

## CHAPTER IV

### Method

The purpose of this research was to determine whether or not poetry (i.e., poems, ballads, and songs) could be used as a source of knowledge on historic dress in a social, political, or economic context, using the dress of Scottish Highlanders from 1603 through 1830 as an example, and to triangulate the findings with other sources that portray dress through the written word or visual image. This research cross-referenced the items of dress with social, political, and economic events that occurred in the lives of the Scottish and Highland people. Poetry was a source of expression for the Scottish and Highland people and should represent a valuable resource for studying historic dress. The main source of documentation for this research was 3,501 literary documents written from 1603-1830 in the form of poetry (i.e. poems, ballads, and songs). The researcher examined these literary documents and identified poems with male dress references and poems with female dress references. The researcher also examined the relationship between dress references and the social, political, and economic events and the contents of the poetry. Finally, the researcher examined the impact of sumptuary laws (i.e., the banning of Highland dress due to The Act of Proscription) on the dress behaviors of the Scottish people during the 18th century.

The data collection was organized in three phases: a content analysis of poetry, a content and poetic analysis of poetry, and a content analysis of letters, travel accounts, and portraits for triangulation. This chapter will discuss the research design and procedures, instrument development, data sources, data collection, and data analysis. Research validity and reliability are also discussed in terms of triangulation. Finally, a pilot test is discussed as a means of confirming the usefulness of the instrument.

#### Research Design

The research design for the current study combines aspects of qualitative and quantitative paradigms. The mixture can be used at many or all steps in the design (Creswell, 1994). Mixed methods add complexity to the research design and uses the advantages of both qualitative design and quantitative design. This research design mirrors the research process by working back and forth between inductive and deductive thinking. The research questions are written toward seeking knowledge (i.e., documents) but with quantitative components (e.g., identify). The quantitative component of content analysis will allow quantification of subjective data (i.e. poetic dress references). The qualitative component will allow the researcher to rely on poetry

that has been written by and about a specific cultural group (i.e., Scottish and Highlanders) and the researcher will refer back to the literature review throughout the data analysis.

This study was approached from a historical research perspective, which according to Kerlinger (1973) entails “critical investigation of events, developments, and experiences of the past...” (p.701). Historic research is limited to extant sources preserved in various records (Sklelvar, 1971). The types of records vary between written and visual forms. Both Kerlinger (1973) and Sklelvar (1971) suggested using primary sources whenever possible. According to Sklelvar (1971), primary sources are those created by individuals during the period under scrutiny. Secondary sources were items created outside the time period being investigated. Secondary sources are useful as a means of reference material but not as the sources of data. The current study examined multiple sources created between 1603 and 1830 about the Scottish Highlands. Historic research was relevant because people have “personalities of given times, places, and experiences whose thinking is consequently in some measure conditioned and determined by the historical circumstances of their lives and experiences” (Kerlinger, 1973, p. 703). Original sources of poetry, letters, and portraits and exact reprints of these same sources were used in the current study. The current research examined time (17<sup>th</sup>-19<sup>th</sup> centuries) and place (Scottish Highlands) in the context of social, political, and economic experiences of the poets and lay people. Sklelvar (1971) divided records into two categories: a) verbal and b) mute (i.e., unwritten). The verbal records included anything oral or written, including literature and letters. Mute records were interpreted by their visual appearance, including paintings and photographs. Both verbal and mute records were examined in the current study.

#### Procedures

Scottish poetry dated 1603-1830 from select anthologies was analyzed to identify references to clothing. An attempt was made to include the works of noted writers of the specific time periods. Poetic analysis and content analysis were used to identify and document references to dress in each poem. Phase I was a content analysis of anthologies to document frequency of poems with dress references to those without dress references. The poems with dress references were identified in Phase I for use in Phase II of the study. Phase II of the study included both a content analysis and a poetic analysis of the poems with dress references identified in Phase I. The second phase of the research built upon the information found in the first phase (i.e., the poems

with dress references) and the information was used to examine Highland dress between 1603 and 1830. The second phase of the study determined the impact of the social (e.g., love, death, drinking), political (e.g., war, royalty), and economic (e.g., work, money) environments on changes in dress through the context of the poem. The poems with dress references that were written in Gaelic and translated into English were analyzed as a separate group before analyzing the poetry with dress references as a whole group. The Gaelic poems were used to confirm that Scottish poets (i.e., Highland and Lowland) were describing what dress items they saw rather than merely writing from literary tradition. Phase III of the study was a content analysis of letters, travel accounts, and portraits. The third phase was used to validate the findings of the second phase with other clothing sources from the same time period. The chosen design model was appropriate because of the sequential nature of the phases and because each phase builds on the knowledge gained in the previous phase.

### Poetic Analysis

Poetic analysis was used to identify references to Scottish and Highland dress in poetry between 1603 and 1830. The rhythm of a poem was used to determine the tone (i.e., mood) of the poem based on the content within the poem for qualitative purposes. The setting of a poem was determined by the references made within the poem to events (e.g., the Battle of Sheriffmuir) or emotions (e.g., love). The poem was assessed only for literal dress symbolism (e.g., Jeanie wore a green mantle), figurative dress symbols were not used (e.g., Mother Nature wore a mantle of green). Literal symbols were used because the researcher wanted to understand the significance and impact of actual garments worn by the Scottish and Highland people, rather than a metaphorical allusion to dress that may not coincide with dress actually being worn during a specific time period.

All of the different parts of the poetic analysis were used to gain knowledge about Highland dress during the 17<sup>th</sup>, 18<sup>th</sup>, and early 19<sup>th</sup> centuries. In addition, the dress was viewed in a social, political, and economic context. The mood surrounding the poem helped to provide additional information about how the context was viewed by a character (e.g., love may be viewed as happy or sad). An example of poetic analysis follows in the poem "Our Gudeman Cam' Hame at E'en" by an anonymous author during the early 18<sup>th</sup> century. The author wrote a humorous poem about love, even though the poem was about a husband discovering his wife's infidelity and her attempt to cover the

affair. The husband and wife banter back and forth over different clothing items that do not belong to the husband. One stanza from the poem states,

Our gudeman can hame at e'en, and hame cam he; he spied a pir o'  
jack-boots, where nae boots should be, what's this now, gudewife?  
What's this I see? How cam thae boots here without the leave o' me?  
Boots! Quo' she; aye, boots, quo' he. Ye auld blind dotard carle, and  
blinder mat ye be! It's but a pair o' water-stoups, the cooper sent to me.  
Water-stoups! Quo' he; Aye, water-stoups, quo' she. Far hae I ridden,  
and muckle hae I seen; but siller-spurs mon water-stoups saw I never  
nane (Chambers, 1829, p. 212-213).

This stanza indicated that the poem deals with love in a humorous way and the rhythm of the poem is light. The literal dress item mentioned was men's boots. All poems were analyzed in a similar manner.

### Content Analysis

Content analysis is a systematic process to quantify subjective data (i.e., dress references in poetry). The principle source of data for the current research was poems of Scotland and the Highlands from 1603-1830. According to Galfo (1983), historical written documents, such as 17<sup>th</sup> century ballads, are an appropriate source of data for content analysis. The researcher recorded references to dress in each of the selected poems. Each poem with a Highland dress reference was read and dress references were categorized by upper body garments, lower body garments, shoes, accessories, fibers, fabric patterns, headdress, ensemble description, and literal dress descriptions in instruments A or B. The color and other adjectives (e.g., flowing) provided additional information for the dress descriptions; therefore, the color associated with a particular garment was recorded whenever possible, as well as adjectives used by the poet to further describe a garment.

According to Galfo (1983), three limitations occur when using content analysis: (a) the nature of the sample, (b) the need for quantification, and (c) the lack of opportunity to duplicate the events being described. The sample of written records rarely includes all of the thoughts that went through a writer's mind or the entire situation present at the time of writing. The need to quantify the data created the need for statistical analysis to examine the data, while answering the research questions. Galfo (1983) suggests that content analysis data be cautiously interpreted to avoid generating inappropriate assumptions. The researcher cannot interact with his or her data. Galfo (1983) stated that content analysis is a "one-way channel of communication

(p. 96).” The researcher must glean information from the principle sources over which he or she has no control.

The limitations are important to understand at the outset of data collection. Galfo’s (1983) first two limitations were overcome by the researcher through the analysis of the data (i.e., poetry) and additional data sources (i.e., costume books, travel accounts, letters, and portraits). The clothing depicted in poems can be compared with the clothing depicted in other accounts of the same time period. The last limitation can be overcome through triangulation, even though the events being studied happened several hundred years ago.

### Development of the Instrument

Instruments are used as aids to perform content analysis for multiple purposes. The researcher may choose to use an existing instrument, modify an existing instrument, or create his or her own instrument. According to Stemple (1981), a researcher creating his or her own categories for the content analysis instrument should keep in mind the following: (a) the categories must pertain to the objectives of the study or the research questions, (b) the categories must function to answer the research questions, and (c) the categories must be a manageable system. In addition to Stemple’s suggestions, Galfo (1983) recommends that units with “meaningful similarities” be grouped together in one category. Analysis should yield information that fits easily into one of the categories that have been created. Stemple (1981) suggests somewhere between ten and twenty categories facilitate manageable and systematic coding of the data, while Galfo (1983) prefers eight to twelve categories. The best way to test the instrument is through a pilot study to determine if the research questions are being answered.

Allen’s (1993) content analysis instrument provided a basis for garment categories and was modified to fit the present study. Categories used in Allen’s instrument that were included in the current instrument were upper body garments, lower body garments, shoes, head coverings, other accessories, and color and fabric. Five instruments were developed for this study: A, B, C, D, and E (see Appendices). Four of the five different instruments for the current study were developed using a sample of poems from the specified time periods. The researcher found it necessary to read a sample of the poems before establishing categories. Exploration of the poems allowed the researcher to create the plausible categories and pre-test the instrument. The sample was also used to determine which of Allen’s categories would be necessary. The development of the instrument involved the use of male and female Scottish clothing

terminology, time period, setting, and reference to clothing. Specific clothing terminology was obtained from the review of literature on Scottish and Highland dress from the 17th, 18th, and 19th centuries and used to identify the components with each main category.

Instruments A, Male Scottish Highland Dress Classification Instrument for Poetry, and Instrument B, Female Scottish Highland Dress Classification Instrument for Poetry, were created to record dress references from the poetry examined. The two instruments contain three main sections (see Appendix C). The first section identifies the source of the document, the name of the poem, the poet, the date of the poem, the tone of the poem, the setting, the subject, and whether the subject is an adult or a child. The source, poem, and poet were identified for simple record keeping purposes. The date of the poem was noted in order to categorize a poem into a time category (i.e., early 17<sup>th</sup> century, late 17<sup>th</sup> century, early 18<sup>th</sup> century, late 18<sup>th</sup> century, early 19<sup>th</sup> century). The tone was identified to categorize the mood surrounding the poem. The setting of the poem was noted to identify the major environmental situation (i.e., social, political, economical) and the minor environmental setting (e.g., love, war, money), in order to categorize the environmental context of dress in poetry. The subject was noted to determine the type of person being described in the poem (e.g., lover, mother, father). The age of a subject was also noted to separate adult clothing for children's clothing.

The second section contains ten subsections. Seven of the subsections consist of specific terminology in the following categories: upper body garments, lower body garments, shoes, accessories, fiber, fabric patterns, and headdress. The two forms differed in that one form contains terminology specific to males (Instrument A) and the other contains terminology specific to females (Instrument B). The review of literature was used to obtain specific dress names and accessory items. In addition to terminology, each of these subsections contains a place to record color and adjective descriptors. The three remaining subsections cover adapted concepts. One subsection asks if the entire garment was described, while another question asks for alternate spellings of given terminology. The final subsection is for additional notes.

The third major section of the instrument deals with the events either described in the poem or indicative of the time period in which the poem was written. There were three lines to write in the major social, political, and economic events of the time period based on information given in the poem. The reverse side of the instruments provided space to allow the researcher to record any qualitative information that may contribute to the research, for example author's or editor's comments. A copy of the instrument was

used to record data for 643 poems from the selected anthologies that contained one or more dress references. A separate instrument was used for males in a poem and females in a poems; therefore, more than one instrument may have been used ofr a particular poem.

Two similar instruments (Instruments C and D) were used to record data from letters and travel accounts (see Appendix D). Instrument C, Male Scottish Highland Dress Classification Instrument for Travel Accounts and Letters, was used to record data from travel accounts and letters that referred to male dress. Instrument D, Female Scottish Highland Dress Classification Instrument for Travel Accounts and Letters, was used to record data from travel accounts and letters that referred to female dress. For each instrument the following information was recorded: the source, whether the piece was a letter or travel account, the setting, the subject, and whether or not the subject was an adult or a child. The main section of the instruments contain specific terminology in each of the following categories: upper body garments, lower body garments, fabrics, shoes, accessories, headdress and an area for additional notes. The forms differed in that Instrument C contained terminology specific to males and Instrument D contained terminology specific to females. The fifth instrument, Instrument E, Scottish Highland Dress Classification Instrument for Costume Books and Portraits, was developed to record data from the costume books and portrait sources (Appendix E) and to record descriptions of the visual images. The source was noted, the setting, the subject, the gender of the person, and whether or not the subject was an adult or child. The main section of the instrument contained descriptions in each of the following categories: upper body garments, lower body garments, fabrics, shoes, accessories, headdress and an area for additional notes. Each of the categories had a place to record terminology from any descriptive caption accompanying a portrait.

### Data Sources

Phase I utilized eighteen anthologies containing 3,501 Scottish poems from 1603-1830 to identify the poems that contained references to dress. After the poems with dress references were identified, Phase II involved the examination of each poem in order to record the information on the instrument form.

The poems in the anthologies were chosen from the multitude of individual poems written by Scottish authors during the 17th, 18th, and 19th centuries. Many editors and publishers have compiled exact reprints of the poems, ballads, and songs into anthologies with special permission from museums and private collectors. Sklelvar

(1971) noted that “knowledge of the past is never complete; thus, a definitive investigation is virtually impossible since one is never sure that all sources of evidence have been located” (p.112). Because not all Scottish poems could be located, eighteen anthologies, containing 3,501 Scottish poems, were chosen because the editor of the anthology identified either the author or approximate date of the poetry. The exact number of poems to be analyzed was determined in Phase I. Only poems with a named author or an approximate date were used for this research. The researcher would have preferred the poems to have an author because birth and death dates of an author are usually known and would allow placement of a poem in a time category; however, poems by anonymous authors were used if an approximate date had been identified. The focus of this research was the content of the work and not the style of the writer.

Eighteen anthologies which met the dating criteria were chosen out of the available sources. The poets were all Scottish, both Highland and Lowland. The sources chosen were:

1. A reprint of The Scots musical museum 1787-1803, Volumes I and II (Low, 1991) that contained 633 songs and poems, most of which were produced between 1787 and 1803.
2. A reprint of Ritson’s Scottish songs, Volumes I and II (Hopkins, 1869) that contained 178 songs, most were from the 17<sup>th</sup>-19<sup>th</sup> centuries.
3. Scottish poetry of the eighteenth century, Volume I and II (Eyre-Todd, 1971) that contained 158 poems from the 1700s.
4. The green garden: A new collection of Scottish poetry (Fergusson, 1946) that contained 88 poems from the 17<sup>th</sup> and 18<sup>th</sup> centuries.
5. The Caledonian muse: A chronological selection of Scottish poetry from the earliest of times (Ritson, 1821) that contained 26 poems from the 17<sup>th</sup> and 18<sup>th</sup> centuries.
6. The Scottish songs; collected and illustrated: Volumes I and II (Chambers, 1829) that contained 478 songs and ballads, most of which were from the 17<sup>th</sup>-19<sup>th</sup> centuries.
7. A Scots anthology from the thirteenth to the twentieth century (Oliver & Smith, 1949) that contained 354 poems, most of which were from the 18<sup>th</sup> and 19<sup>th</sup> centuries.
8. A reprint of Ballads of the forty-five (Meller, 1973) that contained 28 ballads written in the late 18<sup>th</sup> century.

9. A Scottish ballad book (Buchan, 1973) that contained 25 ballads from the late 18<sup>th</sup> and early 19<sup>th</sup> centuries.
10. The Oxford book of Scottish verse (MacQueen & Scott, 1966) that contained 329 poems with a large portion of those from the 17<sup>th</sup>-19<sup>th</sup> centuries.
11. Various pieces of fugitive Scottish poetry; principally of the seventeenth century (Laing, unknown) that contained 42 poems written between 1600-1707.
12. The Edinburgh book of Scottish verse 1300-1900 (Dixon, 1910) that contained 475 poems.
13. An anthology of Scottish women poets (Kerrigan, 1991) that contained 75 poems from the 17<sup>th</sup>-19<sup>th</sup> centuries.
14. A reprint of Watson's choice collection of comic and serious Scots poems: The three parts, 1706, 1709, 1711, in one volume (Watson, 1973) that contained 73 poems, most of which were written in the 17<sup>th</sup> century.
15. The Jacobite relics of Scotland; The songs, airs, and legends of the adherents to the House of Stuart (Hogg, 1819) that contained 200 poems written during the 17<sup>th</sup> and 18<sup>th</sup> centuries.
16. Highland songs of the forty-five (Campbell, 1984) that contained 32 poems written in the mid-to-late 18<sup>th</sup> century.
17. The Golden treasury of Scottish poetry (MacDiarmid, 1948) that contained 138 poems written during the 17<sup>th</sup>-19<sup>th</sup> centuries.
18. The songs of Scotland prior to Burns with the tune (Chambers, 1862) that contained 169 poems written prior to the mid-18<sup>th</sup> century.

The anthologies that were not chosen but were considered: (a) A Scottish book of poetry (Bold, 1983); (b) The Caledonian musical museum or complete vocal library of the best Scotch songs, ancient and modern (Burns, 1809); and (c) The tea-table miscellany: A collection of choice songs, Scots and English in four volumes (13<sup>th</sup> ed.) (Ramsay, 1862). These anthologies were not used because the editors either did not provide an author or approximate date for the poems. In addition some editors intermingled Scottish and English authors. An annotated bibliography for each anthology used and each anthology considered but not meeting the criteria can be found in Appendix F.

The researcher examined all poems that were dated within the chosen time frame, 1603-1830, from each of the chosen anthologies. If a poem, ballad, or song

appeared in more than one compilation, it was examined only one time. However, if the poem, ballad, or song varied from one compilation to the next, then the researcher examined each version of the poem, ballad, or song.

In addition to poetry examined, the researcher examined letters and portraits for the purpose of triangulation with the poetry. Each letter was examined for dress references within the time frame. Each individual in every portrait was examined separately for visual references to dress and the data for each individual were recorded on a separate instrument.

Two sources were available with travel accounts written in the form of letters. These sources were:

1. A reprint of Early travellers in Scotland (Brown, 1978) that contained 12 letters written throughout the 17<sup>th</sup> century.
2. A reprint of Burt's letters from the north of Scotland, volumes I and II (Jamieson, 1974) that contained 25 letters written in the early 18<sup>th</sup> century.

Four sources were available with portraits from 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> centuries. These sources were:

1. The making of the Highlands (Brander, 1980) contained 19 portraits from the early 17<sup>th</sup>, late 17<sup>th</sup>, early 18<sup>th</sup>, late 18<sup>th</sup>, and early 19<sup>th</sup> centuries.
2. History of Highland dress (Dunbar, 1979) contained 72 portraits from the late 17<sup>th</sup>, early 18<sup>th</sup>, and late 18<sup>th</sup> centuries.
3. A series of original portraits and caricature etchings (Kay, 1837) contained 211 portraits from the late 18<sup>th</sup> and early 19<sup>th</sup> centuries.
4. Scottish costume 1550-1850 (Maxwell & Hutchison, 1958) contained 30 portraits from the early 17<sup>th</sup>, late 17<sup>th</sup>, early 18<sup>th</sup>, late 18<sup>th</sup>, and early 19<sup>th</sup> centuries.

The researcher examined all 37 letters but only completed instruments for those letters that contained dress references. Only portraits dated between 1603 and 1830 were examined.

### Data Collection

Data were collected using the anthologies previously outlined. In Phase I of the data collection each anthology with poems dated between 1603 and 1830 was examined to identify the total number of poems meeting the criteria of author and/or date. Poems with dress references were identified. The poems were recorded in an Excel™ database that included author's name, author's birth and death date, name of the poem, first line of the poem, approximate date of the poem, anthology, editor of the anthology, date of

the anthology, place of publication of the anthology, library that contained the anthology, page number of the poem, and whether or not the poem had a dress reference. This information was recorded to serve as a document of all of the poems used in the research. Also, the frequency of poems with dress references could be determined using this database.

In Phase II, only those poems with dress references were used by the researcher to complete instruments A (male) and/ or B (female); however, if a poem contained dress references for both male and female dress, separate forms were used to record data and were entered as separate poems. The information from the instrument was then entered into an Excel™ database containing each specific dress item from every category, as well as information on time and social, political, and economic situations. Poems written in Gaelic were also identified in order to compare the dress references in Gaelic poetry with dress references in Scottish poetry.

Phase III was an attempt to validate the findings in Phase II through triangulation using travel accounts in the form of letters and portraits. Instruments C, D, and E were completed for each of the documents examined for triangulation. A separate form for each written document was used for male dress (Instrument C) and female dress (Instrument D); however, only one form was used for artwork regardless of gender (Instrument E). Each person in a work of art was considered as a separate portrait. Additional forms were used when more than one person appeared in a portrait.

### Data Analysis

Quantification of the data required the researcher to use an Excel™ database and assign codes to the different terminology within each category. According to Galfo (1983), the coding system can determine frequency as a percent total of the content units (each subsection of the instrument) or the number of unit items per category (within the subsection). Descriptive statistics, particularly frequencies, were used to analyze the data. The following questions were examined:

Question 1: How many dress references appeared in Scottish poetry between 1603 and 1830?

Question 1 was approached by examining poems from 18 different anthologies with poetry dated between 1603 and 1830. Pertinent information (e.g., author, date, and title) on each poem was recorded in a database and noted whether or not the poem had dress references. A count of the total number of poems by Scottish authors was

examined and the total number of Scottish poems between 1603 and 1830 with dress references was completed.

Question 2a: What specific dress items were worn by the Scottish people, particularly the Highlanders, between 1603 and 1830?

Question 2a was approached by re-examining each poem with dress references and recording information about dress items, date, and social, political, and economic situations discussed in the poems using instrument A or B. The poetry was examined to find references to items of Highland dress as well as other items of Scottish dress. The researcher recorded all of the information gathered on instruments A and B into Excel™ databases. The Excel™ databases were imported into SPSS 10.1™ for statistical analysis. Frequencies were calculated for each item of dress, the time period the item was worn, the location where the item was worn, and the situation in which the item was worn. Cross-tabulations were used to determine the relationship between time, situation, location, and dress. The cross-tabulations and frequencies allowed the researcher to identify the dress that was being worn between 1603 and 1830 in Scotland. The researcher also compared the dress references found in poetry by Scottish authors of unspecified origin (i.e., Highland or Lowland) with Scottish authors of specified origin (i.e., Highland) using a subset of Gaelic poetry. The frequency of specific dress references in Gaelic poetry were tabulated for comparison.

Matrices were created to record frequencies and cross-tabulation while examining the relationship between variables in this research question. Each dress item was examined in relation to time period (see Table 1) and then to the situation (Table 2), in order to determine whether or not there were changes in the type of Highland clothing referenced in poetry between 1603 and 1830. All cells were filled, regardless of whether or not an item was found since a number system was created to fill the cells. A zero indicated that an item was not found in the analysis of a poem. This system was used for all data analysis and matrices throughout the research. Color was also compared in relation to each century (see Table 3) and then to the situation (see Table 4). Color was also compared to each century to determine whether or not there were changes in the type of color referenced in poetry between 1603-1830. A separate matrix was created for males and females.

Table 1

Garment and Centuries Matrix

(gender specific)	Early 17 <sup>th</sup> C.	Late 17 <sup>th</sup> C.	Early 18 <sup>th</sup> C.	Late 18 <sup>th</sup> C.	Early 19 <sup>th</sup> C.
Upper Body (e.g., plaid, belted plaid)					
Lower Body (e.g., kilt, trews)					
Shoes (e.g., shoes, barefoot)					
Accessories (e.g., brooch, purse)					
Headdress (e.g., bonnet, curch)					
Fiber (e.g., silk, wool)					
Fabric (e.g., tartan, plain-colored)					

Table 2

Garment and Situation Matrix

(gender specific)	Social Situation	Political Situation	Economic Situation
Upper Body (e.g., plaid, belted plaid)			
Lower Body (e.g., kilt, trews)			
Shoes (e.g., shoes, barefoot)			
Accessories (e.g., brooch, purse)			
Headdress (e.g., bonnet, curch)			
Fiber (e.g., silk, wool)			
Fabric (e.g., tartan, plain colored)			

Table 3

Color and Centuries Matrix

(gender specific)	Early 17 <sup>th</sup> C.	Late 17 <sup>th</sup> C.	Early 18 <sup>th</sup> C.	Late 18 <sup>th</sup> C.	Early 19 <sup>th</sup> C.
Colors (e.g., red, blue, green)					

Table 4

Colors and Situation Matrix

(gender specific)	Social Situation	Political Situation	Economic Situation
Colors (e.g., red, blue, green)			

Question 2b: What differences existed in Highland dress for males and females between 1603 and 1830?

Question 2b was approached in a manner similar to Question 2a. Once the specific dress items were recorded, cross-tabulations and frequencies were used to quantify the specific information on dress and time period to reveal differences in dress. The researcher used the same Excel™ databases imported into SPSS 10.1™ discussed in Question 2a to create the cross-tabulations that demonstrated the changes in dress for Scottish men and women between 1603 and 1830. This time frame was divided into five sections: early 17<sup>th</sup> century, late 17<sup>th</sup> century, early 18<sup>th</sup> century, late 18<sup>th</sup> century, and early 19<sup>th</sup> century. Creating cross-tabulations revealed differences between dress items and time periods (Table 1), dress items and settings (Table 2), and dress items and location (Highland or Lowland).

Question 3: What impact did the social, political, and economic environment have on Highland dress in poetry between 1603 and 1830?

Question 3 was approached from a manner similar to Questions 2a and 2b. In addition to recording information about dress and time, Instruments A and B were used to record information about the specific social, political, and economic situations that occurred in each poem. The impact of these situations was determined by using frequencies and cross-tabulating each situation with each item of dress. Also, each situation was cross-tabulated with time period. Cross-tabulations were used to determine

if changes in dress were attributable to social, economic, or political situations (Table 2). The researcher used Scottish poetry to document Highland dress by cross-tabulating Highland specific dress items with the social, political, and economic situation (Table 2) noted in the poem. A three-way cross-tabulation between dress items, environments, and time was also completed. Cross-tabulations may demonstrate a high correlation between certain dress items and situations, and the time period may demonstrate a correlation between dress items worn due to particular events (settings) occurring within a specific situation, which would denote the impact.

The researcher analyzed the situation in relation to time to determine if the differences in dress items were related to the social, political, or economic situations present in Scotland between 1603-1830 (Table 5). In addition to the situation for the poem, the setting (e.g., social – love, political – war, economic- money) was examined in relation to time (Table 6) in order to further understand any changes that took place in the poem due to the situations. Again, a separate matrix was created for each gender due to different dress terminology.

Table 5

Situation and Centuries Matrix

	Social Situation	Political Situation	Economic Situation
Early 17 <sup>th</sup> C.			
Late 17 <sup>th</sup> C.			
Early 18 <sup>th</sup> C.			
Late 18 <sup>th</sup> C.			
Early 19 <sup>th</sup> C.			

Question 4: What references were made about the Act of Proscription in poetry from the late 18<sup>th</sup> century?

Question 4 was approached by cross-tabulating the specific political situation of the Act of Proscription with time period to note the frequency of such occurrences in poetry during the late 18<sup>th</sup> century in Scotland in order to determine the impact of sumptuary laws on Highland dress. Also, the poetry was examined qualitatively to denote the mood in regards to dress. In addition, the situation/setting was important to understanding the significance of sumptuary laws. An analysis of poetry from the late 18<sup>th</sup> century examined the frequency of poems with references to the Act of Proscription.

Table 6

Settings and Centuries Matrix

	Early 17 <sup>th</sup> C.	Late 17 <sup>th</sup> C.	Early 18 <sup>th</sup> C.	Late 18 <sup>th</sup> C.	Early 19 <sup>th</sup> C.
Social – (e.g., love)					
Social – (e.g., death)					
Political – (e.g., war)					
Political – (e.g., Prince Charlie)					
Economic – (e.g., work)					
Economic – (e.g., money)					

A qualitative analysis was conducted to examine the impact of the Act of Proscription on the mood of the poem in conjunction with dress references or loss of dress items in the poems from this time period.

Question 5: What are the similarities in dress references found in Scottish poetry, other written documents (i.e., travel accounts in the form of letters), and visual documents (i.e., portraits) from 1603 through 1830?

Question 5 was approached as a method of triangulation. Letters and portraits were examined, and instruments C, D, and E were used to record information about dress from these sources and to determine qualitatively what Highlanders wore between 1603-1830. Each completed instrument was examined both individually and as a group from a qualitative perspective. There were 332 individuals examined in portraits (Brander, 1980; Dunbar, 1979; Kay, 1837; Maxwell & Hutchison, 1958). The researcher gathered information on artworks (Instrument E) and then noted the changes in dress items by time period (often in decades), gender, location, and age. There were 37 letters examined, of which 29 had Scottish dress references. Exact reprints of letters from the 17<sup>th</sup> and 18<sup>th</sup> centuries were examined (Brown, 1978; Jamieson, 1974). Travel accounts and letters (Instruments C and D) were analyzed in a similar manner. All of the different

sources, including poetry, were triangulated by comparing dress items, time, location, and situation/setting with each source type for similarities. Triangulation of the different sources of data (i.e., poetry, letters, and portraits) validated the use of poetry in gaining knowledge about Scottish and Highland dress.

#### Validity

Validity is the extent to which correct data or answers are produced and interpreted. Three types of validity are: (a) face or content validity, (b) criterion validity, or (c) construct validity (Stage, 1992). Face validity demonstrates to experts that the researcher has adequately covered his or her concepts. The researcher has covered all of the concepts from the purpose statement, objectives, and research questions. Criterion validity is the degree to which scores on an instrument relate to other measures. The information gained using the instruments was compared with other sources. Construct validity is the degree to which an instrument measures the concept. The instrument measured the concepts proposed in the purpose statement, objectives, and research questions and was compared through triangulation with data on letters and portraits. Therefore, all three types of validity were established in this study. Validity of poetry as a means for understanding Scottish and Highland dress had to be evaluated if the study was going to be of value. Validity needs to be established using evidence from other sources (Paoletti, 1982). Additional documentary evidence was used to support the findings. Travel accounts and portraits of Scotland from the 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> centuries were used as additional documentary evidence to measure the validity of the research.

Creswell (1994) defined triangulation as the use of multiple sources to eliminate bias and validate the findings. According to Stage (1992), there are four types of triangulation: data triangulation, investigator triangulation, theory triangulation, and method triangulation. Data triangulation and method triangulation were used in the current investigation. Data triangulation involves using multiple data sources, assessing more than one person, assessing different settings, or assessing different time periods (Stage, 1992). Triangulation has been used in the fields of Nursing and Sociology extensively, but is relatively new to the field of Clothing and Textiles. Trosset and Caulkins (2001) used multiple sources of data to triangulate Welsh concepts of personhood. The current research used multiple data sources both in the form of multiple literary anthologies, as well as costume books, portraits, travel accounts, and letters. Method triangulation refers to the use of multiple methods to study a single

phenomenon (Stage, 1992). The field of nursing has been a frequent user of the triangulation method, particularly for multi-method research. Foster (1997) combined qualitative and quantitative methods to address epistemological and practical issues in nursing. Resnik (2000) used triangulation of multiple forms of measurement to triangulate activity of older adults. In the field of anthropology, Trosset and Caulkins (2001) used both multiple data sources and multiple methods to triangulate Welsh concepts of personhood. A combination of quantitative and qualitative methods in the form of poetic analysis and content analysis were applied in this research.

According to Eicher et. al. (2000), travel accounts offer unique details on dress; however, the accounts are generally one-sided and discuss the fascination with or dismay at a culture that differs from the writer's own culture. Travel accounts are advantageous when used in conjunction with another source (Eicher et.al., 2000). Because the main data source for the current research was poetry, the travel documents were used to triangulate the data. Dunbar (1979) discussed Brown's (1978) Early Travellers in Scotland as a source of information on the historic dress of the Highlands during the 17th century. Brown collected twenty-four travel accounts by English and French visitors to the Highlands throughout the 1600s. Dunbar (1979), Grimble (1973), Smout (1969), and Stewart (1974) believed that English Captain Edward Burt's letters were an excellent source of information on the history of the Highland people because of his vivid descriptions; therefore, Edward Burt's (Jamieson, 1974) letters from his travels in Scotland in the early 18th century were used as a supplementary source to triangulate with the poetry. Portraits from several different sources were used. Maxwell and Hutchison (1958) contend that John Kay's book of portraits is another source for information on Scottish costume. John Kay was an artist who did portraiture in the mid-1700s until the early 1800s (1742-1826); therefore, Kay's (1837) A Series of Original Portraits and Caricature Etchings was used as another source for triangulation. Brander's (1980) The Making of the Highlands was also used as a source for portraits. Brander's book contains many portraits and paintings for all three centuries. Costume books by Dunbar (1951) and Maxwell and Hutchison (1958) were used as sources for portraits, as well. Triangulation with letters and travel accounts was only possible for the 17th and early 18th centuries, due to a lack of sources for the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. Triangulation using portraits was possible from 1603-1830.

### Reliability

Reliability is the extent to which a measurement or procedure will produce similar results. Silverman (1993) noted that there are three acceptable types of reliability: (a) quixotic, (b) diachronic, and (c) synchronic. Neither quixotic nor diachronic reliability applied to this research because quixotic reliability uses a single method of observation to provide the same measurement and diachronic reliability provides stability of an observation over time. However, synchronic reliability applied to the current research because it provides similar observations within the same time period. Synchronic reliability was used in the current study since triangulation in the form of multiple sources of data and multiple methods of collection were used. Also, the researcher periodically re-read poems to ensure the similar data was collected.

Pilot-testing the instrument and data collection method assisted in establishing reliability (i.e., making the study repeatable). Both Paoletti (1982) and Stemple (1981) suggest using a small group of people to pilot-test the instrument. Two graduate students in the Clothing and Textiles program and one graduate student in the English department were asked to pilot-test the instrument two times. Reliability between coders was established by comparing their completed instruments. The reliability can be estimated using the percentage of agreement between coders in the pilot-tests (Stemple, 1981).

The first pilot study included a sample set of 12 poems between 1603 and 1830. Six poems of the 12 poems contained a total of 29 dress references, while the other 6 poems did not contain dress references. The three graduate student participants were asked to identify which poems had dress references and then complete an instrument (Instrument A or B) for each. The participants correctly identified the six poems with dress references and most of the specific dress items. Two of the participants missed one dress item and one participant missed two dress items. The missed dress references were different for each participant. The participants suggested that a list of operational definitions be included with the review of literature. The second pilot test retained the same participants but used 12 poems with an unknown number of poems with dress references and included a list of operational definitions. Two of the participants correctly identified the six poems with dress references, while one participant incorrectly identified a poem with dress references as a poem without dress references. One participant correctly identified all of the dress references, one participant missed one dress reference, and one participant missed two dress

references. The pilot-test confirmed the reliability of the instrument, as only one minor change was necessary; the word “other” was added to each of the categories.