) 연구방법의 세 가지 유형으로 분류하여 분석하였다.

본 연구의 결과에 의하면, 복식학자들은 복식사가 갖는 다른 여러 학문영역과의 연계성(Interdisciplinary nature)으로 인하여, 광대한 연구주제에 따라, 각종 연구자료를 이용하여, 여러 학문적 관점에서, 다양한 연구 방법을 적용시켜 왔던 것을 알 수 있다.

적절한 연구방법의 선택은 각 논문에 따라 연구자의 의도, 주어진 연구주제, 가능한 모든 자료를 근거로 하여 결정되어야 하며, 하나의 논문 내에서도 각 부분에 적합한 여러 연구방법을 병행하여 사용함으로써 가장 효과적으로 연구의 목적을 달성할 수 있어야 한다.

Key words: history of clothing and textiles, research methodology, qualitative method, quantitative method, content analysis; 복식사, 연구방법론, 질적 연구방법, 양적 연구방법, 내용분석법

I. Introduction

The fundamental to the study of historic clothing and textiles is the consideration of evolutionary

theory, a theory of social and cultural change in clothing. Vast amounts of descriptive data on evolution of clothing need to be documented and it has been done particularly as a foundation for interpretive study. Many researchers attempted to find

ways to deal with masses of these descriptive data on clothing by applying systematic quantitative research methods. As well as the work on systematic documentation of descriptive data, the importance of social and cultural factors in interpretation of human behavior has been emphasized in many qualitative studies.

Application of a particular research method involves a complicated consideration and it usually relies on its research topic, primary sources available, and parent discipline of the researcher. Research method used for costume study can be broadly divided into two categories—qualitative and quantitative. Qualitative method is more traditional and far older than quantitative one. Though, use of quantitative method has been increased since the mid-nineteen sixties (Schlereth, 1982).

The status of the effort to select an appropriate method has not received much attention among researchers in history of clothing and textiles. Methodology chosen particularly to the studies of this field needs to be examined in order to expand and improve the scope and quality of studies. Therefore, the purpose of this paper is to identify and analyze methodologies applied for the studies of historic clothing and textiles published during last two decades. In order to perform the analysis, each research paper was examined in terms of researcher, year of the study, research subject, primary sources used, and parent discipline of the researcher.

II. Qualitative Method vs. Quantitative Method

Qualitative methods employ the form of a flowing narrative account or report developed from story telling and an oral passage of history. In a qualitative form of reporting costume study, descriptive questions were drawn to research rather than formal hypotheses. Qualitative studies were usually written in chronological order or some

other logical structure. The conclusion in this type of study is descriptive and often judgmental.

Barzun (1985) proposed qualitative history stating: "History proper is more than its elements; it is more than information about objects, customs and situations: it is a chronological narrative of actions by persons with motives,..." Historical method can be described as a process in which a research question is chosen, and primary and secondary sources are identified, analyzed, and finally interpreted as a synthesis. Traditional historical methods operate by generating hypotheses from data rather than testing hypotheses.

Quantitative method uses objective numerical values for analysis. Systematic application of formal behavioral models and of related mathematical and statistical methods has been accomplished for historical analysis since the nineteen fifties, according to Fogel (1974). He divided quantitative methods used for studying history into two categories informal (impressionistic) and formal (rigorous) methods of measurement. The informal method is a descriptive method of measurement. He further divided the formal measurement into two categories—direct and indirect. Counting is the most common method of direct measurement. The indirect measurement draws equations to examine relationship between variables, such as averages, correlations, and tests for difference.

One of the most frequently-used quantitative methods for costume study is a content analysis. Content analysis is a research method for determining the values, themes, norms of behavior, and other elements of culture from the verbal materials produced by the people of a culture (Berelson, 1952). Such research technique has been applied as a formal methodology in journalism and other communications research first, using verbal data. Application of this method has been extended later to non-verbal communications such as clothing. Content analysis method includes con-

trolled observations and systematic counting of frequency of occurrence. The procedure is systematic in that inclusion and exclusion of content or categories are done according to consistently applied rules (Holsti, 1969). Moreover, the characteristic of content analysis is often described as scientific because of quantification of data.

III. Procedure

The literature searches were made to gather the articles published mainly during the last two decades, from 1977 to 1996. Most articles were selected from the journals in the clothing and textiles field - *Clothing and Textiles Research Journal*, *Dress*, and *ARS Textrina*. Some interdisciplinary articles were chosen from the books and the journals in related academic fields, including *American Anthropologists*, *Antiques*, *Business History Review*, *Home Economics Research Journal*, and *Journal of American History*. This investigation identified and analyzed total of 34 published articles. In order to classify the types of research method used in the studies, each article was evaluated by the fit with three levels of application:

I. Narrative(Qualitative),

II. Interpretive(Qualitative), and

III. Quantitative.

Each type of research method was defined as following: The discourse of *narrative method(I)* is descriptive. This method attempts to record and describe the internal evidence of historic fact or object itself. The factual data of narratives are usually chronologically-ordered, however, the explanation of temporal sequence of data are not attempted. *Interpretive method(II)* seeks to explain the interaction between the object and the perceiver. It involves the speculation based on researcher's impressions. Interpretive history attempts to explain the fact which narrative one just describes. Such interpretive explanation relies

on speculation rather than proof. *Quantitative method(III)* uses objective numerical values for analysis. In some cases, it may attempt to obtain the proof by forming hypotheses and questions, which lead out from the object to external evidence for testing and resolution.

Concerning the interdisciplinary nature of this field, parent discipline of study was also taken into consideration and categorized according to academic discipline.

Each research article was examined by identifying the method with a classification system and analyzing its relation to other factors such as research subject, parent discipline of the researcher, and primary sources used.

IV. Results and Discussion

Based on results of the analysis of 34 articles, it was found that costume and textile historians have done interpretive studies more frequently than they did simple narrative studies. The costume researchers tended to favor interpretive approach and, in the process of interpretive study, quantitative techniques were often applied when quantification was possible and useful. Overall, they focused on studying costume and textiles in a social context more than on studying them for its own state of being.

1. Studies Using Qualitative Methods

The results of analysis on qualitative studies are summarized in Table 1. The narrative approach focusing on the garment itself was proper in the study by Prellwitz and Metcalf(1980). In their study, a thorough documentation of an 1884 wedding dress was attempted using an extant garment object and fashion periodicals of the nineteenth century as primary sources. A simple narrative like this study can yield results more objective than some impressionistic interpretive studies do.

Table 1. Studies of historic clothing and textiles using qualitative method.

<i>Author(year)</i>	<i>Research Subject</i>	<i>Primary Source</i>	<i>Methodology</i>
Prellwitz & Metcalf(1980)	19th C. American costume	Museum object, periodicals	Narrative
Trautman (1984)	18th C. American tailor	Diaries, account books	Interpretive
Steele (1985)	Men's Fashion 1760's & 1770's	Magazines	Interpretive
Farrell-Beck, et al. (1985)	Sewing techniques, 1800~1869	Museum objects, periodicals, manuals	Interpretive
Gordon (1987)	Civil War costume	Historical portraits	Interpretive
Pannabecker (1988)	Silk ribbons, mid-18th to mid-19th C.	Interviews, historic records	Interpretive
Trautman & Bartsch(1988)	17th & 18th C. costume	Probate documents	Interpretive
Danielson (1989)	Changing figure ideals, 1918~1985	Textbooks	Interpretive
Hamiltons (1989)	Female dress of Karen	Participant-observation	Interpretive
Gordon (1992)	Meanings in dress mid-19th C.	Diaries, letters, etiquette books	Interpretive
Welters (1992)	Greek folk dress	Interviews, objects	Interpretive
Hunt & Sibley(1994)	African American dress. 1890~1914	Historical photographs, magazines, newspapers	Interpretive
Ulrich (1995)	ILGWU's label campaign, 1959~1975	Archives, periodicals, union documents	Interpretive

Variety of subjects were discovered in the qualitative studies, ranging from an eighteenth century American tailor(Trautman, 1984), sewing techniques(Farrell-Beck, et al. 1985), figure ideals (Danielson, 1989), label campaign(Ulrich, 1995), to an anthropological interpretation of costume (Pannabecker, 1988; Hamiltons, 1989; Welters, 1992). Depending on these research subjects, many different primary sources were utilized for the qualitative studies. They include actual objects (Prellwitz & Metcalf, 1980; Farrell-Beck, et al.,

1985), anthropological sources from interviews or participant-observations(Hamiltons, 1989; Welters, 1992), historic records such as bills, accounts, probate records(Trautman and Bartsch, 1988) and historical photographs(Hunt & Sibley, 1994), literary sources like diaries, letters, poems, popular fictions, or etiquette books(Gordon, 1992), and periodicals such as magazines, newspapers, or catalogs (Prellwitz & Metcalf, 1980; Farrell-Beck, et al., 1985; Hunt & Sibley, 1994; Ulrich, 1995), as shown in Table 2.

Table 2. Primary sources used for qualitative studies.

Actual objects-	museum and collection objects,
Anthropological sources-	interviews, participant-observations,
Historic records-	bills, accounts, probate records, historic photographs,
Literary sources-	diaries, letters, poems, popular fictions, etiquette books,
Periodicals-	magazines, newspapers, catalogs.

Studies of extant garments and textile objects have made an effective use of qualitative methods. Farrell-Beck, et al.(1985) studied the change of sewing technology in the 19th century, using garment objects from museums and printed sources which supported findings of the study. The results were presented chronologically in a descriptive manner for each research question proposed in this study.

Combined use of actual objects and historic records- bills, accounts, and probate records- was proved to be an effective research tool for qualitative studies. It was interesting to see how the research data obtained from actual objects supported or refuted with the data from historic records of the same period. In Trautman and Bartsch(1988)'s study, probate documents, an under-utilized source, offered information about clothing and textiles for periods for which few or no extant artifacts exists.

Hunt and Sibley(1994) were able to examine if American women wore clothing similar in style to fashions advertised and illustrated in the periodicals of the same period by comparing the data from historical photographs and the data from magazines and newspapers. Periodicals were found to be a more effective research tool when combined with other sources like actual garments. Though, they were used alone for costume study, providing both descriptive and illustrated data; as shown in the article by Steele(1985).

Qualitative studies can also be carried out using interviews as primary sources. Research data obtained from interviews were often supported or explained by applying other sources such as actual objects or historic records. Combining object study with field work provided valuable data generating new hypotheses not obtainable through a quantitative approach. Examples of this type of approach were found in the anthropological studies by Pannabecker(1988), Hamiltons(1989), and Welters (1992).

Literary sources were also proved to be useful for interpretive studies, as shown in Gordon(1992)'s study. She chose diaries and letters as well as the contemporary popular fictions and etiquette books in order to examine roles and meanings of dress in everyday life. In the earlier study(Gordon, 1987), she used historical portraits of the Civil War period as a case study to make analytic generalizations applicable for other periods. Literary sources were also combined with other types of sources in Trautman(1984)'s study. He used diaries and historic records for analyzing a stereotype of an eighteenth century American tailor.

The above analysis indicated that the primary focus of interpretive studies was not clothing in most cases. Clothing was used mainly as evidence to investigate social or cultural aspects of history.

2. Studies Using Quantitative Methods

The common methods applied for quantitative studies were a simple frequency counting and a content analysis, as shown in Table 3. Although the level of quantification differed among studies, the usual type of content analysis was the application of frequency counting and time series analysis.

Weeden(1977) applied content analysis in the study of change in women's day dresses between 1920 and 1976. In 1982, Lowe and Lowe attempted a similar investigation expanding the scope of the

Table 3. Studies of historic clothing and textiles using quantitative method.

<i>Author(year)</i>	<i>Research Subject</i>	<i>Primary Source</i>	<i>Methodology</i>
Weeden (1977)	Women's day dresses, 1920~1976	Magazines	Frequency count & seriation
Turnbaugh (1979)	Bonnet styles, 19th C.	Magazines	Content analysis
Paoletti (1980)	Democratization of fashion, 1875~1885	Magazines	Content analysis
Paoletti (1981)	Changes in masculine image, 1880~1910	Magazines	Content analysis
Lowe & Lowe(1982)	Women's evening wear, 1789~1936	Magazines	Content analysis
Richards (1983)	Women's day dresses, 1920's	Magazines	Content analysis
Anderson & Paoletti(1985)	Eagle motifs in American coverlets	Collection objects	Content Analysis
Belleau (1987)	Women's day dresses, 1869~1980	Magazines	Content analysis & correlation analysis
Jung & Paoletti(1987)	Victorian crazy quilts	Collection objects	Content analysis (Form analysis)
Paoletti, et al (1987)	Men's jacket styles, 1919~1941	Museum objects, catalogs	Content analysis & object study
Campbell & Brandt(1994)	Clothing consumption, 1850~1890	Diaries, letters, memoirs	Content analysis

study further to women's evening wear covering a longer period, 1789~1936. Similar approach was applied by Richards(1983) in her study on the hemline and hipline changes of women's dress in the 1920's.

Later in 1987, Belleau used a content analysis combined with an advanced statistics to study the cyclical change of women's day dresses. In this study, the data obtained from periodicals were analyzed using combined methods-content analysis, time series analysis, and Spearman's rank order correlation. The content analysis of fashion illustrations featured in magazines was also attempted by Turnbaugh(1979) and Paoletti(1980). Turnbaugh used seriation technique, a form of

content analysis used in anthropology to study changes in women's bonnet styles. Seriation was used to order the data obtained from documentary sources for analysis and interpretation. Paoletti (1980) conducted a comparative study of the women's dress designs appearing in fashion magazines applying similar methods.

In empirical applications of content analysis, establishing validity is essential. Validity of the content analysis instrument can be measured by comparing results of the study with those obtained by using another accepted measure of the same variables(Paoletti, 1980). This was shown in the study of men's jacket styles from 1919 to 1941 by Paoletti, et al(1987). They combined documentary

sources, catalogs, and museum objects as primary sources. It was a good example of coordinated content analysis and object study.

As discussed above, the primary sources used for content analysis had been limited mainly to fashion illustrations featured in magazines, nonverbal sources, from which large amount of data was easy to obtain. Later on, various primary sources were also utilized, including actual objects or printed materials other magazines. Furthermore, content analysis of verbal sources was also attempted for costume study. Published diaries, memoirs, and letters were analyzed using content analysis in Campbell and Brandt(1994)'s study, investigating clothing consumption practice of the American army wives in the second half of the nineteenth century.

The new approach using actual objects for content analysis was accomplished in the studies of textile artifacts such as quilts and coverlets. Anderson and Paoletti(1985) used content analysis and seriation to analyze regional variations and

evolution of the eagle motifs in the nineteenth century American coverlets. Later in 1987, Jung and Paoletti applied "form analysis," an adaptation of content analysis to study the characteristics of the crazy quilt tad using 37 dated Victorian crazy quilts. In this study, the method was developed to quantify the features found on the sample quilts, using data collection instrument to minimize the subjectivity which can easily undermine the study of material culture.

In the field of costume study, use of quantitative methods, especially content analysis, has been increased because of its objectivity and effectiveness in operating with a large amount of verbal or nonverbal data.

3. Interdisciplinary Perspectives

Interdisciplinary approach provided opportunities for researchers to study a variety of concepts, methodologies, and interpretations. Table 4 shows the examples of interdisciplinary approach to costume study with their parent disciplines from

Table 4. Interdisciplinary perspectives of historic clothing and textile studies

Parent Disciplines	Researcher (year)	Research Subject	Primary Source	Research Method
Material culture study	Ring(1984)	American samplers	Objects	II
	Cunningham(1984)	Pennsylvania coverlets	Objects	II
	Gehret(1985)	Hand towels	Objects	II
	Marendy(1993)	Pattern drafting	Objects	II
Art history	Ames(1982)	Hall furnishings	Objects	II
	Steele(1985)	Men's fashion	Magazines	II
	Herr(1986)	Pennsylvania quilts	Objects	I
Anthropology	Pannabecker(1988)	Silk ribbons	Interviews, archives	II
	Hamiltons(1989)	Folk dress	Interviews	II
	Welters(1992)	Folk dress	Interviews, objects	II
Archaeology	Deegan(1987)	Civil War costume	Textile remains	III
	Sibley, et al(1992)	Feather remains	Feather remains	III
Economics	Walsh(1979)	Pattern industry	Periodicals	II
	Cohn(1980)	Textile manufacturing	Census records	III

many other fields.

The discipline of material culture study has been applied to costume study where clothing as an artifact is studied, mostly by a qualitative approach. Ring(1984) studied American samplers as an extraordinary form of material culture, applying descriptive methods. Cunningham(1984) and Gehret (1985) have also done the complete qualitative studies, similar to Ring(1984)'s, on the Pennsylvania coverlets and decorated hand towels, respectively. Marendy(1993) chose the model for material culture studies to evaluate its applicability to costume study for documentation of the 1880's bustle dress.

The researchers with art history background tend to look at costume visually. Art historian Steele(1985) has done the qualitative study on the men's 18th century fashion, using caricatures and satires as primary sources. She organized her study chronologically to examine the iconography of satires and its significance in the trend toward plainer male dress. The view point of art collector was expressed in the Herr(1986)'s article. In this study, quilts as work of art were investigated by using a narrative method. The material culture study influenced by a blend of art history and literary criticism was done by Ames(1982). He analyzed the Victorian hall types and furnishings in terms of their utilitarian functions and symbolic significance.

The parent discipline of Welters(1992) was reflected in her choice of ethnohistorical technique, an interdisciplinary technique employing methods from both anthropology and history. She attempted to demonstrate the usefulness of ethnohistorical method for qualitative study of traditional Greek dress using both documents and interviews as primary sources. The anthropological study by Hamilton and Hamilton(1989) also used qualitative methods, participant-observation and cultural interpretation, examining the relationship of dress to human individual and social experience with a

cross-cultural perspective. The concept of cultural authentication was applied in the qualitative, cross-cultural study of silk ribbons by Pannabecker (1988). As discussed above, traditional qualitative methods were favored for anthropological researches.

Interdisciplinary approach drawn primarily from archaeology was attempted, using quantitative methods, for the investigation of the fabric and garment usage by early Americans in the studies of Deegan(1987) and Sibley, et al.(1992). Deegan(1987) analyzed textile remains from the grave of an American Civil War soldier, applying different microscopic techniques for fiber content, color, and fabric construction. The data obtained from this study were used to reconstruct the military uniform of the same period. Sibley, et al.(1992) performed a similar quantitative analysis on the feather remains recovered from burial. The results of this analysis were compared to historic records confirming feather-faced fabric usage by early populations in North America.

Both with the disciplinary background in economics, Cohn(1980) and Walsh(1979) conducted researches using different methods. Cohn(1980), representing the more traditional economist, used quantitative methods to analyze the data collected from manufacturing records. Where as, Walsh (1979)'s study on pattern industry was written in a traditional narrative form without using quantitative analysis which was often expected from an economist.

The interdisciplinary nature of the field allowed costume researchers to study a variety of concepts with different kinds of primary sources and research methods. The researchers with parent disciplines in material culture study, anthropology, and art history tended to use qualitative methods more favorably, whereas the researchers with archaeology and economics backgrounds preferred the use of quantitative methods.

Table 5. Qualitative method vs. quantitative method.

	Qualitative method	Quantitative method
Parent discipline	Material culture study Art history Anthropology	Economics Archaeology
Research subject	Variety of subjects	Mainly stylistic change of fashion
Primary source	Actual objects Historic records Interviews Literary writings	Mainly periodicals

V. Conclusions

Costume and textile historians have used a variety of methods for their research, depending on the nature of their research subjects and the information sources available. The research subjects chosen for the qualitative studies (Table 5) covered broad areas from textile artifacts, fashion of particular periods, even to pattern industry. Accordingly, various kinds of primary sources were used to obtain research data pertaining to these subjects.

In comparison with qualitative studies, the scope of quantitative studies were limited, especially in selecting research subject and primary source. The research subjects of quantitative studies dealt mostly the serial changes in clothing styles. In order to study these subjects, fashion illustrations from fashion magazines were used most often as primary sources. The quantitative method applied most frequently was content analysis, a technique of controlled observation and a systematic counting. Seriation analysis was usually followed for data processing. Furthermore, in some cases, statistical techniques were applied to test the hypotheses, examining relationship between variables.

One of the main scholarly issue of this study was how and when to apply either qualitative or quan-

titative method for a particular research problem. As shown in the above results, available methodologies ranged widely from simple narratives, interpretive analysis, and to quantitative techniques. Though, a research method for a certain study should vary among different articles based on individual's preference and practical factors such as research subjects and primary sources to be used. Many questions in historic research involve quantification in an essential way. The important consideration should be on the subject if the use of quantification is advantageous to the objective of study. Especially when treating a large amount of data, either verbal or nonverbal, use of quantitative method such as content analysis can yield a historic study more objective and effective than any qualitative method can do.

The application of quantitative method, mainly a content analysis, has expanded the scope of historic research done in the traditional impressionistic study, with respect to such issues as evolution of fashion and effect of social influences on fashion. However, the important account to remember here is that history is essentially a literary and humanistic discipline. Thus, the results of quantitative analysis must be explained in words providing a historical synthesis. The display of hard data itself does not give any meaning without proper interpretation.

Combining more than one methods and primary sources should be considered in all cases for better investigation of research subjects. At the same time, different kinds of available primary sources must also be considered to be used. Accordingly, the methods selected should differ from point to point within the same article, depending on these available primary sources chosen. Therefore, for a study of costume and historic textiles, selecting a right research methodology among all available techniques requires logical and empirical considerations.

This exploratory study focused mainly on comparison of qualitative and quantitative methods, classified broadly with three levels of application narrative, interpretive and quantitative methods. The classification developed in this study could be helpful to simplify complex nature of historic clothing and textiles field. In addition, this study could contribute to a stronger foundation for this field by providing direction needed for future research.

Future studies should find ways to classify research methods further in detail by subdividing them. Furthermore, researchers should continue efforts to study methodology for historic clothing and textiles field, analyzing scholarly papers published in many other areas and time periods.

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