FASHION AND FURNISHINGS:

DEVELOPMENT OF A VISUAL ANALYSIS CHECKLIST

FOR EXPLORING ELEMENTS OF DESIGN IN WOMEN'S DRESS FASHIONS AND

CHAIRS OF THE 1880s

by

JENNIFER L. REGAN

(Under the Direction of José Blanco)

ABSTRACT

The study utilized women's dress fashions from a university collection and chairs from local museum and historic house collections in order to evaluate and compare characteristics of the elements of design of line, shape, and form in the objects. The objectives were to develop a visual analysis checklist using the elements of design as a framework to compare women's dress fashions and chairs; and to explore the aesthetic relationship between women's dress fashions and chairs of the period 1880-1889 using the data collected. The hypotheses stated that women's dress fashions and chairs of the 1880s exhibit similar characteristics of line, shape, and form. Data indicated a strong relationship between line, inconclusive results for shape, and associations only between the categories for form. Major findings included a dominance of restrained curves, horizontal and vertical lines, sharp edged lines, and geometric unequally sided forms.

INDEX WORDS: Fashion, Furniture, Dresses, Chairs, Elements of Design, Visual Analysis, Object-based, 1880s, Victorian

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JENNIFER L. REGAN

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JENNIFER L. REGAN

Major Professor: José Blanco

Committee: Patricia Hunt-Hurst
Megan Lee

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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CHAPTER 1

INTRODUCTION

The purpose of this study was to develop a visual analysis checklist using the elements of design as a framework to compare women's dress fashions and chairs. The purpose of the checklist was specifically to explore the visual relationship of women's dress fashions and chairs of the period 1880-1889.

The dominant trend in women's dress fashions during these years was back fullness, with the bustle being in vogue during the years 1883-1889. Various design styles in interior decoration were seen during this period —from historic revivalist styles such as Gothic, Rococo, Renaissance, Colonial, and Neoclassical, combined with motifs inspired by other cultures (Japanese, Egyptian, Indian, Moorish); to styles reflecting ideals of the Arts and Crafts and Aesthetic Movements. The study focused on analyzing elements of design observed in women's dress fashions and chairs of the period, regardless of decorative style.

Methodology

This study focused on the development of a visual analysis checklist to collect data on elements of design observed in women's dress fashions and chairs of the period 1880-1889. This was necessary because no existing instrument or aesthetic framework was found that allows the comparison of women's dress fashions and furniture, or simply observes the elements of design in dress fashions or furniture.

The study sample for women's dress fashions was comprised of objects from the Historic Clothing and Textile Collection housed in the Department of Textiles, Merchandising and Interiors at the University of Georgia. The study sample for chairs was sourced from local museum collections: High Museum of Art (Atlanta, GA), Alamance County Historical Museum, Inc. (Burlington, NC), Archibald Smith Plantation Home (Roswell, GA), and Hickory Hill: The Historic Home of Thomas E. Watson (Thomson, GA). See Appendix G for additional information on the object locations.

Justification

I chose to study the relationship between women's dress fashions and chairs during the 1880s for a few reasons. I have always been particularly interested in both the fashion and lives of the Victorians and intrigued with the relationship the dressed body has to the environment in which it dwells. I decided to focus specifically on chairs, due to the fact they are designed to accommodate the human body.

Chairs of particular historical periods have been noted to be similar in elements of design to dress fashions of the period—such as the wide and boxy horizontal line of Renaissance forms and the feminine, curvilinear forms of Rococo chairs of the eighteenth century. Observation suggests that Victorian chairs appear to be related to dress fashions of the period through their shared use of upholstery-like fabrics and abundance of trimmings.

The elements of design were chosen as the foundation of the visual analysis checklist because they are easily observable in all designed objects, and provide a framework for evaluating aesthetics. Using the elements of design as a framework to compare women's dress fashions and interior furnishings can help us to more clearly assess the existence, scope, and

nature of a visual relationship. Evaluation of the visual relationship can facilitate the search for meaning in the relationship between women's dress fashions and furniture in history.

Another factor that resulted in my doing this study is that the relationship between dress fashions and interior design is an area of study that has recently developed within academia. Griffin and Collins (2007) publication, *Wear Your Chair* is the first comprehensive discussion to date of the relationship between the disciplines of fashion and interior design. The authors discuss the overlap of design disciplines and provide examples of designers pushing boundaries by working across disciplines. Although the text includes numerous images of interior furnishings, furniture, and dress which are of a visually similar nature, any further discussion of the visual relationship is not explored.

Recent museum exhibitions have hinted at the relationship between fashion and interiors. In early 2008, the Fashion Museum in Bath, England featured an exhibit entitled, "Dresses from History" showcasing thirteen dresses from the Georgian, Regency and Victorian periods. Although the dresses are displayed in rooms decorated to represent the interior style of each period, there is no discussion of this relationship. However, some visual similarities between the dresses and interiors were observed—such as the color and print of the wallpaper and the dress fabrics.

Later in 2008 a selection of silver and porcelain decorative arts on loan from the Holburne Museum were added to the "Dresses from History" exhibit. In a press release entitled "Dresses and Decorative art from History," Matthew Winterbottom, Curator of Decorative Art at the Holburne Museum noted that the collaboration provided a "unique opportunity to display fashionable objects and fashionable dress together… Visitors will be able to draw parallels between them. They were not made in isolation; the lavish dining silver, porcelain and glass

was all used and lived with by people wearing clothes such as those displayed in the cases" (Fashion Museum of Bath; Dresses and Decorative art From History, 2008, para. 6). The fact that the apparent visual relationship between the objects is ignored and not further mentioned is surprising but not uncommon.

In late 2008, The Northern Indiana Center for History held an exhibition entitled "100 years of Design" which featured fashions from 1830-1930 displayed amongst furnishings of each period. The exhibition focused on telling the history of South Bend and surrounding communities, in addition to exploring the economic changes spurred by the Industrial Revolution that resulted in a new buying power, rather than examining the visual relationship of dress fashions and interior furnishings.

One of the few works that extensively explores the relationship of fashion and interior decoration within a particular historical period is Koda and Bolton's (2006) *Dangerous Liaisons: Fashion and Furniture in the Eighteenth Century*. The book was published in conjunction with a 2004 exhibition of the same title at the Metropolitan Museum of Art. Koda and Bolton showcase eighteenth century decorative arts, furniture and interiors together in their context, and explore the leading role the dressed body played in navigating space and utilizing furniture. Mimi Hellman, in the introduction, provides an interesting discussion on the dressed body's interaction with eighteenth century interiors, concluding that "the elite body was thus doubly disciplined by fashion, shaped by both its decorative dressing and its decorated environment" (Koda & Bolton, 2006, p. 23).

Although Koda and Bolton (2006) do not seek to create a structural framework for understanding the visual relationship between late eighteenth century fashion and interiors, it can be observed that fashion, interiors, furnishings and decorative arts of the Rococo period shared

similar characteristics such as elaborate surface decoration, curvilinear lines, and abundant (often similar) use of textiles. McNeil (2009) in his critique of the exhibition, notes that many questions are raised such as whether or not developments in furniture mirror those in fashion, as well as the possibility that furniture may in fact be more "inventive" and liberating of the forms and actions of the body, while fashion continues to constrict it (p. 156). McNeil (2009) also notes that the relationship between fashion and furniture is an incredibly "…understudied aspect of design history" and that few studies exist "…which go beyond stylistic history or generalized comments about the shift to informality or comfort" (p. 156).

The relationship between dress fashions and interior decoration during the nineteenth century appears to have been explored primarily within the context of the Victorian woman and the home. Gordon (1996) in her article, "Woman's domestic body: The conceptual conflation of women and interiors in the industrial age" explores how the 1850s to the 1950s have been marked by a significant, almost synonymous connection between women and their private interior spaces. M. Taylor (2006) examines the symbolic relationship between women and their choices for interior decoration during the nineteenth century in the article "'Furniture is a type of dress': Interiors as a projection of self."

At this point, no previous research can be found that explores the relationship between women's dress fashions and furniture (particularly chairs) in the nineteenth century or any other period. Nor has any study been found extensively exploring their visual relationship—or providing a systematic approach for their comparison. It is helpful to develop such a framework in order to aid in assessing the visual relationship between the objects, so that our interpretation and evaluation of meaning can be based on some measurable foundation. Recognizing visual

similarities such as this is “essential in dissolving the strict boundaries between design disciplines” (Griffin & Collins, 2007, p. 7).

My research proposed an interdisciplinary approach to object-based research, and focused on using the elements of design as a framework to further explore the visual relationship between the disciplines of fashion and interior design. This comparative systematic approach utilized the process of visual analysis to observe elements of design by creating a checklist. The ultimate goal was for this study to serve as a foundation for further interdisciplinary studies between fashion and interiors furnishings of any historical period.

Hypotheses

H1: Women’s dress fashions and chairs from the period 1880-1889 exhibit similar characteristics in the element of design of line.

H2: Women’s dress fashions and chairs from the period 1880-1889 exhibit similar characteristics in the element of design of shape.

H3: Women’s dress fashions and chairs from the period 1880-1889 exhibit similar characteristics in the element of design of form.

Objectives

1. To develop a visual analysis checklist using the elements of design as a framework to compare women’s dress fashions and chairs.
2. To explore the aesthetic relationship between women’s dress fashions and chairs of the period 1880-1889 using the data collected from the checklist.

Limitations

For the period being studied, I had access to approximately 40 women's dress fashions for the period 1880-1889 (including dresses, bodices, skirts, and jackets) located in the Historic Clothing and Textile Collection housed in the Department of Textiles, Merchandising and Interiors at the University of Georgia. Only 10 of these objects however, were bodice and skirt ensembles or dresses dated 1880-1889. Women's dress fashions were limited to those represented by the collection, and are primarily American-made fashionable dress worn by middle to upper class white women in the Southeast, particularly in the state of Georgia.

Lack of complete donor information prevented detailed information from being gained that could have further illuminated the dresses. In addition, the limitations of the Historic Clothing and Textile Collection necessitated that objects from the later part of the nineteenth century be the focus of the study due to the availability of garments in the collection (a sufficient number for study were not available for periods earlier than the 1870s). It should also be noted that a museum collection only represents a portion of styles and designs from the period.

Certain factors contributed to a degree of difficulty in observing the original condition of the objects during data collection. Due to the period selected, the dress items being studied are over 100 years old; therefore the condition of the objects is significantly poor due to such factors as staining, yellowing and loss of original color, missing or damaged embellishments, etc. Objects for the women's dress fashions were selected according to the criteria, with locating complete ensembles (dresses or coordinating bodices and skirts) dated 1880-1889 as primary limiters. The above limitations necessitated that the elements of color and texture be omitted from this study.

Local access to chairs of the period was also limited. The Department of Textiles, Merchandising and Interiors does not possess a collection of historic furnishings or furniture, therefore the study sample for chairs was limited to objects available for study at museum collections within traveling distance. The sample size for chairs was smaller than ideally desired, due to the difficulty experienced locating chairs of the period in the Atlanta/Athens area that were also accessible for observation and study. There exists an abundance of chairs available for study in Athens, Georgia historic house museums and museum collections, however, the focus area of these sites are early-mid nineteenth century, and therefore were unusable for this study.

Objects for the chairs sample were selected according to the criteria outlined in the methodology chapter, with availability and access as primary limiters. Lack of original upholstery also posed a limitation, as some chairs of the period have been reupholstered due to fabric degradation. The study sample was limited to objects manufactured during the period 1880-1889, although it is obvious that earlier furniture pieces (including antiques) were also used to decorate homes.

Museums are considered a reliable authority for the dating of historic objects. Some museum objects were dated by year if known, although many were circa-dated. The Historic Clothing and Textile Collection housed in the Department of Textiles, Merchandising and Interiors at the University of Georgia primarily circa-dates objects by decade (i.e. 1880s, 1890s). Although the objects may be catalogued and dated, verifying that the dating is accurate is still recommended in order to authenticate the objects for use as legitimate primary sources of the time period under study.

It was discovered after the selection of the dresses were made, that the blue silk two piece dress (see Figure 1.6), although catalogued as dated from the 1880s, is likely dated from as early

as the 1860s. Although the dress possesses some details that appear to be from the 1880s (angular silhouette with backfullness, trained, and horizontal lace trim applied towards the bottom of the skirt), upon further evaluation certain features (the overall construction techniques of the bodice, low set sleeves, type of machine stitching, and later application of the trim), indicated that the dress was likely from an earlier period than the 1880s. This discovery was a limitation that affected the data, and serves as an example of why objects used as primary sources should be verified to the time period being studied.

I do not possess expert level knowledge (or hold a degree) in historic interiors. Because of this, some interior decoration, furniture design and style terminology may not be present in the data. This was not of a major concern because the main purpose of the study was to collect data on the elements of design observed in the objects. I was also subject to personal biases and individual viewer subjectivity during the process of visual analysis.

The lack of reliability measures used in the development of the checklist is another limitation of this study. For this reason, the term *checklist* (versus instrument) was used. This study contributed to the knowledge base by developing a checklist as an experimental approach, since no such checklist currently exists. In order to be designated as an instrument for use in future studies, the checklist requires more extensive validity measures to prove it is an accurate tool for measuring the elements of design, as well as reliability testing to ensure it can be used repeatedly with different data sources and coders.

Definition of Terms

General Terms

Aesthetic Movement- "Late nineteenth-century movement encompassing all of the arts from architecture to painting, characterized by an emphasis on aesthetics and a strong Japanese design component…" (Pina, 2003, p. 389).

Aesthetics- "The philosophy of art focusing on questions regarding what art is, how it is evaluated, the concept of beauty, and the relationship between the idea of beauty and the concept of art" (D. Preble & S. Preble, 2004, p. 499).

Art Nouveau- "Style popular in Europe and America from the 1890s to the 1910s, characterized by sinuous curves derived from plant forms" (Whiton & Abercrombie, 2002, p. 631).

Arts and Crafts- "Artistic movement of the late nineteenth and early twentieth centuries, valuing craftsmanship above industrial techniques" (Whiton & Abercrombie, 2002, p. 631).

Form- "A three-dimensional area enclosed by a surface" (Davis, 1996, p. 88).

Interior decoration- "The furnishing or adorning of a space with fashionable or beautiful things" (National Council for Interior Design Qualification, 2009).

Interior design- "The art and science of understanding people's behavior to create functional spaces within a building" (National Council for Interior Design Qualification, 2009).

Line- "An elongated mark, the connection between two points, or the effect made by the edge of an object where there is no actual line on the object itself" (Davis, 1996, p. 75).

Shape- "A flat, two-dimensional area enclosed by a line" (Davis, 1996, p. 88).

Women's Dress Fashions Terms

Bishop sleeve- "Full sleeve set into normal armhole and gathered into band at wrist" (Calasibetta & Tortora, 2003, p. 413).

Bodice- “The upper part of a woman’s dress, often close-fitting” (Calasibetta & Tortora, 2003, p. 39).

Bustle- “General term describing exceptional fullness at the back of the skirt of a woman’s dress” (Calasibetta & Tortora, 2003, p. 48).

Coat sleeve- Fitted sleeve that ends in a deep cuff (Tortora & Eubank, 2005).

Cravat- “Square cloth folded diagonally into long strips and tied around the neck, finishing in a bow or knot” (Tortora & Eubank, 2005, p. 291).

Cuirasse bodice- A long jacket ending in a point at the front and fitting smoothly over the hips (Tortora & Eubank, 2005).

Dolman- “A semi-fitted garment of hip to floor length that was shaped like a coat but had a wide-bottomed sleeve that was part of the body of the garment” (Tortora & Eubank, 2005, p. 335).

Kick-up sleeve- A style characterized by a “small puff at the sleeve cap;” first seen in 1883, grew larger in 1889 (Tortora & Eubank, 2005, p. 334).

Leg-of-mutton sleeve- Features fullness at the shoulder and gradually decreases in size to the wrist, ending in a fitted cuff (Tortora & Eubank, 2005).

Ombréd- “Graduated in color” (Olian, 1997, p. xii).

Passementerie- Applied trimmings such as braid, cords, and heavy embroideries (Olian, 1997).

Plastron- “Front center portion set into a woman’s dress, usually made of a contrasting fabric for a decorative effect” (Calasibetta & Tortora, 2003, p. 370).

Tea gown- A loose fitting dress worn without a corset at home with other women friends; introduced in the 1870s; often associated with the rational dress movement (Tortora & Eubank, 2005, p. 333).

Interior Decoration Terms

Antimacassar- "Small pieces of lace or needlework used in Victorian period to protect upholstering on backs and arms of chairs and sofas" (Wagoner, 1990, p. 104).

Appliqué- "Design made by sewing one material to another" (Wagoner, 1990, p. 104).

Apron- "A shaped, sometimes carved piece of wood beneath the seat rail of a chair…also known as a skirt" (Miller, 2005, p. 544).

Cabriole leg- "Slightly S-curved form, narrowing at the point just above a foot" (Pina, 2003, p. 391).

Crest rail- "The top rail of a chair back, sometimes elaborately shaped and carved" (Whiton & Abercrombie, 2002, p. 641).

Hassock- "A heavy cushion or thick mat used as a stool" (Whiton & Abercrombie, 2002, p. 650).

Inlay- "A design in which the surface of furniture formed by inserting woods, ivory, metal or other materials of contrasting color" (Wagoner, 1990, p. 87).

Marquetry- "The term applied when an entire surface, such as a table top, is covered with veneers, or inlays in a close fitting pattern" (Wagoner, 1990, p. 87).

Seat rail- "Horizontal rail that supports the seat of a chair or sofa" (Pina, 2003, p. 398).

Side chair- "Small chair without arms used at a dining table and originally placed along a wall when not in use" (Pina, 2003, p. 398).

Top rail- "The highest horizontal bar on the back of a chair…also sometimes called a crest rail" (Miller, 2005, p. 549).

Tufting- "Upholstery held tightly with buttoning in a regular pattern" (Pina, 2003, p. 400).

Turning- "Type of ornamentation produced by rotating wood on a lathe and shaping it into various forms without cutting tools" (Whiton & Abercrombie, 2002, p. 673).

CHAPTER 2

REVIEW OF LITERATURE

The Interdisciplinary Nature of Fashion

Although the term *fashion* is perhaps most closely associated with dresses or clothing, by definition it encompasses a much broader scope. “Fashion exists in many areas of life, not only in the way we dress, but also in many other areas such as food, home furnishings, and even our ways of thinking” (Johnson, Torntore, & Eicher, 2003, p. 1). Blumer asserts that fashion includes a wider domain than just that of dress (as cited in Johnson et al., 2003). In order to qualify as fashion however, the object must be “used by a large proportion of people in a society (or a segment of society) who are eligible to use it” (Roach & Musa, 1980, pp. 19-20).

Roach and Musa (1980) specifically define a fashion as “both a form of human behavior and a product of behavior” in that they are used by humans who are able to interpret them and are “inventions created as a result of human behavior” (p. 19). Although the authors limit their discussion to dress, the same principles could be applied to interior furnishings, which are certainly defined as products (or inventions) and are used by humans who interpret them in various ways. Smith indicates that fashion encompasses dress and furniture, because they are both continually changing and serve as judgments of beauty at particular times (as cited in Johnson et al., 2003).

Viewing fashion in the context of design is a way of understanding the factors that both shape and inspire it. Griffin and Collins (2007) note that part of the connection between

disciplines is simply that the objects have "undergone a process of design" (p. 63). Horn and Gurel (1981) note that "the forces that are exerted on the creators of dress are the same forces that influence architects, painters, sculptors, composers, writers, poets, and interior designers" (p. 333). Design disciplines, in addition to working with elements of design, often have a shared aesthetic vision, and as a result may create designs that are visually similar. "Furniture, interior, and fashion designers can borrow form, shape, and texture from one another, thereby stretching the boundaries of their individual practice areas" (Griffin & Collins, 2007, p. 101).

The following sections review some of the dialogue regarding the relationship of dress to the other design disciplines of art, architecture, and interior design.

Dress and Art

D. Preble and S. Preble (2004) define a work of art as the "visual expression of an idea or experience formed with skill through the use of a medium" (p. 2). Particular examples of visual arts such as drawing, painting, sculpture, film and architecture are discussed; however dress should be included in this definition, as it is a visual expression through the medium of fabric. Hollander (1993) asserts that "dress is a form of visual art, a creation of images with the visible self as its medium" (p. 311).

Throughout history, particularly from the sixteenth century onward, artists have taken increasingly more interest in dress—whether it has been through capturing the detail of the fabric of a dress or by allowing a garment to take focus in a work. The major art forms of each period reflect the needs and aspirations of the society for which it is created (Horn & Gurel, 1981). The fact that visual similarities exist between art forms is not merely a coincidence. Horn and Gurel (1981) note: "Fashion mirrors a society's aesthetic philosophy; it is not an unpredictable invention that operates isolated from the forces around it" (p. 340).

Mackrell (2005) provides a detailed account of the relationship between art and fashion from the Rococo period in the eighteenth-century to Surrealism in the 1930s. She notes that this relationship was born as early as the Renaissance when fashions and fabrics began to be more clearly depicted in paintings. Historical revivalism, which characterized so much of the nineteenth century, was manifested in a taste for all things French Rococo- Empress Eugenie (1826-1920) both dressed like and collected furniture belonging to Marie Antoinette. Rococo paintings by French painter Jean-Antoine Watteau (1684-1721) were collected, resulting in the popularity of Watteau style dresses in the late 1860s (Mackrell, 2005).

A connection between fashion and art was manifested by the Pre-Raphaelite Brotherhood, a group of men who in the mid nineteenth century criticized the imitation of previous works of art, namely Raphael and other sixteenth and seventeenth century Italian painters. The Pre-Raphaelite's criticized the idealization of subjects at the expense of reality, and instead favored realism and detail. Their interest in fashion arose from the desire to create art that was timeless- not dated by the garments which the sitter wore. Dress depicted in the Pre-Raphaelite style was characterized by loose, flowing robes or garments, full sleeves set high on the shoulder, as well as the absence of understructures and other fashionable details of the period such as crinolines, corsets, and sleeve styles. The painter, Dante Gabriel Rossetti is known for depicting his sitters in Medieval or Early Renaissance costumes in paintings in order to create"…non-fashionable timeless clothes for his models" (Stern, 2004, p. 7).

Nineteenth century American painter James Abott McNeill Whistler often designed costumes and interiors for his backdrops. Whistler's paintings focused much attention on the dress of the women he painted and he often designed dresses for them to wear for the sitting. According to Mackrell (2005), Whistler's designs were based on his desire to achieve a

particular decorative effect through “harmonious arrangement of line, color and form, where design was more important than likeness” (p. 84). Whistler’s designs for interior backdrops of his paintings illustrate his belief that both the costume and its surroundings played equal parts in creating the overall design effect.

Mackrell (2005) notes that artist Gustav Klimt (1862-1918) painted women wearing dresses designed by himself or the Wiener Werkstätte. The Wiener Werkstätte (1903-1932), translated “Viennese workshop,” was a production community of artists, architects and designers who believed in unity of the arts. The workshop produced jewelry, fabrics, ceramics, pottery, and furniture, all characterized by their simple forms with minimal embellishment and geometric patterns.

Twentieth century Russian artist Sonia Delaunay is an example of one whose aesthetic philosophy was mirrored in her designs within several media. Delaunay not only designed textiles and clothing, but also worked with paintings, ceramics, mosaics, light sculpture, book bindings, advertising and poster design, home furnishings, and book illustrations (Roach & Musa, 1980). Delaunay’s work was based upon her ideas about simultaneity; which she interpreted as the belief that unity can be achieved by contrast. According to Cohen (1975), simultaneity “suggested the reconciliation in art of that which was irreconcilable in nature: that two things, apparently dissonant and contrary, cannot only be present together but in fact, complement, enhance, enrich each other by their dissimilarity and contrast” (p. 29).

The Bauhaus School (1919-1931), focused on promoting unity of the arts through interdisciplinary studies in fashion, art, and architecture. The school sought to diminish the boundaries between the arts by encouraging collaboration of artists and craftsman. Stern (2004)

notes that Russian painter Wassily Kandinsky (who was closely associated with the school) also designed dresses.

Fashion Designers and Art

Fashion designers, in their quest for new designs, often find themselves inspired by art. Welters (2007) discusses how fashion designer Yves Saint Laurent was inspired by works of art-such as Mondrian's color-block paintings, Picasso's cubist shapes, and Van Gogh's irises. British designer John Galliano often designs fantastical creations inspired by works of art from the past. In his 2008 Spring/Summer haute couture collection in Paris, Galliano took inspiration from famous works of art by Gustav Klimt and John Singer Sargent. Miuccia Prada's Spring/Summer 2008 collection featured designs inspired by Art Nouveau fantasies of fairies and flowers in soft, curving shapes.

A 2008 episode of the television show *Project Runway* entitled "The Art of Fashion" illustrated the relationship between the disciplines of art and fashion when the designers were challenged to create a look inspired by a work of art from the Metropolitan Museum of Art. The very fact that the relationship of art and fashion has more recently entered the discourse of popular culture further underscores its significance.

Fashion designers have at times made the fashion-art connection a literal one in their collaborations with artists to create new designs. Paul Poiret (1879-1944) collaborated with artists and his designs were often inspired by the painters with whom he worked, such as Raol Duffy, Erté, Paul Iribe, and Georges Lepape. Poiret's school of design, Martine, created designs for textiles for dress and interiors, as well as wallpaper, embroideries, curtains, rugs, hand painted ceramics, murals, and furniture (White, 1973). Thirties surrealist fashion designer Elsa Schiaparelli worked with artists such as Jean Cocteau, using his drawings as inspiration for her

designs. She also collaborated on designs with surrealist artist Salvador Dali, with whom she created the infamous lobster dress, shoe hat and drawer pull suit.

Dress and Architecture

Fashion's relationship to architecture has been increasingly studied in academia over the past few years. Currently, a large number of publications discussing the relationship of fashion and architecture exist compared to those discussing fashion and interior design. The Museum at Somerset House in London housed a 2008 exhibition entitled "Skin + bones: Parallel practices in fashion and architecture" which focused on how fashion designers and architects have influenced and been influenced by each other. The exhibition, organized by The Museum of Contemporary Art in Los Angeles, was a recent experiment in the connection between fashion and architecture throughout the late twentieth century and into the millennium. The exhibition provided an extensive discussion of the relationship, along with relevant fashion designs and architectural illustrations/models.

Both fashion and architecture share basic goals: practically, to provide shelter and protection for the body, and emotionally, to serve as an outlet for the expression of personal, social and cultural identities. Similar language also exists between disciplines—"designers and fashion editors frequently talk about the 'construction' of clothes, particularly haute couture," and "the outer layer of a building is called 'cladding'" (Cavallaro & Warwick, 1998, p. 81).

Both disciplines account for the scale of the human body as well as create protective layers around the body. "Architects and fashion designers both produce environments defined through spatial awareness by working with and against the human form…" (Quinn, 2003, p. 6). As a result, fashion designers have the ability to dwarf the body (by surrounding it with large proportions) or enhance it, through the use of fabrics that define the body. This relationship can

be described as body-dominant (the body's form is the focus) and body-subordinate (the garment masks or blurs the boundaries of the body). In a similar way, architects can create large spaces with high ceilings that dwarf the body or small spaces that allow the body to take precedence. Bevlin (1994) refers to this use of the body as a unit of measurement as "human scale" (p. 160). In constructing space and volume out of two-dimensional materials, both disciplines create new shapes that challenge conventional ideals of proportion and form (Hodge, Mears, & Sidlauskas, 2007).

Fashion and architecture share a variety of construction techniques—such as wrapping, pleating, printing, draping, folding, and weaving. Wrapping involves reinventing the "skin of a building" in architecture, such as Frank Gehry's Walt Disney Concert Hall in Los Angeles (Hodge et al., 2007). Printing is now being used by many architects as they experiment with printed motifs and patterns on building facades, and draping techniques borrowed from fashion designers can transform hard surfaces into "gentle curtain-like folds" (Hodge et al., 2007). Folding has been utilized by architects since the early 1990s as a way to create visual interest and manipulate light and shadow, while weaving allows architects to create unconventional surfaces, connect buildings and create interlaced interiors (Hodge et al., 2007).

An interesting observation is that buildings seem to have become more fluid and fabric-like while garments have become more sculpted and architectonic (Hodge et al., 2007). Computer-aided design software and new, innovative materials introduced in the 1990s, has allowed architects the ability to create unusual and complex forms not previously possible (Hodge et al., 2007).

Quinn (2003) also explores the concept of "aesthetic elitism"—the acclaim for structures (and fashion) that are visionary in nature (p. 8). In the realm of fashion, he describes this as the

difference between what is perceived as a work of art (haute couture) versus "trash fashion"—which is often mass-produced (p. 7). Quinn (2003) observes that in architecture, "some structures are debased to the category of mere 'buildings', while historic monuments, iconic structures and the edifices acknowledged as poetic gestures are accepted as 'architecture' (p. 8). According to Quinn (2003), architects often have the opinion that the enduring forms which they strive to create separate them from fashion because these timeless designs are the "antithesis of the transience associated with fashion" (p. 8). Wigley (1995) notes that "fashion is portrayed as an insidious phenomenon that will inevitably return to contaminate the pure logic of architecture unless it is consciously held in check" (p. 39). As a result, much of modern architectural discourse involves a sort of "preemptive defense against the charge that it is itself a fashion" (p. 39).

This ephemeral nature is one sense in which the two disciplines seem to differ, as dress fashions have the natural ability to change at a faster rate while buildings traditionally have more of a permanent presence (Hodge et al., 2007). Quinn (2003) however, argues that architecture is only sustainable to the extent that it remains fashionable. Wigley (1995) in his discussion of white walls as a architectural building choice which does not last over time in its original state, notes that: "…the visible aging of the white wall calls into question architecture's ability to transcend the turnover of fashionable styles" (p. xix).

The concept of *shelter* is another illustration of the relationship between fashion and architecture. The term *techno fashion* can be used to describe garments that incorporate technology or transformable objects in order to adapt to the needs of the modern environment (Quinn, 2002). According to Quinn (2002), such self-controlled environments can provide the wearer with heat, music, privacy and communication—functioning as pseudo-shelters for the

wearer. Such environments “signal fashion’s capacity to assume the functions of modern dwellings” (Quinn, 2003, p. 13).

Modern architects are creating “more versatile, adaptable and ecological structures that can respond to humanitarian need” (Hodge et al., 2007). Fashion designer Yeohlee Teng incorporated such ideas by designing a cape with zippers that appeared to be a sleeping bag (Hodge et al., 2007). Marshall McLuhan notes that clothing and housing are “near twins” in their shared functions as an extension of the skin, heat control mechanism, and means of socially defining the self (as cited in Quinn, 2002, p. 13).

Both clothing and housing function as an extension of the self by providing us with a means to express our personalities and tastes. The idea of fashions’ role in expressing one’s identity may seem quite obvious, while architectures’ expression of it may be harder to understand at first. Architect Jean Nouvel’s design for the Arab World Institute in Paris expresses dual identities of both Arab and Western culture. The south façade is a patterned expression of Arab architecture while the north façade is “literally a mirror of Western culture- a glass curtain wall enameled with images of the Parisian cityscape” (Hodge et al., 2007). Like casting off and swapping “identities” through changing outfits, the building assumes a different identity depending on where the viewer stands (Hodge et al., 2007).

Both fashion and architecture may also function to communicate ideas about one’s wealth or status. Bell (1976) notes: “certainly a building can be an instrument of conspicuous consumption in much the same way as a dress” (p. 192). Bell observes that in the nineteenth century, English decorated churches, Italianate clubhouses, and baroque buildings were “in their exuberant and conspicuously wasteful decorativeness, the equivalent of the feminine dress of the period” (p. 192).

Visual similarities between the designs of fashion and architecture provide yet another fascinating connection. Throughout history many buildings and clothing have "echoed each other in form and appearance" such as curves of a building reflecting those of a waistline, or the fluidity of shape to the drape of fabric (Hodge et al., 2007). Fashion can be compared to architecture in the sense that they both are a type of outward covering. Bell (1976) poses an interesting thought regarding this relationship: "It makes sense that buildings (which are a kind of outward covering) should have some of the qualities of garments and that the functional nature of architecture is obscured by frills of marble and mosaic, stone chiseled foliage, and crockets taking on the appearance of lace" (p. 191). Some architects even cite specific fashion references as an influence—for example; a building wrapped in diamond-shaped glass panes reflects the design of a fishnet stocking (Hodge et al., 2007).

Horn and Gurel (1981) note that "the aesthetic unity in the art forms of an era can be seen in the similarity between the Gothic headdress and its architectural counterpart, the spire on the cathedral" (p. 334). The Gothic architectural emphasis of exaggerated points and verticality can also be seen in the conical shaped headdress, pointed shoes, and sleeves of the period. The linear form and vertical "fluting" detail of the Greek garment known as a chiton can be compared to columns of the same period. In the mid nineteenth-century, "when steel construction made light, open architecture possible, the same technology was applied to women's wear"- a reference to Joseph Paxton's Crystal Palace and the hoop skirt which is perhaps one of the most common observations on the relationship (Horn & Gurel, 1981, p. 335).

The Art Nouveau style of the turn of the century is another instance when strong design similarities were seen in women's dress fashions and architecture. The popularity of embellished surfaces during the Art Nouveau period was seen in both the decoration of building facades and

the "…generous application of braid, embroidery, and beading to women's dresses and suits" (Roach & Musa, 1980, p. 34). The Art Deco style of the mid-twenties and thirties also saw major intersections in the lines, shapes, and forms seen in the façade (and interiors) of buildings and women's dresses. Linear, geometric forms dominated in both architecture and dress fashions of the period (Mackrell, 2005).

Some architects have even put their design sensibilities to play in designing women's fashions. The Art Nouveau architect Josef Hoffmann designed clothing and jewelry to complement his architectural designs (Mackrell, 2005). American architect and interior designer Frank Lloyd Wright designed dresses for his wife, Catherine, as well as clients—and likely did so as an attempt at aesthetic unity (Hanks, 1979; Gorman 1995). Harmonizing with the interior spaces and architecture was likely Wright's reason for designing women's dresses—as his clients were those who lived in Wright-designed houses (Hanks, 1979; Gorman, 1995). In viewing surviving photographs of the dresses, Hanks observes that the geometric cut of Catherine's dresses echo the "…angular lines of his art glass windows" (p. 25).

Wright's desire to design dresses for the women to wear in the homes he designed could also be viewed in light of his association with organic architecture, in which the design is integrated into the surrounding environment. Gorman (1995) theorizes that the dresses could be viewed as "an integral part of Wright's architecture/interior design" because they, along with the interiors, "shared dual purposes of function and beauty, which would be intensified by the interrelationship" (p. 271).

The relationship between architecture and fashion can also be seen in fashion photography. Quinn (2003) notes that here architecture serves to give garments meaning and context as well as functioning as a metaphor for mood. In the urban backdrop of a fashion photo

shoot, the connection becomes apparent-the dress of the model becomes blurred within the landscape or building; “both are dressed and dress each other” (Cavallaro & Warwick, 1998, pp. 81-82).

This connection became more obvious in the 1930s when photography replaced illustration as the main format in fashion publications. The shift from fantasy to reality meant that every detail of fashion and architecture or interior decoration could now be observed in a photograph, creating the opportunity for photographers to think about the spaces surrounding the garments. This new ability to capture details of interiors, furniture and decorative details of clothing led to an increasing interest in the idea of harmonizing the costume to the interior in photographs (Mackrell, 2005). It is important to note that harmonizing the interior to the costume was also done in fashion illustration before the introduction of photography. Perhaps it became more of an interest because photography made paying attention to details and the surrounding spaces a necessity, not merely just a choice for the artist to embellish.

Dress and Interior Design

Fashion and interior design are connected—both in their perpetuation of aesthetic ideals of that which society considers beautiful, and in their ability to provide comfort and communicate something about the wearer/dweller. Both can function as a vehicle for conspicuous consumption in communicating one’s status or wealth, whether actual or aspirational. Smith notes that both dress and furniture seem to be under the dominion of fashion, as they are continually changing and serve as judgments on what we consider beautiful at particular times (as cited in Johnson et al., 2003).

Inspirations from clothing fashions can be seen in textiles for home furnishings, specifically with color, prints, and motifs. For example, toile printed fabric and black and white

floral and graphic patterns were major trends in both fashion and interior decoration in 2007. Home furnishing fabrics seem to experience comparably rapid fashion cycles due to their wear as well as influence from fashion fabrics that continue to change quickly (Leslie & Reimer, 2003).

Thomasville Furniture (1904-present), known for their advertisements which feature furniture and home furnishings alongside visually similar dress fashions, offers "home furnishings, accessories and cabinetry that allow you to express yourself through your home" (Thomasville, 2009). Thomasville's Spring 2007 catalog cover featured an image of one half of a woman's buttoned dress jacket juxtaposed alongside half of a dresser with drawer pulls. The image—likely inspired by Elsa Schiaparelli's drawer pull suit of 1936, illustrated the visual relationship between the fashion of the garment and that of the furniture. Thomasville believes they have been able to remain successful because they have continually evolved "…keeping step with the fashion trends of the day" (Thomasville, 2009).

Leslie and Reimer (2003) explore connections between the fashion and furniture industries, noting the movement of fashion companies into furniture, and ways in which furniture manufacturers and retailers are seeking to facilitate quicker fashion cycles. Home furnishings have seen "more rapid cycles of replacement demand" in recent years (p. 435). Smith believes dress changes more quickly because furniture is more durable (as cited in Johnson et al., 2003). Industry Canada, which seeks to develop Canadian industry and economy, suggests that the fashion cycle for home furnishings could be accelerated by "shift[ing] consumer perception of furniture from a "commodity" to a "fashion" item" (as cited in Leslie & Reimer, 2003, p. 430).

Similar patterns, trims and embellishment can also be found in drapery, upholstery, wallpaper, and fabrics used in both interiors and fashion. Fabrics such as velvet, corduroy, chenille, velour, terry cloth, and lace are often seen in both fashion and interiors (Griffin &

Collins, 2007). “Upholstery is clothing for houses; it is no coincidence that, in fact as well as fiction, fabrics for furnishing and dress are upon occasion interchangeable” (Lebeau, Corbett, & Dirand, 1994, p. 143). Upholsterers of both today and yesterday have been inspired by women’s dress in their elaborate treatments such as ruching, flouncing, and swagging (Lebeau et al., 1994).

The connection between fashion and interior design is established. Designs characterized by a shared use of color, form, line, and ornament, have been present in both fashion and interiors throughout history. Blum (1974) notes that throughout history, “stylistic elements found in costume also appear in decorative arts, particularly in interior furnishings” (p. 149).

The eighteenth century serves as a rich source of study for the relationship of dress and interiors. According to Roach and Musa (1980), the artistic modes of Rococo in the mid-eighteenth century favored delicate lines and curves, light to medium value colors, and applied decorations of small scale; all of which were clearly visible in dress of the period. Koda and Bolton (2006) extensively explore the dressed body’s relationship to the interiors, furniture, and decorative art surrounding it in *Dangerous Liaisons: Fashion and Furniture in the Eighteenth Century.*

In their discussion of clothing and other art forms, Horn and Gurel (1981) assert that interrelationships can be found throughout most of history. They observe that in late nineteenth century women’s dress, “basic structures invariably were covered with ornamentation …basic shapes of furniture were concealed under upholstery, drapery, tassels, and fringes, and costume followed the same general principle” (p. 336). The cumbersome structure of the bustle and abundant draping of textiles on the human form resulted in body subordinate dress in which the female form was both masked and enhanced. Naturally, it can also be said that much of late

Victorian furniture was subordinate to the items covering it, as they concealed the structure of the underlying form.

According to Boucher (1987), the period 1868-1914 saw fashion heavily influenced by the decorative arts, specifically, "the abundance and aggressiveness of the new style of furniture were imitated by fashion between 1870 and 1895…" (p. 389). Boucher (1987) is likely referring to the heavily upholstered furniture of the period, as he calls the early bustle of the 1870s the "upholsterer's style" due to the "overloaded forms, which echoed the extravagances of furniture upholstery" (p. 394). The bustle was often compared to upholstered furniture in its use of similar trimmings.

Turn of the twentieth century Art Nouveau style was seen not only in architecture, but also in interiors, furnishings, decorative arts, and even women's dress fashions of the period. The goal of this new art (which it undoubtedly achieved) was to "introduce art into every aspect of everyday life" and to have harmony across all visual arts (Mackrell, 2005, p. 109). An emphasis on naturalistic forms was seen in ironwork, art, and dress motifs and the fashionable curvilinear female silhouette mirrored the curvy lines of Art Nouveau (Roach & Musa, 1980). Interiors exhibited similar characteristics of dress of the period through the use of stylized curves, vertical lines, flower ornament, and an overall sense of sweeping movement. Curvilinear lines appeared in women's dress through the fashionable hourglass silhouette and sweeping trumpet skirts. Boucher (1987) observes that "the melting tones of curtains were repeated in the satin of gowns" of the period (p. 389).

The Art Deco movement of the mid twenties and thirties favored geometric lines, streamlined forms, and flat surface ornament. Tortora and Eubank (2005) note that these influences were particularly apparent in the geometric lines of 1920s fashion, and could also be

observed in fabric prints, beading, and jewelry. Payne, Winakor, and Farrell-Beck (1992) confirm that women's dresses of the twenties featured geometric designs and the abundant use of ornamentation. The facades of skyscrapers were echoed in the linear quality of chemise dresses of the twenties and streamlined form of the slender and narrow thirties silhouette. Mackrell (2005) notes that Coco Chanel's linear silhouettes "reflected the streamlining and functionalism found in modernist architecture" (p. 134). Like Art Nouveau, expressions of Art Deco manifested in a wide variety of mediums including women's dress fashions, architecture, painting, and interior design.

The 1950s were characterized by an emphasis on femininity, which was marked in the fashion world with the introduction of Christian Dior's New Look, which enhanced feminine curves via a full skirt, soft rounded shoulders and a nipped in waistline. This focus on femininity correlated with domestication and the perpetuation of the American dream, complete with the house full of appliances which were available in candy and bubblegum hues similar to popular colors in fashion. Many visual representations of Dior's New Look in fashion could be observed in furniture and furnishings—from a Philip Johnson designed lampshade echoing the shape of the wide-brimmed coolie hat, to architect Eero Saarinen's Tulip table with its base in the shape of the revived hourglass silhouette. Partington (1989) notes that women of the period decorated their rooms using their personal "fashion sense…since putting a room together was often compared with putting an outfit or meal together" (p. 211).

It is apparent that visually similar designs connect the fields of fashion and interior design. The reasons why, however, are perhaps not fully understood. According to Griffin and Collins (2007) "design is influenced by external conditions that affect designers in various disciplines who are working at the same time" (p. 23). In other words, design in general is

subject to outside influences that collectively aid in shaping preferences of individual designers. Horn and Gurel (1981) assert that factors such as technology, morals, customs, beliefs, and values "contribute to the cultural climate in which art forms develop, and the forces that are exerted on the creators of dress are the same forces that influence architects, painters, sculptors, composers, writers, poets, and interior designers" (p. 333).

Roach and Musa (1980) assert that "the shared aesthetic qualities of dress, painting, sculpture, interior design, architecture, and ceramics of any particular epoch are simultaneously influenced by, or are reactions to, the same intellectual and artistic currents that sway literature, music, and the performing arts" (p. 33). Essentially, everything is connected because it can not divorce itself from the society in which it exists. Roach and Musa (1980) use the term "cultural consistency" to describe the occurrence of shared aesthetics across disciplines; noting that a higher degree of cultural consistency may be evident during some time periods more than others (p. 33). An example of this may be the many clear instances of shared design elements such as form, line, and surface definition during the Art Nouveau and Art Deco periods. (Roach and Musa do not speculate why higher degrees of cultural consistency may occur).

Another facet of the relationship between fashion and interior design is the significance of the clothing we choose to wear in public spaces. Fitting in (or avoiding standing out) can be facilitated by dressing in a way that coordinates, or relates to the space. Fashion designer Yeohlee Teng's Fall 1997 collection "Urban Nomads" was born out of her observation that the travelers in an airport looked dated compared to the ultra modern interiors, inspiring her to create a collection of how she thought people should look in that space (Quinn, 2002). Teng's collection is a literal interpretation of the visual relationship between dress and space. Numerous

examples throughout history show aesthetic similarity of fashion and interiors, as previously discussed.

Griffin and Collins (2007) use the term *near environment* to describe the connection between "the clothing and accessories that we wear, the appliances and furniture we use in the rooms we inhabit, the buildings that enclose those spaces and the grounds surrounding the buildings…[and] the cities and towns in which they are located" (p. 63). In this way, we understand that one's clothing (a combination of one's body and possessions) as well as one's furniture (possessions) and interior environment (home) classify as part of one's near environment.

Thomas hints at this connection between all of one's possessions and surroundings, noting that "when silks and furs and gems and lace and the unminted gold are attached to the person of a woman, it follows also that the household and the world in which she moves are transformed to harmonize with her showy taste and appearance" (as cited in Johnson et al., 2003, p. 83). The concept of the near environment can serve as a lens by which we seek to understand how the fields of dress, interior design and architecture are related.

Elements of Design

Elements of design function as a common thread between the disciplines of fashion and furniture because they are the fundamental components of the design of any object. Bevlin (1994) notes that what we view as an aesthetic result in an object is produced from the interaction of elements and principles of design. According to Griffin and Collins (2007), the elements of design "provide a structure for understanding the process of design" and in doing so create a language with which to "describe, discuss, and evaluate design projects" (p. 65; 63). As

a result, the elements of design can offer us code able information with which to measure aesthetics.

Griffin and Collins (2007) define elements of design as “properties that are visible and inherent in aspects of the design” (p. 65). Line, shape, form, color, and texture are most commonly regarded as the elements of design. We may think of the elements of design as being inherently related to the visual arts such as painting and drawing, however, they are the foundational basis for any design- whether it is a painting, dress, chair, or even a soda bottle. Both fashion design and interior design courses involve the understanding and application of the elements of design. Elements of design are “visual definers” because they are the most fundamental components that shape our aesthetic understanding, and therefore are the foundation of every artistic media (DeLong, 1998).

Horn and Gurel (1981) assert that elements of design have “sufficient universality to override a particular artistic expression and therefore can be applied as readily to clothing as to other art forms” (p. 290). Griffin and Collins (2007) consider whether crossover in design disciplines (such as architects or artists designing clothing) may come quite natural since “…all design students understand the basic elements and principles of design” (p. 102). It is in this realization that we may begin to understand why visual similarities exist across design disciplines and can therefore be used as an avenue to explore the relationship between the world of fashion and furniture.

Line is the most important element of design, as it is the fundamental element that influences all others. Line functions to outline a silhouette, connect shapes, and divide space (Horn & Gurel, 1981). The authors also note that the human eye connects points to form a line

even when that line is broken. Lines exhibit a number of variations (direction, path, etc.), each of which result in different expressive qualities.

Variations in line direction result in visual effects. Horizontal lines reinforce the illusion of width (Horn & Gurel, 1981), while vertical lines have the effect of lengthening or narrowing the object (Davis, 1980). DeLong (1998) notes that "since the body is basically vertical, vertical lines may reinforce body verticality" (p. 177). "Horizontal lines draw attention away from the body verticality and may divide the body into a series of sections, depending upon their position" (DeLong, 1998, p. 177). Horizontal lines may express tranquility (Bevlin, 1994), or "…parallel objects at rest or repose" (Horn & Gurel, 1981, p. 293). Davis (1980) notes that horizontal lines have the psychological effect of attributing quietness and passivity. Diagonal lines contribute an "active, somewhat unstable quality" due to their association with movement (Horn & Gurel, 1981, p. 294).

Lines that follow a straight path may convey feelings of stiffness, severity, rigidity, and precision (Horn & Gurel, 1981), as well as strength and dignity (Davis, 1980). Straight lines also contribute an angular quality to the human form when used in clothing (Horn & Gurel, 1981). Curved lines are either full or restrained and have the opposite effect of emphasizing the human body's contours (Horn & Gurel, 1981). Restrained curves are associated with gracefulness and gentleness, while more vigorous curves have an active nature (Horn & Gurel, 1981).

Lines also exhibit hard or soft edges. Hard edged lines can be enhanced by smooth, unfilled surfaces, and are often read as angular, decisive, and sharp (DeLong, 1998). Soft edged lines are associated with lines that are curving, indistinct, and blurred; and are often accompanied by filled or textured surfaces or transparency (DeLong, 1998). DeLong (1998) theorizes that

there may be an association between curving or soft edged lines often used in eveningwear, and the fact that it is designed for an event which "…encourages visual lingering" (p. 182).

Sources of line in dress include construction details (seams, folds, and edges), the human body and its silhouette, and even the relation of the body to its immediate surroundings (DeLong, 1998). DeLong (1998) notes that line in clothing can function to provide visual interest (i.e. pleats), give direction (i.e. a row of buttons form an implied line), or divide space (i.e. the edge of a jacket). Lines in clothing can also be introduced by structural techniques such as construction lines (seams, darts, tucks), "creases or folds made by pleats, gathers, tucks, or draping" and "real or perceived edges of garment parts" (Davis, 1980, p. 56). It should also be noted that dress sleeves typically form a vertical line direction when the body is at rest, although we know the movements of the human form change this and can result in diagonal or horizontal line directions.

The joining of lines results in a shape. Shape not only refers to flat, two-dimensional shapes but also patterns created by shapes. For the most part, shapes are defined as geometric, natural (or organic), or abstract. Regular and geometric shapes often simpler to perceive than irregular and organic shapes, due to our familiarity with them (DeLong, 1998). According to DeLong (1998), shapes can serve as the focus of visual interest in the object if they are "distinctly defined" in surface or edges, isolated, simple in outline, and feature continuous edges that do not overlap (p. 190). Ideas of calmness and order can be communicated with the repetition of geometric shapes, while repetitive use of irregular or organic shapes can create "…an appearance of some disorder and excitement…" (DeLong, 1998, p. 192).

Bevlin (1994) notes that "human construction is dominated by geometric shapes" and cites architectural buildings as a common example (p. 84). Shapes in clothing can result from

lapels, pockets, outlines, and the spaces created by seam lines and darts (Horn & Gurel, 1981). It should also be noted that patterns can include decoration such as wood carvings or reliefs, which are commonly seen in late Victorian furniture.

Form can be described as the "three-dimensional extension of shape," therefore the same definitions for shape apply (Bevlin, 1994, p. 78). Horn and Gurel (1981) note that throughout fashion history, variations in form have created a distinctive silhouette that defines each period…from geometric forms that mask the body's contours or those that add fullness and create harmonious proportions. Griffin and Collins (2007) assert that in design for clothing, furniture, and interiors, "our basic instinct for form springs from necessity" (p. 103). It is important to note that form for clothing fashions are inherently affected by the form of the human body, while the form of furniture (while it takes the contours of the body into account), necessitates a particular foundation of form.

This research focuses on observing the elements of design of line, shape, and form in women's dress fashions and chairs of the 1880s. As previously noted, color and texture were omitted from the study due to limitations of the objects. The following section provides a background of the period, which is helpful in understanding the context under which these designs were created.

Historical Background of the Period

Industrialization and Technological Advancements

The term "Victorian" refers to the period of Queen Victoria's reign in England (1837-1901), during which time both British and American society was defined by industrialization, urbanization, and progress, as well as a focus on morality and the home environment. Whiton and Abercrombie (2002) note that the nineteenth century was characterized by the conflict

between two opposing forces: “progress towards the future versus a retreat to the past; the charm of the handmade versus the efficiency of the machine-made; beauty versus usefulness” (p. 501).

A number of new developments in the nineteenth century changed the way every day life was experienced. Technological advancements in heating, lighting and plumbing changed the way of life in the home. Developments in the science of color theory led to increased knowledge about perceiving color, as well as creating it. The first synthetic (aniline) dye was developed in 1856 by Henry Perkin, who later introduced “Perkin’s violet” in 1859 (Whiton & Abercrombie, 2002).

The effects of the Industrial Revolution led to the struggle between the efficiency of the machine and craftsmanship of the hand-made. This dichotomy between the ideals of what was considered tradition and what had been spurred by progress and innovation, largely defined late Victorian society. Industrialization had numerous effects on design during the period, with the advent of the machine forever changing the nature of the process and ultimately, the product.

Ferebee (1970) notes that from the nineteenth century onward, design has been “polarized into machine-oriented and nature-oriented modes” (p. 10). The visual appearance of objects became directly influenced by the production method. Ferebee (1970) notes the significance of these modes as “fundamental elements of style,” asserting that “buildings and objects expressing either mode will be found to share a set of characteristics” (p. 10). She explains that objects made by machine (which she designates as “proto-Functionalist” during the Victorian period) “…tend toward geometric form and angular line,” utilize “…glass, steel, concrete and other industrial materials,” and are usually “hard and smooth-surfaced” (p. 10). Such designs “evoked the rationalism of the machine” (p. 25).

Alternately, objects of the "nature-oriented mode tend toward biomorphic forms, curved lines and wood, stone and other natural materials," and due to their use of hand-based techniques are often rough in texture (Ferebee, 1970, p. 10). Ferebee (1970) labels these artifacts as "picturesque" during the Victorian period and notes that surface ornament, the concealment of texture, and the use of historical-revival motifs often characterize this mode (p. 10).

As a result of the Industrial Revolution, clothing had also become increasingly factory made. The development of the sewing machine by the mid nineteenth-century and cutting machines by 1872 helped accelerate the mass production of menswear, but for women, only undergarments such as corsets and outerwear were mass produced at this point. According to Payne et al. (1992), outerwear such as mantillas and cloaks were easier to mass produce because their loose fit did not require precise sizing. Limitations of mass production at the time allowed dressmaking to remain a popular profession for women, who for the most part, continued to sew dresses at home. Ebenezer Butterick introduced full-scale patterns in 1863, and popular magazines often included patterns for women's use at home (Payne et al., 1992).

Although the manufacture of ready-made women's dresses was limited during the 1870s, by the end of the 1880s much progress had been made regarding the number and selection available (Kidwell & Christman, 1974). Machine-made lace became extremely popular towards the end of the century, and could even be purchased in pieces (Moore, 1949). This development made more ornamentation possible, contributing to the ease of using fancy embellishments in home dress-making.

The Rise of Consumerism

As a result of the Industrial Revolution and changes in manufacturing technology, furniture began to be manufactured cheaper than ever before, resulting in more rapidly changing

styles and an increasing accumulation of furniture by even the middle and lower classes. Novel and innovative styles were facilitated by these new manufacturing means, which fueled the desire for increasingly novel styles and for 'fashionable' furniture.

Advances in technology directly influenced consumerism by accelerating the dissemination of new styles and increasing their affordability. For the furniture industry, increased mechanization meant that wood veneers could be cut thinner than by hand and carving could be automated, resulting in lower costs (Miller, 2005). Mass production had resulted in lower costs and therefore consumer prices, so that the middle class was now able to afford more than ever before. Miller (2005) notes that the "redistribution of wealth in favor of the middle classes created huge demand for fashionable furnishings" (p. 262). Innovations in transportation such as the railroad helped to increase the efficiency of distribution, as well as allow consumers easier access to shopping.

The middle of the century also saw other catalysts for the spread of fashion with the rise of the department store (Macys in 1858) and the emergence of fashion magazines (*Harper's Bazaar* in 1867) (Nunn, 1984). "Department store giants vied for the distinction of providing for their customers the most extraordinary surroundings" and began carrying a vast array of merchandise by the 1870s (Kidwell & Christman, 1974, p. 157). For those unable to journey to these new shopping destinations, department stores even offered their own illustrated mail-order catalogs, selling both clothing and home furnishings (Kidwell & Christman, 1974). This period saw the beginning of the development of the mail-order industry, with Montgomery Ward in the 1870s, and May, Stern, and Company in 1882 (Kidwell & Christman, 1974).

The Age of Exhibitions

The nineteenth century was also the great age of exhibitions. Exhibitions were major influencers of taste from the 1860s on, and they "became showcases of 19th century European aspiration" (Miller, 2005, p. 262). The 1851 Great Exhibition at the Crystal Palace in London fueled the desire for novelty, ornamentation, and the exotic—as representatives from different countries showcased among other things, their designs for furniture and home furnishings. Exhibitions even printed illustrated catalogs, which were used by both consumers and furniture designers (Miller, 2005). Miller (2005) notes that the styles showcased at these exhibitions were not necessarily the best indicators of what the general public was buying, as there was much competition and many objects submitted for show were "their most flamboyant and technically complicated achievements, rather than items that were in general production" (p. 269).

The Crystal Palace exhibition, the first of the big exhibitions, saw over six million visitors during the six months it was open (Miller, 2005). The building structure itself, designed by the architect Joseph Paxton, used prefabricated iron and glass and was constructed in only six months—a visual testament to progress and the Industrial Revolution. The 1876 Centennial Exhibition in Philadelphia was another source of inspiration for new design styles. It also promoted renaissance- revival styles and fueled Japanese design interest in America (Miller, 2005).

The Arts and Crafts Movement

The Arts and Crafts Movement manifested during the late nineteenth century in response to the effect of the increasing industrialization of furniture and the arts. Increasing industrialization fostered a craze for novel styles at a rapid rate, resulting in objects which design reformers criticized as lower quality in design and construction. The movement sought to revive

handcrafted production and quality in furniture design. Designers associated with the movement included Walter Crane, Philip Webb, and William Morris.

William Morris, founding father of the Arts and Crafts Movement, led the way for reform in furniture production—designing textiles, furniture, carpets, and wallpapers, among other things. Morris strongly believed that there should be nothing in your house that is not useful or beautiful. Morris's beliefs about interior decorating were certainly contradictory to Victorian aesthetics of the day, "which seemed to reflect a fear of empty spaces through the accumulation of clutter more typical in earlier Victorian interiors" (Crochet, 1999, p. 204). Whiton and Abercrombie (2002) note that the Arts and Crafts interior was sparsely decorated, with earth tone colors, wood flooring, decorative tile, linoleum, and small area rugs.

The Aesthetic Movement

The Aesthetic Movement was a reform movement of the late nineteenth century that was deeply influenced by literature, and affected fine art, furniture, decorative art, and fashion. The movement occurred as a result of a "reform movement for both art and society" which began developing around the middle of the century as a reaction to "urbanization" and "industrialization" (Blanchard, 1995, p. 22). Writings of art critic John Ruskin (1819-1900) and William Morris (1834-1896) were well-known public voices that laid the groundwork for the development of aestheticism.

Popular playwright Oscar Wilde (1854-1900) emerged as leader among the Aesthetic Movement, who offered his ideas not only on achieving beauty in interiors but also on the lack of it in contemporary dress. Wilde strongly believed there was a connection between the beauty found in one's surroundings and the beauty of one's dress—and expressed his opinions openly on what he considered the ideal aesthetic for ones' dress, home, and interior spaces. Personally,

Wilde found no beauty in the dress and architecture of the 1880s (which he made well known), and instead admired the beautiful surroundings and dress of the Greeks, noting how the delicate lines and proportions of dress were mirrored in their architecture (Stern, 2004).

"Art for art's sake" – a well-known phrase that defined the philosophy of the movement, was the idea that art exists for its own sake...not necessarily for practical reasons or useful purposes. Aesthetes' belief that art should be evident in every aspect of daily life was acted out through the objects with which they furnished their interiors. In the home, this led to a "resurgence of interest in the decorative arts" dominated by the overuse of the label "artistic" to describe tasteful objects within the home (Blanchard, 1995, p. 22). Aesthetes believed that furniture should be of good design and quality, as well as beautiful. Miller (2005) notes that Aesthetes considered "beauty as more important than practicality, in striking contrast to the Victorian taste for clutter," and favored simple, Japanese designs in dark woods with minimal decoration (p. 322).

The Aesthetic Movement also included a major intersection in the fields of fashion and interior design. London-based retailer Liberty and Company (1875-present) emerged as the quintessential shopping destination for home furnishings, textiles, and dress fashions in the Aesthetic style. Advocates of dress reform spoke out against the corset and excesses of fashionable dress of the period; just as Morris and others were advocating simpler, more sparsely furnished interiors. Aesthetes were such not only by the way they furnished their homes, but also by their dress. Aesthetes favored clothing that was simple and uncomplicated in design, both in shape and embellishment (Roach & Musa, 1980). Aesthetic style furniture too was simple in design and free of excessive ornamentation.

A new subculture of individuals arose, characterized not only by their dress, but also by their interiors. While most women of the 1880s were wearing close-fitting, tightly corseted bodices with heavy upholstered and bustled skirts in deep or vibrant colors, female Aesthetes went corset-less in loosely draped tea gowns or one-piece dresses with loose sleeves in subdued colors. According to Blanchard (1995), aesthetic dress also served as a "symbolic rejection of domestic confinement" by the women that chose to wear it (p. 31). The dress of Aesthetes borrowed inspiration from the art world, particularly Pre-Raphaelite paintings which often featured women in medieval or classical style loose fitting garments. Blanchard argues that the Aesthetic Movement uniquely saw the "elevation of dress to "high" art and the perception of both producer and wearer as "artists"" (p. 23).

Aesthetes rejected bright colors, frills, lace, beads, elaborate braiding, appliqué and feathers and favored subdued color schemes and classical, oriental or East European peasant decoration. Other popular details of Aesthetic fashion included historic-inspired elements such as puffed-shoulder sleeves and slashed sleeves. Blanchard (1995) notes that just as aesthetic fashion drew on a variety of historical references eclectically combined without regard to historical accuracy, an aesthetic room of the period "might include a Turkish rug, a Japanese vase, a Gothic chair, and a reproduction of a Greek statue" (p. 24). Gordon (1996) notes that the artistic interior "was eclectic and rather fragmented" just as "detailing on women's clothes in the 1880s was at its most complicated and ornate" (p. 297).

Women and the Victorian Home

The Victorian period is often remembered as an era in which there became a shift of center to the ideals of family, morality, comfort, privacy, and the home. Hartzell (2009) labels the nineteenth century as "addicted to dwelling" (p. 55). Flanders (2003) explains that this

occurred as a result of the ever increasing pace of life as a result of industrialization, as "…the family, and by extension the house, expanded in tandem to act as an emotional counterweight" (p. 4-5). Victorian society as a result, became marked by separate spheres of public versus private; "work and trade" countered by "home life and domesticity" (Flanders, 2003, p. 5).

Hartzell (2009) notes that this new focus on the home was aided by the use of fabrics and textures in interior spaces. "Caught in the transitional anxiety of industrialization…and a burgeoning consumer economy, textiles functioned…as *protection* from modernity—the plush padding of the private interior shielding its occupants from the public "nakedness" of iron-and-glass factories, exhibition halls, and department stores…" (pp. 67-68). Flanders (2003) notes that it was "…this very dynamism [which] led people to try to create a still center in their homes, where things changed as little as possible" (p. 5).

Wilson and Taylor (1989) observe that femininity was a key symbol in the lives of Victorian women with their "fragile looks," "housebound lives" and "moralistic restrictions" (p. 25). If the home functioned as the private sphere offering protection from the outside world—then women were certainly the guardians of it. Women and the home, together then, were viewed as "…the source of refuge and retreat" as well as that of "strength and renewal" (Flanders, 2003, p. 5). As guardians of the home, women "were to create a haven of peace and a refuge…from the coarsening world of capitalism outside" (Wilson & Taylor, 1989, p. 25). Morality itself had also become deeply intermingled with women and their proper role in the home. Flanders (2003) notes that evangelical ideas helped to perpetuate the notion of a woman's primary duty as a wife and mother.

Women were also the chief decorators of the home, and assumed responsibility for the decoration of interior spaces. The latest home furnishings trends and guidance on tasteful

decoration could be obtained from both fashion and home periodicals, as well as interior decorating advice manuals. In addition to most clothing, women were also the makers of a variety of home furnishings such as sofa covers, wall pockets, and lampshades. According to Perrot "…never before had bourgeois women worked so hard at crocheting, knitting, embroidering, weaving…aimed at covering everyday objects…" (as cited in Hartzell, 2009, p. 59).

Steele (1985) observes that the Victorian woman's first duty was to society and to be beautiful. Decorating the body and its surroundings were both ways of presenting the self and communicating ideas about the wealth, status, and taste of the family. Flanders (2003) clarifies that "taste was not something personal" but rather, "…something sanctioned by society" (p. 18). Taste possessed "moral value" and "…ignoring the taste of the period was a sign of something very wrong indeed" (p. 18). If one was to be judged as respectable, conformity was key.

"Dress—the decoration of the body—and interior furnishings—the decoration of the home—together formed what in more contemporary terms has been called the *front* that projected the desired image to the world at large" (Gordon, 1996, p. 283). Both forms of decoration served to illustrate either poor or good taste on the part of the woman.

Both women's dress and the interior decoration of the home functioned to communicate the status or wealth of the men which owned them (Gordon, 1996). According to Saisselin, women of the late nineteenth century, "…installed in sumptuous interiors and admired for their beauty as living *objets d'art,* began to be idealized as consummate *bibelots*—exotic trinkets, or art objects—which, like the prizes of the collector, existed to be touched, and so, possessed" (as cited in Hartzell, 2009, p. 66). Women, children, and the home "…were the outward indicators of a man's success in the world" (Flanders, 2003, p. 168).

At the same time, both dress and interior decoration served as much needed outlets of personal expression in an age characterized by male ownership and authority. M. Taylor (2006) asserts that the nineteenth century middle-class interior functioned as "one of the few locations available for women's self expression" (p. 530). "Women decorated rooms as a reflection of self, individuality, and eventually personality," and did so "in parallel with their own bodies and clothes, extending one into the other" (p. 530).

M. Taylor (2006) uses the term "conceptual conflation" to describe the "metaphoric relationship between woman and interior" (p. 530). Gordon (1996) observes that "…most strongly between 1875 and 1925, the connection between women and their houses in Western middle-class culture was so strong that it helped shape perception of both" (p. 282). Women and their interiors progressed from being simply like each other, to becoming synonyms for each other (Gordon, 1996). Gordon (1996) asserts that this "conflation" between woman and interior manifested most strongly during the late nineteenth century due to "an outgrowth of women's ideal role in the culture that was created by industrial capitalism," an obsession with "proper appearance," and the belief that status was achieved, more than ascribed (p. 283).

Gordon (1996) explains: "body and interior space were often seen and treated as if they were the same thing, so much that they became almost interchangeable; symbolically, one could stand for the other" (p. 281). Haugland asserts that the way in which Victorian women decorated their spaces paralleled the process of "…lining, padding, and ultimately, concealing the female form…" (as cited in Hartzell, 2009, p. 59). Fabrics and trimmings were in a sense then, "transposed from the 'decorated' female body onto the interior" (M. Taylor, 2006, p. 532).

Even language used in advice literature of the period helped shape and reinforce this metaphorical relationship between woman and the home (Gordon, 1996; M. Taylor 2006).

Haweis, in *The Art of Decoration* (1881), proclaims that "furniture is a kind of dress, dress is a kind of furniture, which both mirror the mind of the owner and the temper of the age" (as cited in M. Taylor, 2006, p. 535). Feminist writer Cobbe writes in 1869: "the more womanly a woman is, the more she is sure to throw her personality over the home, and transform it… into a sort of outermost garment of her soul" (as cited in M. Taylor, 2006, p. 535).

Fashion plates of the nineteenth century also provide interesting clues about the relationship between the fashionably dressed woman and the home. Steele (1988) notes that fashion plate settings not only communicated the circumstances for which the clothing was designed for, but also the places women were supposed to be. Interiors and garden scenes were popular, implying that women belonged at home or in the enclosed garden- seen as an extension of the domestic sphere (Steele, 1988).

An interesting note is that from the mid-nineteenth century on, women began to be increasingly pictured outside the home, although they were shown fairly secluded- depicted "safely" away from the crowd (Steele, 1988). This is likely a direct result of the rise in the number of women venturing outside the home as a result of the Industrial Revolution. Kidwell and Christman (1974) note that by the 1870s, more women began working, pursuing education, or shopping in department stores, made possible by technology such as trains and trolley cars.

Interior Decoration of the 1880s

The phrase "interior decoration" is said to have been introduced by Thomas Hope's 1807 publication, *Household Furniture and Interior Decoration*. As a result, numerous periodicals and books providing advice on furniture and interior decoration began to be published during the nineteenth century. Charles L. Eastlake's 1868 publication, *Hints on Household Taste in Furniture, Upholstery, and Other Details* was a popular decorating manual of the later part of the

century. *The Decorator and Furnisher* (1882-1898) is considered to be the first American interior decorating magazine, while *The Home Decoration* (1886-1889) also provided advice on how to furnish a home. In addition, fashion periodicals such as *Godey's Lady's Book, Harper's Bazaar*, and *Petersons*, informed readers about interior decorating trends.

Home entertainment during the period was both customary and of utmost importance. Because of this, public rooms such as the parlor or drawing room were carefully furnished with an eye to current fashion, because guests would be received here. These public rooms housed the most expensive furniture pieces intended to display the wealth and taste of the inhabitants. "A parlor suite was intended to serve a lifetime without evidence of the slightest wear" (Finley, 1931, p. 144).

Victorian interiors were characterized by their cluttered arrangements of large -scale upholstered furniture. According to Horn and Gurel (1981), "forms, shapes, and colors clashed and competed for attention" (p. 336). Different patterns are used for the walls, curtains and floor, creating a busy impression. By this time, a wide variety of wallpaper patterns and colors were available. Russell (1983) writes:

> This was an age in which every area of a room was layered with carpets, wall coverings, 'throws', pictures, and a proliferation of ornamental bric-a-brac—an age in which the inhabitants of a room were literally lost amidst a sea of layered decorative detail. (p. 382)

Surface Decoration

A review of the 2001 exhibition "On the surface: Late nineteenth century decorative arts" at the Mint Museum of Art in Charlotte, NC, notes that "the embellished surface was the defining elements of late nineteenth century American decorative arts" (Traditional Fine Art Online Inc. [TFAOI], 2001). The abundance of ornamented surfaces such as wallpaper, window

treatments, furniture, and carpet in a variety of prints and colors contributed to the chaotic nature and mix-matched effect of interiors. So many surfaces were decorated that it almost seems as if virtually nothing was left untouched and unornamented in the Victorian interior.

Dr. Barbara Ferry, Decorative Arts curator at the Mint Museum, indicates that the focus of late nineteenth century design was more on "decoration, ornamentation, and embellishment" than form (TFAOI, 2001). Ornamentation "became more linear" and shapes "more angular, smoother, and less flamboyant" (TFAOI, 2001). Crochet (1999) notes that "the Victorian architectural style and coordinated interior exhibited ornamental detail on virtually every surface plane" and was in part defined by its superfluous use of ornament which "visually tantalized" the senses (p. 200). Elaborate inlays and marquetry decorated furniture surfaces, floral wallpapers covered walls, rugs concealed floors, and even ceramics were painted with detailed pictorials (TFAOI, 2001). Surface decoration of wood was for the most part, incredibly detailed. Gilt bronze and ivory and mother of pearl inlays were often desired to show off one's wealth and status (Miller, 2005). Such decoration also helped to conceal design flaws (TFAOI, 2001). Ferebee (1970) explains that "…the Victorian furniture designer concentrated on the surface of a thing at the expense of structure" (p. 25).

Textiles & Trimmings

To say textiles were used abundantly in the home throughout the nineteenth century would be an understatement. Whiton and Abercrombie (2002) assert that "the role of interior textiles was greater in the nineteenth-century than it had ever been before or has been since" (p. 549). Hartzell (2009) notes that "it was the new ubiquity of textiles in the nineteenth century that facilitated the weaving of the bourgeois web" (p. 57). Hartzell (2009) observes that from the early part of the century onward, "…sensuous textiles were increasingly employed as a unifying

force in interior decoration, and by the 1850s, the popular press began to remark upon the assiduous lining and sealing of interiors from the outer world" (p. 58).

Hartzell (2009) explains that fabrics "enveloped the hard contours of furniture and padded the walls of private chambers, protecting their occupants from the sharp angles of public life in [the] nineteenth century…" (p. 53). Gordon (1996) also notes that textiles were utilized in Victorian interiors to help soften "straight, hard edges" (p. 296). She also draws an interesting comparison of the element of line in mid-nineteenth century women's dress and interiors—noting that the "soft, round look" of the ideal woman was seen in the home through the "abundance of softening fabric and an emphasis on rounded edges and smooth curves" (p. 296).

Velvets in particular began to be used by the middle class to "soften and conceal" interior spaces (Hartzell, 2009, p. 53). Hartzell (2009) speculates that velvet textiles "…provided not only casings for bodies and objects, but also opportunities for tactile pleasure in a culture whose taboos against touching are legendary" (p. 54). The use of velvets in home furnishings during the late nineteenth century reflected "a re-clothing of private spaces that was intimately connected with new trends in women's dress" (Hartzell, 2009, p. 53).

Eclectic rooms of the late nineteenth-century used a multitude of fabrics in different styles and colors; however colors were always chosen to harmonize" (Mayhew & Myers, 1980). Printed fabrics for interiors were differentiated from those used for dress by their "slightly heavier" weight, twill or sateen weave, and their larger, more elaborate designs with more colors (J. Nylander & R. Nylander, 2005, p. 161). Motifs "shifted to flat, conventionalized (stylized) designs," which was likely a result of style preferences of English reformers (TFAOI, 2001).

Curtains functioned as both a decorative and practical element in the Victorian interior. They were key elements of the decorative interior, and at the same time, provided privacy and

concealment from the outside world. According to Mayhew and Myers (1980), window curtains were an important part of every decorative style in the nineteenth-century. Curtain styles varied greatly, according to the chosen interior style. Winkler and Moss (1986) note that "curtain materials corresponded in richness to the upholstery fabrics in the rooms" (p. 169). Curtains could be tied back with cords, tassels and fringe and the height of curtains also often corresponded with the style of the room (Winkler & Moss, 1986).

Incidental draperies, a term used to denote any type of furnishing that is draped with textiles, appeared frequently in the 1880s. Grier observes that the "drapery craze" of the nineteenth century peaked in the 1880s and 1890s (as cited in Hartzell, 2009, p. 59). Interior decoration manuals illustrated the plethora of ways in which textiles could be draped, not only over windows, but also walls, doors, and even furniture (Hartzell, 2009). Hartzell (2009) explains that this overuse of draped textiles manifested as a desire for "tactile reassurance," a sort of protection and shielding of the home from the outside world (p. 59).

Needlepoint upholstery was popular and interiors of the period illustrate its use for "'throws' for sofas, cushions, pillows, and antimacassars for chairs and sofas; wall pockets to hold letters, magazines, and newspapers" (Winkler & Moss, 1986, p. 174). Gordon (1996) notes that padded pillow-like bustles "adorned both sofas and women's derrieres" (p. 289). "Women also dressed moveable furniture and decorative accessories in their own image"—covering legs with skirts, adding "dust ruffles" and fringe, and draping objects with scarves and shawls (p. 289).

Trimmings and passementerie such as braids, cords, ropes, fringes, tassels, bows, and rosettes were commonly used in interiors and appeared on almost everything—from window treatments and furniture upholstery, to table coverings and lighting fixtures. Even wall hangings

could be suspended by cords embellished with trimmings. Lebeau et al. (1994) note that the period was the "larger-than-life epoch of cords as thick as elephant's trunk, of rosettes the size of lettuces, of buttons like mushrooms; of social and financial exuberance expressed in every last tasseled tieback and bobbled bellpull" (p. 139). The amount of trimmings used often depended upon the style, and formality level of the room.

Decorative Styles in Furniture

Victorian furniture designers were inspired by contemporary, historical, and cultural influences. Many cabinetmakers and furniture dealers had immigrated to the United States, bringing with them their foreign tastes from abroad (Pina, 2003, p. 134). International exhibitions of the nineteenth century were major influencers of taste, showcasing endless styles featuring exotic elements from other cultures. The 1876 Centennial Exhibition introduced Colonial revival styles, as well as Japanese art and culture to Americans (Pina, 2003).

Late Victorian furniture is perhaps best described as the result of a conglomeration of various historical styles, motifs and elements—all seen in a single form. Revival styles of Gothic, Rococo, and Renaissance motifs and forms were among the most popular. Classical motifs also continued to be used in furniture design. Miller (2005) notes that "Grecian, Roman, and Egyptian themes were never far from the public consciousness, thanks to frequent and well-publicized archeological discoveries" (p. 264). Colonial revival styles seen after 1876 featured narrow and delicate reinterpretations of eighteenth century styles (Miller, 2005).

Perhaps one of the most common historic revivalist styles seen during the period was that of Gothic revival. This style was largely inspired by the architect A.W.N. Pugin (1812-1852), who was a major proponent of Gothic style architecture and furniture. Pugin's furniture designs revealed, rather than hid, construction techniques and he noted that anyone that avoided injury in

a room full of Gothic style furniture, with its sharp ornament and angular projections, was extremely fortunate (Pina, 2003, p. 133).

According to Pina (2003), the American interpretation of Gothic style however, was far from the original—America itself had no history of Gothic architecture and forms from which to be inspired. In fact, most American Gothic revival furniture of the period was simply the application of Gothic motifs and ornament on contemporary forms—such as arches, tracery, and trefoil and quatrefoil cut-outs on chair backs (Pina, 2003). Turned chair and table legs and pointed arches were other popular details in Gothic revival furniture pieces.

Rococo-revival furniture pieces were most popular during the mid-nineteenth century; although they were also seen during the later part of the century. Pina (2003) notes that although given the name 'rococo', furniture of this revivalist style was often dramatic and imposing—characteristics more similar to furniture of the baroque period. Cabinetmaker John Henry Belter's name became almost synonymous with rococo-revival furniture of the period (Miller, 2005). Belter's furniture featured laminated wood, opulent carving throughout, and curved, barrel chair backs (Pina, 2003). Miller (2005) indicates that Belter furniture can also be identified by its dramatic curves, openwork, and use of fruits, flowers, vines and classical motifs.

Renaissance-revival furniture featured typical historic details: the forms were often massive and symmetrical, carving was prominent, and bulbous, turned legs were common features (Pina, 2003). Gilding often appeared in the form of incised lines on legs or elsewhere (Pina, 2003). Tufted upholstery on seating "added to both the linear quality—the lines connecting the buttons—and the three-dimensional quality—by the mounds of upholstery between these little linear valleys" (Pina, 2003, p. 135). An important note is that this style can prove difficult to identify due to the incorporation of other historical features such as Gothic or

Rococo (Pina, 2003). New York based Herter Brothers (1864-1906) was a popular decorating firm that became well known for their wood furniture which catered to wealthy clients. Herter Brothers were also well known for their designs of renaissance-revival furniture (Miller, 2005).

The Victorian fascination with the 'exotic'—a term used rather loosely to describe a gamut of styles unfamiliar to the Western world, resulted in elements and motifs borrowed from other cultures. Styles inspired by Chinese, Japanese, Indian, Persian, Moorish, Turkish, and Arabian cultures were popular. According to Whiton and Abercrombie (2002), "these deliberately foreign styles were often freely mingled with one another or with more classical elements" (p. 522).

American versions of Japanese style furniture experienced a peak in the 1880s, and featured ebonized finishes, geometric forms and straight lines, ornamented with latticework or inlay of Japanese motifs (Pina, 2003). These more simple designs were often characterized by their lack of surface decoration and carvings which defined the majority of Victorian furniture (Pina, 2003). Art furniture, as these Japanese influenced styles were often referred to, was associated with the ideals of the Aesthetic and Arts and Crafts Movements. This furniture style reflected Japanese influences in the elements of design —such as straight lines, rectilinear shapes, and geometric forms. Asymmetry, often a feature of art furniture, was favored by Japanese artists. Popular motifs included stylized nature forms such as birds, peacock feathers, leaves, and flowers. Art furniture could also feature Gothic details; however they more closely resembled earlier styles that lacked abundant surface ornament, with carvings and exposed construction (Pina, 2003). Herter Brothers became well known for producing art furniture, and Charles Locke Eastlake extensively discussed the style in his publications.

Solid, simple forms with exposed construction in naturally finished woods were hallmark features of Arts and Crafts furniture. Miller (2005) notes these were “simple, geometric pieces” that focused on the grain of the wood, rather than surface decoration (p. 17). Decoration was usually limited to construction features, cutouts, inlays, or spindles (Miller, 2005). Chairs often featured elaborate turning and seats were made of rush, leather, or fabrics (Miller, 2005). Upholstery was often stylized nature motif patterns in “bold patterns in rich, natural colors” (Miller, 2005).

According to Miller (2005), much of the Arts and Crafts furniture was created by designers who originally trained as architects—which was significant because “…designers let the materials and techniques of cabinet-making dictate shape and decoration” (p. 322). The American interpretation of the Arts and Crafts style included the use of natural materials and inspiration from Shaker and American Indian objects, as well utilized mechanized processes (Miller, 2005).

Wicker furniture experienced a peak in popularity during the 1880s, fueled by the public interest in the exotic, as the “material was imported from the Far East” (Pina, 2003, p. 141). Pina (2003) notes that “besides being artistic, handmade, and exotic, wicker furniture could adapt to any room or any need” (Pina, 2003, p. 141). Although made of a variety of woven materials including straws and grasses, rattan was the most popular choice (Pina, 2003). Heywood Wakefield Company was the most popular wicker furniture manufacturer during the period (Pina, 2003).

The majority of furniture pieces of the period were massive with heavy proportions, and utilized dark woods such as mahogany, oak, rosewood, and ebony. Crochet (1999) describes furniture of the period as “heavy, cumbersome, and overstuffed” (p. 200). Ornamentation on

furniture included inlay, paint, and carving; and popular finishes such as lacquer, paint, and gilding.

Chairs

Throughout history, the chair has undergone many transformations—from its early forms—the throne, stool, and bench—to elaborate 18th century chairs including design features suited to the dressed body and its activities. Chairs of today increasingly feature ergonomic design principles, as they are adapted to the human body due to the necessity of prolonged sitting and the use of computer technology to aid in design (Bevlin, 1994).

The chair is inherently linked to the human body, which it was designed for accommodating. Moore (1949) notes that the bustle of the 1880s was completely collapsible and "easily moves to one side when the wearer sits down—provided she avoids a deep armchair…" (p. 113). Another interesting note is that the term *apron* or *skirt* is often used to refer to the decorative piece of wood that appears beneath the seat rail of a chair.

Miller (2005) observes that the late nineteenth century saw a "greater emphasis on comfort, reflected in curvaceous forms and deep-buttoned upholstery" (p. 17). The development of coil springs "improved comfort, influenced the shape of furniture, and contributed greatly to upholstery's importance in interior decoration" (Peirce, 1999, p. 216). Gordon (1996) indicates that the use of coil springs for comfort in upholstered furniture did not become widespread until the mid-century fashion innovation of the lighter weight steel (or cage) crinoline. She also notes that during the 1870s and 1880s, furniture was often sold in suites or suits, a concept that by 1880 was applied to women's clothing sold thorough coordinating bodices and skirts.

Peirce (1999) explains that the shapes of chairs during the 1880s "…were determined as much by the emphasis on upholstery as by the traditional wooden frames" (p. 216). Padded arms,

seats, backs, and thickly padded easy chairs were other reflections of the new Victorian focus on comfort (Miller, 2005). Hartzell (2009) indicates that these new forms of upholstered seating in the 1880s "…mimicked the ample appearance and pliant textures of women's dresses to create an experience of bodily comfort…" (p. 60). Contrarily, Finley (1931) notes that chairs of the Victorian period often "threw the sitter's body forward in a strained and uneasy posture" (p. 143).

Chair design had never been more diverse than in the late nineteenth century (Miller, 2005). Virtually every decorative style of the period could be seen in chairs, and various elements from each style were often combined together in one form. Chairs of the mid-nineteenth century and beyond were "influenced by fashion, which resulted in the design of low, wide seats to accommodate full skirts" (Miller, 2005, p. 310). Casters for chair feet were "a 19th century innovation allowing ease of movement around the room" (Miller, 2005, p. 304).

Chairs of the Victorian period usually exhibit either oval or horse-shoe shaped backs, which are upholstered (Wagoner, 1990, p. 32). Seats are also upholstered and are often round or oval (Wagoner, 1990, p. 32). Arms, when present, are curved and low, and serve "more as a brace for the back than to support the sitter's arms" (Wagoner, 1990, p. 32). The cabriole leg, an S-shaped style with an outward curved knee and inward curving ankle was a popular feature of chairs during the period. Chair feet of the period are usually scroll curves (Wagoner, 1990).

Hall chairs were known for their stiffness of form and lack of upholstery and were used in spaces of low status—as the sitters were likely servants (Pina, 2003). Highback chairs, characterized by their exaggerated tall backs and short legs, combined historical motifs and often, embroidery or needlework (Pina, 2003). Easy chairs were usually large and low-seated with a sloping back, and were the most comfortable options for chairs (Pina, 2003). Rockers

were also popular seating choices and usually featured low seats with high backs (Wagoner, 1990).

Women's Dress Fashions of the 1880s

Gernsheim (1981) notes that as a result of the crinoline craze of the 1860s, women began tiring of wide, bell shaped skirts and "were turning eagerly to the development of curves with the aid of the bustle" (p. 60). Back fullness was the predominant feature of dress of the 1880s, achieved through the use of bustles and/or drapery and fabric manipulation at the back of the skirt. Although usually fabric covered, bustles were available in a variety of forms (Koda, 2001). Horse hair or wire was commonly used for construction of the bustle (Buck, 1984). According to Buck (1984), bustles of the 1880s were usually part of the dress construction, particularly through hoop steels inserted into the lining of the skirt. Bustles were frequently collapsible and often attached at the waistband. Moore (1949) theorizes that the development of back fullness drapery was inspired by the pillow-like cushion worn as part of the obi at the back by Japanese women, which they unhooked and used as seating. It is evident, however, that the bustle that first appeared in the 1870s had evolved from the angular silhouette of the skirt of the late 1860s.

The 1880s saw two major variations in the way in which back fullness was achieved. The first few years of the decade (1878-1883) marked the introduction of the cuirass bodice, which fit smoothly over the hips and ended in a point in the front (Tortora & Eubank, 2005). The tight fit and long waist of the cuirass bodice tightly molded female curves (Gernsheim, 1981). According to Buck (1984), this long-waisted bodice was accompanied by a skirt that fit tightly over the hips, "…without fullness at the front and sides" and "all remaining fullness was brought to the back to flow into a train" (p. 54). Skirts of the period started out slender, and by 1881 included drapery at the hip (Payne et al., 1992). Decorative effects of the skirt became focused low at the

back below the derriere and long trains and heavy fabrics helped to emphasize the focus on the rear. Complicated posterior drapery and slender lines were in vogue, with dresses often lacing "up the back to produce the closest possible fit" (Moore, 1949, p. 105).

The remainder of the decade (1883-1889) saw the return of "large, rigid, shelf-like bustles" which appeared more constructed than draped as before (Tortora & Eubank, 2005, p. 332). This new bustle was more rigid—jutting out more horizontally than that of the previous decade. Boucher (1983) notes that this bustle held the skirt "…out horizontally behind the waist" and "the draped poufs gained unprecedented fullness…" (p. 394). Olian (1997) indicates that the new bustle from 1883 onwards was more extreme, angular, and set higher (p. iii). Blum (1974) observes that the mid-1880s bustled silhouette appeared to have a harder edge compared to that of the early 1870s, noting that "when viewed in profile, it appears to be a small triangle set forward on a very large square" (p. 149). According to Koda (2001), these new bustles of the late 1880s "were as padded and heavily embellished as a drawing-room hassock of the period" (p. 133). Skirts began to lose some stiffness and back fullness by about 1887 (Payne et al., 1992).

Russell (1983) notes that the skirt, with its "…complex interplay of draping, textures, patterns, and trim" was the focus of fashionable dress during the period (p. 378). Extra material, draped in increasingly elaborate ways, was used to create the fashionable back fullness. According to Buck (1984), "the construction of skirts throughout the period was complicated and various" (p. 62). Buck (1984) writes: "…it would perhaps be true to say that generally there is no real skirt at all, but an application of drapery and trimming to a lining or foundation" (p. 63). Pannier draperies were a popular feature of skirts of the early 1880s and were sometimes constructed with puffs or waterfall draperies pleated closely together at the back (Buck, 1984). Asymmetrical drapery, swag-like aprons, and pleats were popular details for skirts (Payne et al.,

1992). Skirts were rarely trained with the exception of eveningwear (Buck, 1984; Nunn, 1984; Tortora & Eubank, 2005). Buck (1984) observes that "the loss of the train gave a new line to the skirt and its draperies" (p. 60). Gernsheim (1981) notes that skirts after 1887 exhibited a straighter line and often omitted the horizontal trimming and drapery.

Although the female leg was usually concealed and certainly an erogenous zone during the Victorian period, legs may not have been as perpetually hidden as we might think. In particular, one might catch a glimpse of an ankle revealed beneath the shorter fronts of skirts of the 1880s. Steele (1985) claims the stereotype of Victorian prudishness towards legs is perhaps exaggerated—and that lower legs appeared at times, such as for costume balls and private gatherings. She also argues that no documentation exists confirming the stories of women actually covering the legs of furniture.

Bodices of the decade were usually tight-fitting and "…shaped by darts or princess seams" (Payne et al., 1992, p. 530). The interior lining of the bodice featured boning and the front sections were shaped by darts (Buck, 1984). The close, molded fit of the bodice, along with the use of the corset, emphasized the hourglass silhouette. Bodices were longer early in the decade and then became just below waist level, ending in a point at the front (Payne, et al., 1992).

From 1883 on, the v-shaped waistcoat front was a defining characteristic of the bodice (Buck, 1984). This center front panel could also be a plastron and was "…usually made of a contrasting fabric for a decorative effect" (Calasibetta & Tortora, 2003, p. 370). The plastron often featured vertical pleating, or gathering at the top and bottom—as was common for the puffed plastrons of the late 1880s (Buck, 1984). According to Moore (1949), bodices after 1883 featured tighter sleeves, making the "…undulations of waist and bosom even more pronounced"

(p. 106). Other common features of the bodice included “jabots of lace falling down the center front” or “lace cravats tied in a bow” (Buck, 1984, p. 64).

Necklines usually featured high band collars (Payne et al., 1992), or could be square, pointed, or round (Moore, 1949). Collars could be part of the blouse, jacket, or dress (Tortora & Eubank, 2005). Buck (1984) notes that higher standing collars were seen from 1885 on. The later part of the decade saw the popularity of left side front closures on the bodice (Payne et al., 1992). Buck (1984) indicates that “by the end of the 1880s, the bodice was becoming the more important part of the dress” (p. 65).

Sleeves during the 1880s were usually close-fitting and set high in the armhole, ending at either three quarters or at the wrist. Narrower versions of the coat style sleeve of the previous decade with plain cuffs were commonly seen (Payne et al., 1992). The kick-up sleeve, which consisted of a small puff at the sleeve cap, was seen after 1883. These puffy-capped sleeves were introduced in American fashion magazines as early as 1882 and were shown with more exaggeration after about 1885 (Payne et al., 1992). The leg-of-mutton sleeve was first seen around 1887 (Payne et al., 1992). The bishop sleeve was another option that became popular into the 1890s (Tortora & Eubank, 2005). Gernsheim (1981) observes that women during the second half of the 1880s appeared “aggressively erect and square-shouldered” (p. 68).

Women of the 1880s required a variety of costumes for daily activities- such as morning gowns, afternoon gowns, tea gowns, visiting costumes, and dresses for dinners and balls. Dress ensembles usually consisted of two pieces—a bodice and matching skirt, although the one-piece princess dress worn during the latter part of the period was an exception. Loose blouses worn with skirts were worn, although less frequently than two piece dresses. Kidwell and Christman (1974) note that the terms “suit” and “dresses” both were used during the 1880s to refer to two or

three piece dresses (p. 139). Evening dresses were usually differentiated by their lavish trimmings and ornamentation, trained skirts, and short sleeves that covered only the shoulders (Payne et al., 1992; Tortora & Eubank, 2005; Buck, 1984).

Tailor-mades, which consisted of a tailored bodice or jacket and elaborately draped skirt, were also worn (Nunn, 1984). Buck (1984) notes that these styles gained popularity during the second half of the 1880s. She observes that pleated draping of the skirt was often seen on plainer dresses such as tailor-mades. Gernsheim (1981) indicates that "the combination of plain, tight bodice and complicated skirt" gave a 'plain above, fancy below' appearance" (p. 68).

Rules about proper taste in both dress and interior decoration "reflected the increasing elaboration of special-use goods" (Gordon, 1996, p. 286). Gordon (1996) asserts that women's dress of the late nineteenth century was "quite time-and occasion-specific, with each season, activity, and period of the day having its own proper materials and style," while simultaneously "rooms and their contents were increasingly function- specific, with appropriate fabrics or pieces of furniture that also changed with the season" (p. 286). Specific types of dress were both associated with (and mirrored the details of) particular parts of the home. Light colored airy fabrics were seen in the breakfast room, while elaborate, "richly colored silks and velvets" with "complex arrangements of drapery and trim" were appropriate for the dining room and parlor (Gordon, 1996, p. 286).

The variety of outerwear for women increased during the late nineteenth century and was dominated by coats, jackets, and wraps which easily accommodated the bustle silhouette (Tortora & Eubank, 2005). Jackets were cut to accommodate the shape of the bustle, fitted closely to the back, and were either loose or fitted in front, extending below the waist or to the knee (Tortora & Eubank, 2005). The dolman, with its low set sleeves, continued to be the most

popular wrap (Payne et al., 1992). Gloves, muffs, decorative fans, and ornately trimmed parasols helped complete the decorated ensemble of the 1880s woman.

Surface Decoration, Textiles, and Trimmings

In viewing images of the Victorian period, one gets the feeling of a sense of tactile luxury from the variety and contrast in texture alone. The Victorian woman was surrounded by an abundance of textiles, both in her own dress and interior spaces. According to Russell (1983), "the number and complexity of the fabric pieces comprising a gown greatly increased" during the 1880s (p. 373). Fashion fabrics of the period were "upholstery-like in quality, made even heavier by the profuse use of beading, fringes, braids, and furs"—some even weighing up to ten pounds (Blum, 1974, p. 149). Olian (1997) also observes that fashion fabrics during the 1880s were nearly the weight of upholstery fabrics. She notes that the heavy fabrics and appliqué decorations weighed garments down, which could have actually proven useful keeping women warm in their often drafty ill-heated homes.

Specifically, fabrics for day dresses were usually heavy, contributing to the upholstered look (Gernsheim, 1981). Winter dress fabrics were often of pile weaves such as velvet, plush, velour, brocade, and bengaline; while summer fabrics were often of linen, light wool, eyelet, or navy dungaree (Payne et al., 1992). Stripes were popular and became bolder in design throughout the decade (Moore, 1949). "Dark colors and two-color or two-texture ensembles" were most popular during the 1880s (Payne et al., 1992, p. 529). The development of aniline dyes also resulted in bright, unusual, often garish color combinations for dress fabrics.

Russell (1983) observes that skirts, like interior decoration, were characterized by "…rich layering, complex draping and pleating, and minute detail" (p. 378). Elaborate draperies of dresses were reflected in the draperies of window treatments (Gordon, 1996; Russell, 1983).

According to Gordon (1996), both women's dress and window treatments involved multiple layers and trimmings, and the "scalloped edgings and fringes" of valances "echoed the undulating edges" of women's skirt trims (p. 296). In the early part of the decade, horizontal trimmings and drapery were preferred (Gernsheim, 1981; Nunn, 1984), as well as the use of loops, bows of ribbon, and narrow, closely pleated flounces to ornament dresses (Buck, 1984). Asymmetrical drapery was increasingly seen in skirts of the later part of the 1880s (Buck, 1984). The use of asymmetrical decoration added yet another visual stimulus and perhaps mirroring the rambling asymmetry of the exterior façade (and floor plan) of the home. Buck (1984) notes that after 1885, day dresses were not as lavishly trimmed as before.

Similar surface ornamentation was also seen in the dress of women and their surroundings. Gordon (1996) observes that "complexly carved dining room furniture mimicked the "dark bead embroidery that might adorn the surface of a fashionable gown" (p. 287). Fringe was a popular ornamental trimming for dresses, window treatments, chair arms, and table cloths. Lace was also frequently used in both women's dresses and interior furnishings. Buck (1984) notes that "lace was used in profusion to trim the draperies of the dress," as well as collars and plastrons (p. 73). Blum (1974), observes that "all accessories- gloves, handkerchiefs, hair ornaments, jewelry, aprons, shoes and stockings- provided surfaces to be decorated…none escaped the love of rich trimming" (p. viii).

CHAPTER 3

METHODOLOGY

This study utilizes object-based research as the methodology in order to observe elements of design in women's dress fashions and chairs of the 1880s. The study involves the development of a visual analysis checklist for the comparison of the elements of design.

Object-based Research

Object-based research involves the interpretation of actual objects as material culture methodology. In the field of dress history, this methodology "focuses necessarily and unapologetically on examination of the details of clothing and fabric" (L. Taylor, 1998, p. 347). Objects are often overlooked as sources of study, with much focus on written or visual sources. Steele (1998) argues that the interpretation of objects is among the most valuable methodologies for studying fashion history; and "…provides unique insights into the historic and aesthetic development of fashion" (p. 327). Martin asserts that objects are worthy of study "…because they are complex, symbolic bundles of social, cultural and individual meanings fused into something we can touch, see and own…" (as cited in L. Taylor, 2002, p. 72).

Objects themselves are inherently reflections of the society or culture in which they were made and used. DeLong and Petersen (2004) note that "objects reflect those who made and used them and, by extension, the beliefs of the larger society to which they belonged" (p. 100). Jules Prown (1980) makes the argument that "style is inescapably culturally expressive" therefore, the data collected from objects are "of value as cultural evidence" (as cited in Steele, 1998, p. 329).

He asserts that because of this, objects "can be used actively as evidence rather than passively as illustrations" (p. 1).

One of the main criticisms of object-based approaches is the extreme attention to detail involved with the identification of the object. L. Taylor (2002) asserts that the identification of objects "…provides the basis upon which cultural theory can later be viably applied" (p. 12). Schreier comments on the importance of object- based studies of dress—first, as "a sign of cultural mingling," second, as a force for the sustaining of cultural values and third as "an identifiable symbol of a changing consciousness" (as cited in L. Taylor, 2002, p. 55).

External criticism is defined as checking the authenticity of the artifact and involves answering questions such as "Is it actually from that time period?" "Or did someone recreate it?" (Flynn & Foster, 2009, p. 189). The review of literature written about the visual character of the objects during the period is useful in evaluating external criticism. Specifically, evaluating the construction techniques used, condition, and stylistic details can aid in authenticating an object. In the context of historical research, visual authentication is important because the object could negatively influence the data if it is not from the stated time period. In order to be effectively used as primary sources, objects should be evaluated in order to verify they are from the stated time period. "In looking at an artifact, if the workmanship and materials (fabric, notions) are from that time period, the artifact passes internal validity" (Flynn & Foster, 2009, p. 306).

Object-based research is an inductive method, as it begins with observation, then looks for patterns, and finally moves towards generalizations and theories. Steele (1998) discusses some models for analyzing clothing artifacts, specifically those of Prown and Fleming. Prown (1980) identified three stages of object analysis: description, deduction, and speculation (as cited

in Steele, 1998). For Prown (1980), description involves the recording of information that can be observed from the object itself, including elements of design. This study addresses this stage via the recording of visual information observed from the object, using the checklist. The cover sheet of the checklist allowed the viewer to first record information about the object such as the type of garment or chair, and other stylistic details (such as materials and location and type of embellishments). The subsequent pages of the checklist focus on the detailed observation of what elements of design are observed in the object, and how they are expressed (any notes are recorded in the far right column). The checklists are located in Appendices E-F.

According to Prown (1980), the second stage—deduction, requires the viewer to interact with the object (as much as possible), by either touching, wearing, or using the object—or contemplating the imagined experience of it. Steele (1998) notes that this involves an awareness of previous knowledge or biases that may inaccurately influence this stage. For this study, deduction was addressed during data collection (interacting with the object), analysis of the data, and comparison of the data.

Prown (1982) defines the third stage—speculation, as "framing hypotheses and questions which lead out from the object to external evidence for testing and resolution" (as cited in Steele, 1998, p. 7). He notes that it is here that a shift occurs "from analysis of internal evidence to the search for and investigation of external evidence" (p. 10). Speculation occurred in this study during the writing of the discussion, which draws on external evidence via written sources from the review of literature. Speculation also occurred in the conclusion when the hypotheses were evaluated.

Fleming (1973) adds a fourth step for the process of object analysis—interpretation. This stage involves the search for significance and relevance, the moving "beyond description toward

explanation" (p. 158). This study developed a visual analysis checklist to collect and analyze data, for the ultimate goal of explaining the significance of that data, in order to better understand the relationship between the objects. It is helpful to develop a framework to better assess the visual relationship between the objects, so that our interpretation and evaluation of meaning can be based on some measurable foundation.

Primary sources for this object-centered approach utilized dresses from the Historic Clothing and Textile Collection housed in the Department of Textiles, Merchandising and Interiors at the University of Georgia, and chairs from local museum collections in order to identify and explore visual aspects of the objects. DeLong and Petersen (2004) also utilized an object-based approach in order to visually analyze and characterize a selection of 1930s evening dresses from a university housed historic clothing collection.

DeLong and Petersen's (2004) study sought to shift analysis of the objects from the technological, political, social, functional relationships of historic dress to "visual characterization aligned with how visual expression is understood" (p. 99). Likewise, the objectives of this study were to develop a visual analysis checklist and record data regarding the elements of design in order to better understand the visual nature of the objects. The study required the development of a visual analysis checklist because no existing instrument was found that focuses on the comparison of elements of design for women's dress fashions and furniture.

Visual Analysis

Visual analysis can be described as the detailed and systematic analysis of an object conducted by observing the item and recording specific characteristics. DeLong and Petersen (2004) describe visual analysis as a "process of reducing the unit or object to its constituent parts for examination" (p. 100). The authors note that visual analysis of objects "should include

application of aesthetic concepts" (p. 100). For this study, the elements of design were selected as the aesthetic framework from which to perform visual analysis of the objects.

Sources for visual analysis may include paintings, prints, drawings, redrawn illustrations, fashion plates and cartoons; all of which can be useful for providing information relating to "style, quality of fabrics, cut, hairstyles, body stance, accessories and exactly how these were worn" (L. Taylor, 2002, p. 115). Photographs are also excellent sources for conducting visual analysis, as they often provide a more accurate representation of reality than sources subject to both the imagination and biases of artists such as fashion plates and paintings. It should be noted that criticisms also exist about the use of photographs.

This study utilized objects as sources for visual analysis. Items of dress, when available, are excellent candidates for visual analysis because they provide an actual representation of what was worn during a particular period in history as well as within specific social strata, such as the middle or upper class. Items of dress are also useful because they are three-dimensional primary sources that can be observed and touched, thus enhancing the ability to perform visual analysis.

Although objects as primary sources for study have considerable advantages, it should be noted that choosing actual garments is not without its limitations. Ribeiro (1998) notes that when using garments for study, we rarely have access to information that would tell us how and with what it was worn, as well as "…nothing about the person who wore it, and the context(s) in which it was worn" (p. 317). Having such information on the wearer and the occasions or environments in which the garment was worn could give insight into understanding the inter-relatedness of the wearer's dress fashions and personal selections for interior furnishings in the home.

Cosbey, Damhorst, and Farrell-Beck (2003), in seeking to explore the diversity of women's daytime clothing styles from 1873 through 1912 as an indicator of women's social role ambivalence, conducted a visual analysis of fashion illustrations from fashion periodicals of the period. The researchers used a visual analysis instrument to evaluate the illustrations which consisted of feature identification measures (e.g. sleeve styles), body location measures (e.g. neckline length), and aesthetics and fit measures (e.g. the rating of skirt complexity on a five point scale). The development of the visual analysis instrument was discussed extensively in an earlier publication (Cosbey, Damhorst, & Farrell-Beck, 2002).

Numerous other studies focusing on visual analysis of dress and textiles have been conducted. Jung and Paoletti's 1987 study was based on the visual analysis of features of Victorian crazy patchwork quilts, observing features such as number of patches and type of embroidery stitches. McMurry, White, and Simpson (2001) identified and dated dresses using the process of visual analysis and in doing so developed a systematic reference for dating garments. Field (2004) focused on the visual analysis of features of a found silk dress as well as the processes used in making it.

According to DeLong (1987), visual analysis involves sufficient time and attention, as well as the detachment of our own self-interest or biases. A systematic approach to visual analysis can be helpful in order to reduce such personal biases as well as provide a defined process that will increase the likelihood of someone being able to successfully repeat the study. DeLong (1998) outlines a methodology for visual analysis that provides a systematic approach to aid in objectivity:

1. Observation- “paying attention to the total visual form,” and describing it (p. 56). This was done during the process of data collection by first viewing the object as a whole, photographing it, and taking notes on the characteristics and details of the object.
2. Differentiation- “identification of the visual parts and then an awareness of their relationships” (p. 56). This was addressed during the design of the checklist, which evaluated individual parts of the objects (i.e. arms of chairs).
3. Interpretation- “looking for the themes and associations of meaning that seem to summarize and explain the form” (p. 56). Most interpretation occurred during data analysis and the writing of the discussion section.
4. Evaluation- making a judgment about the object based on evaluative criteria (p. 56). The discussion section of this study focused on my personal evaluation of the data analysis.

Development of the Checklist

Multiple publications were reviewed prior to the study in order to become familiar with commonly regarded elements of design (see Appendix A). The most basic elements of design that were repeatedly listed included line, shape, form, color, and texture. Art publications (such as Mills & Smith, 1985; D. Preble & S. Preble, 2004) included additional elements.

A variety of publications focusing on elements of design as interpreted in dress were also evaluated. Davis (1996) provides an in depth understanding of elements of design, particularly as they relate to dress applied to the human form. This source was integral to the study, as elements of design are perhaps least understood in dress, as they seem to be more commonly regarded in the context of art. Her charts outlining how the elements of design can be interpreted in clothing as well as those describing specific characteristics of the elements of design in chart format (e.g. line direction, line path) were used for constructing a reference key for this study. See

Appendices C-D for the reference keys adapted from Davis (1996) which were used to help interpret shape and form in dress for the study.

Following the review of the above sources, it was decided that the study would focus on evaluating the elements of line, shape, and form for the completion of the objectives. These particular elements were selected because they were included in all discussions on elements of design, suggesting that these were basic foundational elements.

Although there are many potential characteristics of each element of design, this study focused only on selected characteristics adapted from Davis (1996). Line path was evaluated as straight, restrained curve, full curve, or other. The category of "other" included jagged, looped, wavy, scalloped, zigzag, and crimped. Line direction (vertical, horizontal, diagonal), and line edge (sharp, fuzzy) were also assessed. Shape and form were both evaluated according to whether they were equal sided geometric; unequal sided geometric, or organic. If the shape or form was not organic, it was characterized according to the particular shape (i.e. square, circle, etc.) and form (i.e. bell, cylinder, etc.). The reference guide for identifying the elements of design used in this study provides detailed information as well as illustrated examples (see Appendix B).

Since the goal of the study was to observe and record elements of design in the objects (women's dress fashions and chairs), it was necessary to use a means to systematically record them. Cosbey et al. (2002) note that "the primary dilemma in documenting visual characteristics [of dress] is how to measure and record them" (p. 110). Cosbey et al. (2002) aimed to "develop an instrument that would facilitate systematic identification of the stylistic characteristics of women's clothing presented in consumer magazines of the period" (p. 111). Like the checklist developed for this study, selected elements of design (line, shape, texture, color) were included.

Although the researchers focused on pictorial evidence rather than objects, their research was helpful in the development of the checklist for this study.

Cosbey et al. (2002) also discussed the various modes of measurement used in previous visual analysis studies in dress. Their discussion of the use of interval measurement to record aesthetic features in dress most closely aligned with the measures used for this study. Interval measurement includes rating clothing features "on a certain characteristic along a bipolar continuum" and has been used in numerous visual analysis studies (p. 112). The interval measures utilized by DeLong and Larntz (1980) included clothing design characteristics such as straight versus curved lines, shiny versus dull, and sheer versus opaque.

The checklist developed for this study (see Appendices E-F) allowed for evaluation of the elements of line, shape, and form to be assessed for parts of the objects. Embellishments were evaluated within each part of the object in which they occurred (e.g. fringe located on the seat). Using the checklist, I marked off the appropriate choice(s) under each category (e.g. type of line direction: straight, vertical, horizontal, diagonal) for each part in the left hand column as well as recorded any additional observations or notes in the right hand column.

The checklist was modified to accommodate the differences between women's dress fashions versus chairs. The differences between checklists were only the parts of the objects listed for evaluation. I based the composition of the checklist on basic ideas about ergonomics and chair design related to the human form, in order to position a comparison between the parts of the objects. For example, the skirt of the sitter would rest upon the seat and legs of a chair (chair legs would likely be obscured by skirts of a sitter in late Victorian dress), the sitter's legs would likely rest against the legs of the chair, the sitter's bodice would rest against the chair back, and the sitter's arms/sleeves would rest upon the chair arms. It should be noted that the

front legs of chairs were usually more decorative and visually prominent than the back legs, therefore only the front legs were analyzed using the checklist in this study.

Validity is described as the "soundness" or "accuracy" of the data (Flynn & Foster, 2009, p. 179; 309). According to Flynn and Foster (2009), validity measures ensure that the instrument is actually measuring what it is designed to measure (p. 140). In developing the instrument, Cosbey et al. (2002) attempted to document as many individual features of the objects as possible, such as bodice, collar, neckline, sleeve, cuff, skirt, etc. During the development of the instrument for this study, I also considered how I could include account for the variety of object features, and did so by deciding to evaluate the objects by their parts, rather than attempt to evaluate it as a whole.

Cosbey et al. (2002) note that the clarity and detail of the primary sources used for study (fashion illustrations), helped increase validity. In this way, the use of objects which could be viewed in close proximity as the primary sources of this study aided in validity. The use of a three-member research team that possessed "…extensive formal educational or research backgrounds in clothing construction and flat pattern, costume history, and visual analysis methods" also enhanced the validity of the study (Cosbey et al., 2002, p. 120). Cosbey et al. (2002) indicate that the use of coders with limited formal training in costume history "…helped to confirm the face validity of the instrument by indicating the degree of ease in using the instrument" (p. 120).

According to Flynn and Foster (2009), "reliability usually refers to how consistently an instrument in a study measures the results" (p. 140). One way this can be tested is by the repeated use of the instrument (Flynn & Foster, 2009), or specifically through the use of inter-rater reliability measures (Cosbey et al., 2002). Cosbey et al. (2002) performed inter-rater

reliability measures for 10% of the sample in order to reduce biases. This involved a training process to ensure the coders understood how to use the instrument to code sample illustrations, comparison of "…coders' responses for consistency", "negotiation of coder responses" to handle any discrepancies, and the consultation of a third party expert in dress history or visual analysis when no compromise could be reached (Cosbey et al., 2002, pp. 120-121). Although this study did not include any reliability measures, the techniques of Cosbey et al. (2002) serve as a guideline for appropriate measures to further develop and refine the checklist.

Cosbey et al. (2002) also prepared "style guides" to aid coders in identifying the various measures, which helped increase reliability of the instrument (p. 115). Similarly, I developed a reference guide for identifying the elements of design being evaluated. The reference guide provides definitions and images of the characteristics of the elements of design of line, shape, and form, and also includes illustrated examples of how shape and form may be interpreted in clothing (see Appendices C-D). The guide was adapted from Davis' (1996) textbook, *Visual design in dress*. No similar reference was found that provided illustrations for identifying elements of design in chairs. Although I utilized the reference guide during the process of data collection, it did not enhance the reliability of the checklist because it was not tested and used by other coders.

Cosbey et al. (2002) also note that the modification or elimination of measures which were found to be ineffective or difficult to use, also aided in increasing the validity and reliability of the instrument. The following section discusses how the checklist measures for this study were either modified or eliminated when found to lack effectiveness or clarity.

Refinement of the Checklist

The checklist was pilot tested prior to data collection in order to identify any issues. The piloting involved using the checklist to visually analyze a total of six objects (three women's dress fashions and three chairs) from the mid-late nineteenth century. The pilot study sample representing women's dress fashions was sourced from the Historic Clothing and Textile Collection housed in the Department of Textiles, Merchandising and Interiors at the University of Georgia. The pilot study sample representing chairs was sourced from the historic Ware-Lyndon House in Athens, GA. The checklist was then revised based on the piloting results.

Multiple changes were made to the checklist upon evaluation of the pilot study results. Most of these modifications were made as an attempt to provide more clarity in order to decrease subjectivity, and increase the ease with which the checklist might be used. Perhaps the most significant change was that two separate versions were created in order to allow for applicability to the specific parts of the chairs or dresses (i.e. chair seat, dress skirt). It should be noted however, that the order in which the parts appeared on each checklist were aligned based on ideas about how the dressed body would interact (sit) on a typical chair (i.e. dress sleeves rest on chair arms). This revision also increased the ease of data comparison.

Another significant modification to the checklist was the decision to evaluate embellishments within each part of the object in which they were located, rather than as a separate part. It became obvious that repetitive data was collected when embellishments were assessed as an individual category. In addition, it seemed helpful to categorize embellishments as either structural or surface. Structural embellishments refer to manipulation of the fabric (such as draping, folds, and creases) and construction techniques such as darts, pleats, gathers, and seams.

Surface embellishments include applied trimmings such as appliqués, embroidery, buttons, ruffles, ribbons, rosettes, bows, fringe, tassels, and trim.

Other changes were made in order to allow more information to be collected with the checklist. Additional space was added for descriptive information to be recorded upon initial viewing of the object on the cover page, prior to beginning the actual checklist. This ensured that basic necessary information was collected about the object apart from the data that would be collected from the specific parts of the checklist. It was discovered that it was necessary to distinguish that only the front legs of chairs would be evaluated on the checklist. The abundance of detail of surface decoration and fabric treatments in women's dress fashions of the period necessitated the designation of bodice front, skirt front, and skirt back for the checklist. I felt it was important to include the skirt back in the checklist due to the focus on the posterior of the human form through the bustle/back fullness trend of the period.

Some items the checklist requested were omitted due to unavailability. For example, the intended location for which the chairs were originally used was not always provided or known; and therefore was removed from the checklist. Originally, an expanded section for decorative style of the furniture was part of the checklist; however, it was omitted because the information was not usually available and was not necessary for completion of the study objectives.

The piloting also revealed that some information was not necessary for the completion of the objectives. Initially, the checklist listed bodice neckline and bodice collar separately, but this was later modified and included under 'bodice' in order to maintain general comparison between the dress fashions and chairs.

Methodological Steps

1. Sources discussing the elements of design were reviewed.
2. The elements of design to be used for the study were selected, taking into account any limitations.
3. The checklist was developed using the elements of design as visual definers.
4. Ten women's dress fashions and ten chairs were selected according to the following criteria:
    a. The objects are dated from the years 1880-1889 (and are known to the best of knowledge to be produced during this period).
    b. The objects are of American origin if origin is known.
    c. The objects represent items marketed to or used by the middle, middle-upper, or upper classes.
    d. The objects are available for close observation and accessible for study in person.
    e. The objects selected for the women's dress fashion sample consist of a skirt and bodice or a one-piece dress; so that the checklist components are applicable (i.e. no skirts alone, or coats, accessories, etc. were selected for the sample). (It should be noted that there were only 10 dresses in the collection dated from this period that met this criteria, therefore these were the ones selected).
5. Elements of design observed were recorded using the checklist for both the women's dress fashions and chairs sample.
6. The data was analyzed by performing frequency counts for each category and sub-category for each element of design recorded on each checklist for women's dress fashions, and subsequently compiling a total frequency count for the sample as a whole.
7. The above step was repeated for the chairs sample.

8. The data analysis results for women's dress fashions and chairs were then cross-analyzed in order to accept or reject the hypotheses.

Sample

Two samples were needed for conducting visual analysis, both of which included ten objects. Sample one represented women's dress fashions in the form of dresses or coordinating bodices and skirts from the Historic Clothing and Textile Collection housed in the Department of Textiles, Merchandising and Interiors at the University of Georgia, dated from the period 1880-1889. Sample two was comprised of chairs from local museum collections which included: the High Museum of Art (Atlanta, GA), Alamance County Historical Museum, Inc. (Burlington, NC), Archibald Smith Plantation Home (Roswell, GA), and Hickory Hill: The Historic Home of Thomas E. Watson (Thomson, GA). The chairs sample was not limited to any particular decorative style, as the focus is on elements of design evident of the period in general. See Appendix G for additional information on the object locations.

Data Analysis

Upon completion of data collection for both samples, the data was analyzed by performing frequency counts for each category and sub-category for each element of design recorded on each checklist for both the women's dress fashions and chairs samples. For example, data collected for the element of shape was evaluated by part of the object in which it occurred (i.e. dress bodice) according to the category (i.e. geometric equal-sided) and sub-category (i.e. square). A total frequency count for both samples was obtained by the compilation of the individual data.

The results of the frequency counts for the two data sets indicated relationships between the parts within the object (i.e. dress bodice or chair back) in which particular characteristics of

the elements of design were consistently observed; as well as the dominant characteristics in the elements of design that were observed within both data sets. The data analysis results for women's dress fashions and chairs were then cross-analyzed in order to accept or reject the hypotheses.

CHAPTER 4

DATA ANALYSIS

Description of the Samples

Data was collected using the checklist for two sample sets composed of 10 objects each. Sample set one represented women's dress fashions and included objects number 1.1-1.10. Sample set two represented chairs and included objects number 2.1-2.10. Tables 1-2 provide brief descriptions of all objects in the women's dress fashions and chairs sample sets (see Figures 1-20 for images of the objects). Additional detailed images of the object parts are archived and available upon request. The frequency tables and comments are available in Appendices H-M.

Explanation of the Data Collection Process

When a particular characteristic of an element of design was observed during data collection, the selection was circled on the checklist, and comments were made in the "notes" column, explaining how the particular element was interpreted within that object part. For example, for women's dress fashions sample #1.6, when analyzing the skirt front, the selection "horizontal" under line direction was circled, and the following comments were made in the notes column: "rows of lace tiers." Tables 3-4 provide examples of how this was done throughout the process of data collection (see Figures 21-22 for images of the objects used as examples).

Table 1.
Objects in the Women's Dress Fashions Sample

SAMPLE #	DESCRIPTION	DETAILS	LOCATION
1.1	White Cotton 2 Piece Dress	1883-1889 Window-pane weave, bishop sleeves, lace appliqué trim	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.2	Light Brown Patterned 2 Piece Dress	1883-1885 Slight train, puffs, complex drapery, asymmetry, cravat	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.3	Brown with Green Striped 2 Piece Dress	Early 1880s Ombré effect, asymmetry, beaded tassels, pleated godets	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.4	Ecru Long Trained Dress	1880-1883 Silk, lace side panels, square neck, vertical center front pleats	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.5	Peacock Blue 2 Piece Dress	1885 Silk satin, velvet trim, geometric line of bodice pattern	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.6	Blue Silk 2 Piece Dress	1880-1889 Horizontal lace trim tiers, trained, round neck, low set sleeves	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.7	Cream Circular Trained Gown	1880-1889 Silk satin, lace tiered skirt front, square neck, extensive train	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.8	Black Cotton Dimity 2 Piece Dress	Late 1880s Flounced and pleated bodice, gathered and gored skirt	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.9	Marigold 2 Piece Dress	1889 Netted, silk, skirt remnants only, v-neck, ribbon bow trim sleeves	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA
1.10	Blue with Sunflower Print 2 Piece Dress	Late 1880s Silk with velveteen trim, leg of mutton and kick-up sleeves	Historic Clothing and Textile Collection (Department of Textiles, Merchandising and Interiors at the University of Georgia) Athens, GA

Table 2.
Objects in the Chairs Sample

SAMPLE #	DESCRIPTION	DETAILS	LOCATION
2.1	Reclining Armchair	1881 by Hofstatter, Jr. oak, stylized floral upholstery of blue w/ yellow-gold	High Museum of Art Atlanta, GA
2.2	Wakefield Wicker Rocker	1880 by Wakefield Rattan Co., woven designs, turning	High Museum of Art Atlanta, GA
2.3	Herter Brothers Side Chair	1881-1882, gilt maple, printed red silk, mother of pearl inlays, no arms	High Museum of Art Atlanta, GA
2.4	Eastlake Style Slipper Chair	1880, black painted walnut, floral upholstery, upholstered arm rests	Hickory Hill: The Historic Home of Thomas E. Watson Thomson, GA
2.5	Renaissance-revival Upholstered Armchair	1875-1885, red and gold, walnut, upholstered arm rests, carvings	Alamance County Historical Museum, Inc. Burlington, NC
2.6	Gold Striped Slipper Chair	1880, Carpathian elm, spindle decoration, no arms	Alamance County Historical Museum, Inc. Burlington, NC
2.7	Campaign Hall Chair	1880, not upholstered, Italian Renaissance style "Savonarola", folding feature	Alamance County Historical Museum, Inc. Burlington, NC
2.8	Upholstered and Trimmed Side Chair	1880-1885, skirted, padded, silk floral upholstery, no arms	High Museum of Art Atlanta, GA
2.9	Thonet Bentwood Rocker	1885-1889, beech, curved frame	High Museum of Art Atlanta, GA
2.10	Upholstered Rocker	1880, Rococo-revival, balloon-back, small floral print, upholstered arm rests	Archibald Smith Plantation Home Roswell, GA

Table 3.
Example of Data Collection, Women's Dress Fashions- Skirt Front

ELEMENT	CHARACTERISTIC	NOTES
Line path	Straight	a- silhouette, lace tiers
	Restrained curved-a	b- lace trim edges
	Full curved	
	Other-scalloped-b	
Line direction	Vertical	rows of lace tiers
	Horizontal	
	Diagonal	
Line edge	Sharp-a	a- overall outline
	Fuzzy-b	b- lace tiers, fabric folds
Shape	Rectangle	Elongated- lace tiers
Form	Trumpet	overall outline

Table 4.
Example of Data Collection, Chair- Back

ELEMENT	CHARACTERISTIC	NOTES
Line path	Straight-a	a- outline, incised lines of wood, upholstered striped pattern
	Restrained curved-b	b- foliage detail of incised lines (at each side frame)
	Full curved -c	c- spindles (back rail), top finials (crest)
	Other-wavy-d	d- continuous strip trim
Line direction	Vertical-a	a- striped pattern of upholstery, incised lines, trim
	Horizontal-b	b- lines of finials, double incised lines (crest rail), incised lines (back rest, spindles), trim
	Diagonal	
Line edge	Sharp-a	a- overall simplicity of pattern, outline
	Fuzzy-b	b- continuous strip trim
Shape	Square –a	a-wood frame
	Rectangle-b	b- upholstered inset, back rail inset
	Floral/foliage-c	c- incised lines of wood
Form	Sphere	2 finials at ears (crest rail), spindles (back rail)

Explanation of the Data Analysis Process

Upon completion of the data collection, the checklist data was transferred to excel spreadsheets in order to organize data and tally frequencies. A total of six spreadsheets were created—individual sheets for each element (line, shape, form) for both data sets (women's dress fashions and chairs). For each spreadsheet, the horizontal row listed the object sample number (e.g. 1.1), while the vertical rows listed the element characteristics and possible selections (e.g. line edge: sharp or fuzzy).

Two excel functions were then applied to the data in order to tabulate frequencies. The first was: "=COUNT(value1, value2,…)". The COUNT function counted the number of cells that contain numbers. Specifically, this function counted the frequencies of the number "1" for each row that was selected, which resulted in a total count for each characteristic of the elements. The other formula used was: =SUM(number1, number2,…)". The SUM function added all the numbers in a range of cells. This function provided a comprehensive total for each of the characteristics of the elements, by selecting each of the columns housing the total row counts. The SUM function was used to gain the final totals. The totals were then sorted in descending order and the highest frequencies in each category were highlighted, in order to aid in comparison (see Appendices H-M).

It should be clarified that when the data was transferred to the excel spreadsheets the presence of the number "1" indicated that the particular characteristic was observed for the object part. For instance, using the above example, for women's dress fashions sample #1.6 when analyzing the skirt front, the "horizontal" selection was tallied as "1". The reason for the use of the number "1" in the excel spreadsheets was to facilitate total frequency counts for each

of the categories, subcategories, and as a whole. When no characteristic of that element was observed, the space was left blank.

It should also be noted that the far right column of each page of the spreadsheet labeled "N/A" provided a space to note any instances where the particular characteristic was non-applicable. For the element of line in women's dress fashions, one of the dresses (#1.9) did not allow for the evaluation of line in the skirt front or skirt back, since only remnants of the skirt remained. For the element of shape in women's dress fashions, some dresses did not feature any flat, two-dimensional shapes for sleeves (#1.7, #1.8), for skirt backs (#1.2, #1.4, #1.8), and for the skirt front (#1.8). For the element of form in women's dress fashions, one of the dresses (#1.9) did not allow for the evaluation of form in the skirt front or skirt back, since only remnants of the skirt existed.

Three of the chairs (#2.3, #2.6, #2.8) did not feature arms, therefore the elements of line, shape, and form were not evaluated for the object part "arms" and were designated "N/A". In addition, three of the chairs (#2.6, #2.7, #2.8) did not feature any flat, two-dimensional shapes on the front legs, and therefore were designated "N/A" for the evaluation of shape for the object part "front legs." All of the above instances were limitations of the study sample and were considered when evaluating the data analysis findings.

The section of the checklist located on the far right column labeled "notes," was also typed and transferred to an excel spreadsheet. An important note is that comments only appear for the objects that exhibited the particular characteristic of the element. For example, if no straight lines were observed for the chair back in sample #2.1, then no comment appears under the section "back" under the sub-section "straight lines". These spreadsheets are available in Appendices H-M and are labeled "Data Analysis: Comments." The comments described how the

elements were interpreted within each of the object parts. These were significant contributors to the data analysis because they provided a means to compare and contrast how both women's dress fashions and chairs illustrated the elements of design.

Data collected on the title page of each checklist (which included basic information and general notes for the object) were also typed and transferred to an excel spreadsheet. Both the comment sheets and title page sheets were useful as a reference during the process of data analysis. Also, photographs were taken during the process of data collection, including front, back, and side views of the objects as well as detailed images of the object parts (e.g. dress bodice, chair back, etc.). These photographs were useful references for the interpretations of the elements of design. Both the spreadsheets and detailed photographs are archived and available upon request.

Two different types of tables are included in this section to aid in the comparison of the frequency tabulations. The first table in each of the findings sections provides the *total* frequency tabulations for both of the data sets for line, shape, and form. These totals were calculated as the sum of all the frequency counts for each of the individual parts of the samples, therefore they include comprehensive results of the frequency counts for each of the samples for dress (bodice, sleeves, skirt back, skirt front) and chairs (back, arms, seat/seat rail, front legs). These total frequency counts provide information on which characteristics of the elements were most or least dominant in the samples for women's dress fashions and chairs (the highest frequencies for each category are highlighted). The tables list all of the characteristics of the element observed in descending order, so that comparisons between women's dress fashions and chairs can be made.

Additional tables are also included under the findings for line. These tables provide the frequency tabulations for the *individual parts* in order to make comparisons between both data

sets (e.g. dress bodices compared to chair backs). None of these detailed tables are included for the elements of shape and form due to the lack of comparative findings, as discussed later.

Findings: Line Path

The results of the total frequency counts indicated that restrained curves were the most frequently observed aspect for both women's dress fashions and chairs (see Tables 5-6). Full curved lines were the next frequently observed aspect for chairs, while a slightly lower number were observed for women's dress fashions. Women's dress fashions featured more straight lines than full curved lines, and more straight lines than chairs. Of the category "other," scalloped lines were seen the most in women's dress fashions, while wavy lines were dominant in chairs. Few other types of lines in the "other" category were observed for either sample. No crimped lines were observed in either data set, and no looped or jagged lines were seen in the women's dress fashions data set.

Table 5.
Total Frequency Tabulations for Line Path (Women's Dress Fashions)

CURVED-RESTRAINED	37
STRAIGHT	32
CURVED-FULL	20
OTHER-SCALLOPED	11
OTHER-WAVY	2
OTHER-ZIGZAG	1
OTHER-LOOPED	0
OTHER- JAGGED	0
OTHER-CRIMPED	0

Table 6.
Total Frequency Tabulations for Line Path (Chairs)

CURVED-RESTRAINED	30
CURVED-FULL	26
STRAIGHT	20
OTHER-WAVY	10
OTHER-SCALLOPED	2
OTHER-LOOPED	2
OTHER-ZIGZAG	1
OTHER- JAGGED	1
OTHER-CRIMPED	0

All samples for bodices featured restrained curves and straight lines, and this was the dominant aspect observed for line path (see Table 7). Nine of the samples for chairs featured both restrained and full curves in the back area (see Table 8). For the other category, the most dominant observations only included two women's dress fashion bodices and five chair backs.

Table 7.
Frequency Tabulations for Line Path (Women's Dress Fashions-Bodices)

STRAIGHT	10
CURVED-RESTRAINED	10
CURVED-FULL	6
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	0
OTHER-SCALLOPED	2
OTHER-ZIGZAG	1
OTHER-CRIMPED	0

Table 8.
Frequency Tabulations for Line Path (Chairs-Backs)

STRAIGHT	7
CURVED-RESTRAINED	9
CURVED-FULL	9
OTHER- JAGGED	1
OTHER-LOOPED	1
OTHER-WAVY	5
OTHER-SCALLOPED	1
OTHER-ZIGZAG	0
OTHER-CRIMPED	0

All samples for dresses featured restrained curves as the overall outline for sleeves (see Table 9). Restrained curves were also dominant for chair arms, but observed at a lower frequency (see Table 10). Full curves were also seen at the same frequency for chair arms. Significantly less full curves were seen in dress sleeves compared to chair arms. Straight lines were the second most observed for both samples. No line paths in the "other" category were observed in dresses, and three chairs featured wavy lines on the arms. Three chairs (#2.3, #2.6, #2.8) did not feature arms at all, and were noted as "N/A" on the checklist in this section.

Table 9.
Frequency Tabulations for Line Path (Women's Dress Fashions- Sleeves)

STRAIGHT	7
CURVED-RESTRAINED	10
CURVED-FULL	2
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	0
OTHER-SCALLOPED	3
OTHER-ZIGZAG	0
OTHER-CRIMPED	0

Table 10.
Frequency Tabulations for Line Path (Chairs- Arms)

STRAIGHT	4
CURVED-RESTRAINED	6
CURVED-FULL	6
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	3
OTHER-SCALLOPED	1
OTHER-ZIGZAG	0
OTHER-CRIMPED	0

For the skirt back and chair seat/seat rail areas, restrained curves were most frequently observed and the frequency counts were identical (see Tables 11-12). Full curves occurred just as frequently as restrained curves for skirts, and slightly less for seats. The majority of the dress samples featured straight lines in the skirt back area, while a slightly lower number of chairs featured straight lines in the seat area. Both data sets featured two objects with wavy lines. Both data sets also observed scalloped lines. Overall, the frequency tabulation results for skirt backs and chair seats were similar. The skirt area was unable to be evaluated for sample # 1.9 due to the fact that only remnants were available; therefore it was classified as "N/A" on the checklist.

Table 11.
Frequency Tabulations for Line Path
(Women's Dress Fashions- Skirt Backs)

STRAIGHT	7
CURVED-RESTRAINED	8
CURVED-FULL	8
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	2
OTHER-SCALLOPED	2
OTHER-ZIGZAG	0
OTHER-CRIMPED	0

Table 12.
Frequency Tabulations for Line Path
(Chairs- Seat/Seat Rail)

STRAIGHT	4
CURVED-RESTRAINED	6
CURVED-FULL	6
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	3
OTHER-SCALLOPED	1
OTHER-ZIGZAG	0
OTHER-CRIMPED	0

Restrained curves were dominant within both data sets for skirt fronts and chair front legs (see Tables 13-14). Straight lines occurred twice as much in the dress data set than for chairs. Only two of the chairs featured front legs with a straight line path, instead most of the legs featured restrained curves. Chair legs actually featured slightly more full curves than straight lines. Skirt fronts featured the least amount of full curved lines. The skirt area was unable to be evaluated for sample # 1.9 due to the fact that only remnants were available; therefore it was classified as "N/A" on the checklist.

Table 13.
Frequency Tabulations for Line Path (Women's Dress Fashions- Skirt Fronts)

STRAIGHT	8
CURVED-RESTRAINED	9
CURVED-FULL	4
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	0
OTHER-SCALLOPED	4
OTHER-ZIGZAG	0
OTHER-CRIMPED	0

Table 14.
Frequency Tabulations for Line Path (Chairs- Front Legs)

STRAIGHT	4
CURVED-RESTRAINED	7
CURVED-FULL	5
OTHER- JAGGED	0
OTHER-LOOPED	0
OTHER-WAVY	0
OTHER-SCALLOPED	0
OTHER-ZIGZAG	1
OTHER-CRIMPED	0

Findings: Line Direction

Data analysis results showed equal frequencies for both vertical and horizontal lines within the chairs data set, and similar frequencies for women's dress fashions, with vertical lines dominant (see Tables 15-16). The observation of diagonal lines was equal in frequency for both data sets and least observed for both. Vertical lines were also dominant for women's dress fashion bodices and chair backs (see Tables 17-18).

Table 15.
Total Frequency Tabulations for Line Direction (Women's Dress Fashions)

VERTICAL	35
HORIZONTAL	30
DIAGONAL	18

Table 16.
Total Frequency Tabulations for Line Direction (Chairs)

VERTICAL	28
HORIZONTAL	28
DIAGONAL	18

Table 17.
Frequency Tabulations for Line Direction (Women's Dress Fashions- Bodices)

VERTICAL	9
HORIZONTAL	7
DIAGONAL	7

Table 18.
Frequency Tabulations for Line Direction (Chairs- Backs)

VERTICAL	10
HORIZONTAL	9
DIAGONAL	6

Vertical lines were observed in all of the dress sleeves, but only in half of the chair arms (see Tables 19-20). Horizontal lines occurred second most frequently in both data sets. Diagonal lines were the least observed in both data sets. Three chairs (#2.3, #2.6, #2.8) did not feature arms at all, and were simply noted as "N/A" on the checklist in this section.

Table 19.
Frequency Tabulations for Line Direction (Women's Dress Fashions- Sleeves)

VERTICAL	10
HORIZONTAL	7
DIAGONAL	4

Table 20.
Frequency Tabulations for Line Direction (Chairs-Arms)

VERTICAL	5
HORIZONTAL	4
DIAGONAL	2

Horizontal lines were most dominant in the chair seat/seat rail area, while skirt backs featured an equal frequency of horizontal and vertical lines (see Tables 21-22). Vertical lines were dominant in chair front legs, while skirt fronts featured an equal frequency of horizontal and vertical lines (see Tables 23-24). Diagonal lines were observed the least (see Tables 21-24).

Table 21.
Frequency Tabulations for Line Direction (Women's Dress Fashions- Skirt Backs)

VERTICAL	8
HORIZONTAL	8
DIAGONAL	4

Table 22.
Frequency Tabulations for Line Direction (Chairs-Seat/Seat Rail)

VERTICAL	6
HORIZONTAL	9
DIAGONAL	6

Table 23.
Frequency Tabulations for Line Direction (Women's Dress Fashions- Skirt Fronts)

VERTICAL	8
HORIZONTAL	8
DIAGONAL	3

Table 24.
Frequency Tabulations for Line Direction (Chairs-Front Legs)

VERTICAL	7
HORIZONTAL	6
DIAGONAL	4

Findings: Line Edge

Tables 25-26 provide the *total* frequency tabulations for line edge as observed in women's dress fashions and chairs. Sharp lines were dominant in both data sets. All samples for women's dress fashions featured sharp lines in the bodice area, and all chairs featured sharp lines in the back area. About half of the samples for each also featured additional lines that were fuzzy. More sharp lines than fuzzy lines were observed for both samples in the skirt back and chair seat/seat rail areas. All samples for women's dress fashions featured sharp lines in the sleeve area, while only half of the samples for chairs featured sharp lines in the arm area. Although more sharp lines than fuzzy lines were seen in dress skirt fronts, only sharp lines were observed in chair front legs. The frequency count totals for both data sets were fairly close in the numbers observed for sharp versus fuzzy lines.

Table 25.
Total Frequency Tabulations for Line Edge (Women's Dress Fashions)

SHARP	36
FUZZY	16

Table 26.
Total Frequency Tabulations for Line Edge (Chairs)

SHARP	33
FUZZY	14

Findings: Shape

Geometric unequally sided shapes dominated for both data sets, however organic shapes were seen frequently for chairs, while considerably less for dresses (see Tables 27-28). Chairs featured just as many geometric equal-sided shapes as unequal-sided. Of the geometric unequally sided shapes, rectangles were seen most frequently for both data sets. Circles were also fairly close in frequency counts for both data sets. The most dominant shape in chairs was organic shapes categorized as "other". "Floral/foliage" organic shapes were also seen in high frequency.

Rectangular shapes were observed within both data sets and were primarily elongated in shape. Circles and ovals were also featured in both data sets. Chair backs featured a significantly higher number of organic shapes with an equal number of those designated as “floral/foliage” as those categorized as “other”.

Differences within the data sets include the fact that shapes for dress bodices were more evenly distributed within a wide variety of shapes. Squares and diamonds were more frequently observed in chairs, while triangular shapes (specifically equilateral and isosceles) and ovals were more common in dresses. Trapezoid and square shapes were common in chairs, while none of the women’s dress fashions featured this shape. Diamond shapes also appeared in the chairs data set, and were lacking in the women’s dress fashions data set. The majority of women’s dress fashions featured the isosceles triangular shape, while none were featured in chairs. Women’s dress fashions also featured a high frequency of equilateral triangles, while none were observed in chairs.

It should be noted that there were a few instances when no two-dimensional, flat shapes were observed within some parts of the objects. This was due to lack of pattern in the fabric, no flat shapes created by structural embellishments, or lack of carved patterns on the wood surfaces. These include: three chairs in the front leg area (#2.6, #2.7, #2.8), two dresses in the sleeve area (#1.7, #1.8), three dresses in the skirt back area (#1.2, #1.4, #1.8), and one dress in the skirt front area (#1.8). In addition, three of the chairs (#2.3, #2.6, #2.8) did not feature arms, therefore no shapes were observed for the “arms” category.

Other shapes in the women’s dress fashions data set that appeared at lower frequencies and are not discussed here are: squares, diamonds, scalene triangles, and marquis. The chairs

data set also featured a number of shapes at lower frequencies which include: teardrops, paisleys, equilateral and scalene triangles, marquis, pears, and kidney shapes.

It should also be noted that certain shapes did not appear at all in the data sets. For women's dress fashions, these included: parallelogram, trapezoid, teardrop, pear, paisley, kidney, pentagon, hexagon, octagon, heart, ogive, star, club, and spade shapes. For chairs, these include: pentagon, hexagon, octagon, isosceles triangle, parallelogram, heart, ogive, star, club, and spade shapes. Also, many shapes on the checklist were not observed at all for either of the data sets. These included: pentagon, hexagon, octagon, heart, ogive, star, club, and spade shapes.

No association was found for shapes observed within dress bodices and chair backs. Dress bodices featured a wide variety of shapes, with the highest frequency of equilateral triangles. On the other hand, chair backs featured mostly organic shapes, with circles and rectangles both the next highest frequencies.

Moderate associations were seen for shapes observed in dress sleeves and chair arms. Dress sleeves featured a wide variety of shapes, with the highest frequency of both organic shapes and equilateral triangles. Chair arms featured the most organic shapes, specifically those categorized as "other." Moderate associations were also seen in the shapes observed in skirt backs compared to chair seats/seat rails. Rectangles were dominant within both data sets, although chair seats/seat rails also exhibited an equal number of organic shapes categorized as "floral/foliage," while skirt backs did not.

Strong associations were observed for shapes in skirt fronts when compared to chair front legs. Both featured a dominance of rectangular shapes. Skirt fronts also featured an equal frequency of organic shapes, and front legs—although organic shapes were not equally observed, they were close in frequency.

Table 27.
Total Frequency Tabulations for Shape (Women's Dress Fashions)

GEOMETRIC UNEQUALLY SIDED	35
GEOMETRIC EQUAL-SIDED	22
ORGANIC	16

GU	RECTANGLE	16
GE	EQUILATERAL TRIANGLE	11
GE	CIRCLE	9
O	FLORAL/FOLIAGE	9
O	OTHER	7
GU	OVAL	7
GU	ISOSCELES TRIANGLE	7
GE	SQUARE	2
GU	DIAMOND	2
GU	SCALENE TRIANGLE	2
GU	MARQUIS	1

Table 28.
Total Frequency Tabulations for Shape (Chairs)

GEOMETRIC UNEQUALLY SIDED	38
GEOMETRIC EQUAL-SIDED	38
ORGANIC	20

O	OTHER	20
GU	RECTANGLE	18
O	FLORAL/FOLIAGE	18
GE	CIRCLE	12
GE	SQUARE	7
GU	DIAMOND	5
GU	TRAPEZOID	4
GU	OVAL	3
GU	TEARDROP	2
GU	PAISLEY	2
GE	EQUILATERAL TRIANGLE	1
GU	SCALENE TRIANGLE	1
GU	MARQUIS	1
GU	PEAR	1
GU	KIDNEY	1

Findings: Form

Geometric unequally sided forms dominated in both data sets, although slightly more were observed in women's dress fashions (see Tables 29-30). Geometric equal-sided forms were the next highest frequency recorded within both data sets, however, significantly fewer were observed for women's dress fashions compared to those that were geometric equal-sided forms (the same can be noted for organic forms). Trumpet forms dominated in women's dress fashions, while spheres were the highest frequency count recorded in chairs, with box forms also close in frequency. Both trumpet and hourglass forms appeared within both data sets, although they were the first and second (respectively) highest recorded frequencies for women's dress fashions. Both data sets also included cylinder forms.

Table 29.
Total Frequency Tabulations for Form (Women's Dress Fashions)

GEOMETRIC UNEQUALLY SIDED	44
GEOMETRIC EQUAL-SIDED	6
ORGANIC	4

GU	TRUMPET	17
GU	HOURGLASS	10
GU	PYRAMID	9
GU	CYLINDER	8
GE	SPHERE	6
O	OTHER	4

Table 30.
Total Frequency Tabulations for Form (Chairs)

GEOMETRIC UNEQUALLY SIDED	31
GEOMETRIC EQUAL-SIDED	14
ORGANIC	11

GE	SPHERE	9
GU	BOX	8
O	FREEFORM CURVES	6
GU	HOURGLASS	5
GU	TRUMPET	5
GE	CUBE	4
GU	CYLINDER	4
GU	OVOID	4
GU	BARREL	2
GU	BELL	2
O	DOME VARIATION	2
O	OVOID VARIATION	2
GU	DOME	1
O	OTHER	1

Moderate associations were found for forms observed in dress sleeves and chair arms. Dress sleeves featured a dominance of cylinder forms, while chair arms featured more box forms. Chair arms did however feature a high frequency of cylinders, although they were not the dominant form. Moderate associations were found for forms observed in dress skirt backs and chair seats/seat rails. Dress skirt backs featured a dominance of pyramidal forms, while chair seats/seat rails featured a wider variety of forms. It should be noted that trumpet forms were observed in chair seats, although they were not the dominant form.

No associations were found for forms observed in dress bodices and chair backs. Dress bodices featured a dominance of hourglass forms, while chair backs featured a wider variety of forms, with none being overly dominant. It should be noted that both spheres and hourglass forms were observed within both data sets. No association was found for forms observed in dress

skirt front and chair front legs. Dress skirt fronts featured a dominance of trumpet forms, while chair front legs featured a wider variety of forms, and did not feature any trumpet forms.

Figure 1. White Cotton 2 Piece Dress, Sample #1.1

Figure 2. Light Brown Patterned 2 Piece Dress, Sample #1.2

Figure 3. Brown with Green Striped 2 Piece Dress, Sample #1.3

Figure 4. Ecru Long Trained Dress, Sample #1.4

Figure 5. Peacock Blue 2

Figure 6. Blue Silk 2 Piece

Figure 7. Cream Circular Trained Gown, Sample #1.7

Figure 8. Black Cotton Dimity 2 Piece Dress, Sample #1.8

Figure 9. Marigold 2 Piece Dress, Sample #1.9

Figure 10. Blue with Sunflower Print 2 Piece Dress, Sample #1.10

Figure 11. Reclining Armchair, Sample #2.1
Image Used Courtesy of the High Museum of Art, Atlanta.
(1982.314) Virginia Carroll Crawford Collection

Figure 12. Wakefield Wicker Rocker, Sample #2.2
Image Used Courtesy of the High Museum of Art, Atlanta.
(1984.375) Gift of Loran Cash in Memory of Michael L. Botts

Figure 13. Herter Brothers Side Chair, Sample #2.3
Image Used Courtesy of the High Museum of Art, Atlanta.
(1982.316) Virginia Carroll Crawford Collection

Figure 14. Eastlake Style Slipper Chair, Sample #2.4

Figure 15. Renaissance-revival Upholstered Armchair, Sample #2.5

Figure 16. Gold Striped Slipper Chair, Sample #2.6

Figure 17. Campaign Hall Chair,
Sample #2.7

Figure 18. Upholstered and Trimmed Side Chair,
Sample #2.8
Image Used Courtesy of the High Museum of Art, Atlanta.
(1984.117) Virginia Carroll Crawford Collection

Figure 19. Thonet Bentwood Rocker, Sample #2.9
Image Used Courtesy of the High
Museum of Art, Atlanta.
(1999.126) Gift of Sara and Paul N. Steinfeld

Figure 20. Upholstered Rocker,
Sample #2.10

Figure 21. Blue Silk 2 Piece Dress,
Sample #1.6

Figure 22. Gold Striped Slipper Chair, Sample #2.6

CHAPTER 5

DISCUSSION

Horn and Gurel (1981) underline the universality of the elements of design, noting that they can be applied across disciplines. This was found to be true during the process of data collection, as elements of design were observed within both women's dress fashions and chairs. Therefore, the use of the elements of design as an aesthetic framework to visually characterize the objects was appropriate.

Line

Horn and Gurel (1981) note that line functions to outline silhouettes and divide space, with the human eye connecting points to form lines when the line is broken. This was observed for both data sets, with restrained curved lines often describing the silhouettes of objects, and rows of buttons in dress bodices resulting in implied lines. DeLong (1998) confirms that line can be observed in dress construction details, the human body, and its silhouette. DeLong specifically mentions pleats and rows of buttons as interpretations of line in dress, both of which were observed in the women's dress fashions data set. Davis (1980) also mentions pleats and notes how structural embellishments and garment edges can also form lines. A notable observation is that fabric patterns within both data sets featured a combination of horizontal, vertical, and diagonal lines.

A significant finding was that the majority of the objects within both data sets featured a combination of the major line types (straight, restrained curves, full curves). Because of this, the notes made during the process of data collection were important contributors to the research

findings. These notes helped facilitate understanding of how women's dress fashions and chairs of the period interpreted the elements of design (see Appendix H-M).

Overall, restrained curves were dominant in women's dress fashions and chairs. The fact that a slightly higher frequency were observed in women's dress fashions may be explained by the fashionable hourglass silhouette of the period, as well as the fact that the dresses were both designed and functioned to encase the human form. The abundance of detail (specifically surface embellishments) also likely accounted for a dominance of restrained curved lines in women's dress fashions.

Horn and Gurel (1981) note that restrained curves are associated with gracefulness and gentleness. These are characteristics most often ascribed to women. This finding of a dominance of restrained curves in women's dress fashions is not at odds with what we know about the Victorian period and its emphasis on ideal femininity. Wilson and Taylor (1989) observe that femininity was a key symbol in the lives of Victorian women with their "fragile looks," "housebound lives" and "moralistic restrictions" (p. 25).

Other links exist between curves and femininity. Gordon (1996), writing about the mid-nineteenth century, notes how the "soft, round look" of the ideal woman was seen in the home through the "abundance of softening fabric and an emphasis on rounded edges and smooth curves" (p. 296). An obvious example of the association between curves and femininity is the restrained curved lines of hourglass forms of the silhouette of the ideal woman of the nineteenth century, aided by corsets and boning of bodices.

Restrained curves were observed in women's dress fashions through the overall silhouette achieved by the fabric and in some cases, gathers, contributed to this effect in skirt backs. Restrained curves in bodices frequently took the form of the overall hourglass silhouette,

pattern details, outline of lapels, and structural embellishments such as gathers, darts and pleats. Restrained curves in chairs were seen in the overall silhouette of the frame of the back, carvings and incised lines of the wood. In addition, upholstery pattern details often featured floral/foliage motifs of curved lines. Restrained curves were also dominantly observed in women's dress sleeves. The sleeve styles of the dresses included the coat sleeve, leg of mutton, bishop, and kick-up. For chair arms, restrained curves were seen in the overall outline and details such as incised lines and carvings.

Skirt backs featured restrained curves primarily interpreted through the overall outline and draped fabric treatments. Restrained curves in the chair seat/seat rail area were interpreted through the overall outline (often aided by upholstery that softened the edges slightly), upholstery patterns, and seat rail details such as incised lines and carvings. Seats with restrained curves were seen through the overall outline, also aided by the fullness of the upholstery. Skirt fronts featured a dominance of restrained curves for the silhouette. Chair front legs primarily featured restrained curves through the leg styles such as cabriole and rocker gliders. Pina (2003) confirms that the cabriole leg has a "slightly S-curved form" (p. 391).

Full curves in bodices were seen in fabric patterns, lace, or the neckline/collar area. Full curves in chair backs were seen in details of the upholstery pattern motifs, details of the frame, and particularly the crest rail detail (spindles and carvings). Significantly less full curves were seen in dress sleeves compared to chair arms. This was likely due to the fact that sleeve styles of the 1880s did not feature a lot of fullness and rounded edges, and instead featured a slight, sloped curved line through the popular fitted, coat sleeve style. Full curves were also seen at the same frequency for chair arms and were interpreted in the detail of carvings, roundels, and scrollwork

which terminated the ends of the arms. Chair arms also featured full curves in the upholstered arm rests and rocker style arms.

A noteworthy observation is that full curves in women's dress fashions were mostly seen in the skirt back area—a finding not surprising, as Gernsheim (1981) notes that women of the period "were turning eagerly to the development of curves with the aid of the bustle" (p. 60). In skirt backs, full curves were seen mainly at the upper part of the skirt where extra fullness was aided by gathers and voluminous fabric yardage to accommodate the bustle. Full curves were also seen in the train or through drapery puffs at the sides of the skirt as in one case. These full curves, achieved through the use of the bustle, are body subordinate—as they mask the true form of the wearer. In light of this, it is interesting that Horn and Gurel (1981) assert that curved lines actually de-emphasize the body's contours.

Chair seats mainly featured full curves in the upholstery pattern details or in the seat rail detailing. Skirt fronts actually featured the least amount of full curved lines, and were only seen in surface embellishments such as rosettes and pattern details. The fact that chair legs featured slightly more full curves than straight lines was likely due to the popular use of turning in chair legs. Miller (2005) confirms that chairs of the period often featured such elaborate turning.

Straight lines, although not dominantly observed for both data sets, helped to convey feelings of stiffness, severity, rigidity, and precision (Horn & Gurel, 1981). Straight lines in chairs were observed in the outline of the wood frame, at the back rail or crest rail, and in details such as the trim and incised lines. Examples of this in women's dress fashions included structural embellishments such as darts, pleats, pattern details, and closure lines. The straight lines served to balance the feminine curves of the bustle, draped and puffed sections of the skirt, and puffed sleeves. Perhaps more straight lines would be observed in dresses of the later part of the 1880s,

as Gernsheim (1981) notes that skirts after 1887 featured a straighter line and often omitted the horizontal trimming and drapery. A few of the dresses (#1.1, #1.8, #1.10) fit this description and are likely dated from the later part of the decade.

Straight lines in dress bodices were seen in pattern details, closure lines, and structural embellishments such as darts and pleats. Straight lines in chairs were observed in the overall outline of the wood frame, at the back rail, crest rail, as well as in details such as the path of trim and incised lines. For dresses, sleeve cuffs often featured straight lines or the fabric patterns featured straight lines. Some of the chair arms featured straight lines in the overall outline or incised line details. Straight lines in skirt backs were primarily seen in pleats and gathers throughout the skirt, or concentrated at the hem in panels. Chair seats featured straight lines through the outline of the upholstery sides. Skirt fronts featured straight lines through pleats, pattern motifs, and details concentrated at the hem.

Gordon (1996) notes that the “scalloped edgings and fringes” of valances “echoed the undulating edges” of women’s skirt trims (p. 296). Both data sets featured scalloped lines in applied trimmings, particularly the pleated edges of hems on skirt backs and those at the seat rail of chairs. Two women’s dress fashion bodices featured scalloped lines in the lace detail at the collar, and five chair backs featured wavy lines (most frequently through the trim).

A basic finding was that most objects featured a combination of both vertical and horizontal line direction. Also, a variety of vertical, horizontal, and diagonal lines were observed in the pattern details of dress bodices. The fact that chairs featured more horizontal lines than women’s dress fashions may be related to the use of common design features (seat rail, back rail, and crest rail) which necessitate a horizontal line direction.

As noted in the review of literature, vertical lines had the effect of lengthening the object (Davis, 1980). Vertical lines in chair backs and front legs are examples of how this was achieved. Chair backs most often featured vertical lines through the exaggerated tallness of the back, particularly through the wood frame. Vertical lines were largely seen in dress bodices in structural embellishments such as gathering, pleating, shirring, and darts. Rows of buttons for front closures were also a common observation of vertical line in dress bodices. Dress skirts featuring vertical lines through structural embellishments emphasized tallness, indicating that vertical lines placed upon the body "may reinforce body verticality" (DeLong, 1998, p. 177). This emphasis on verticality is confirmed by Gernsheim's (1981) observation that women during the second half of the 1880s appeared "aggressively erect…" (p. 68).

The data analysis findings also indicated a strong association for vertical line direction in dress sleeves and chair arms. Vertical lines in sleeves were seen in every dress sample due to the basic sleeve styles of the period—which were usually a long, fitted coat style with a slight downward slope from the elbow bend. Vertical lines were also dominantly observed in the general direction of chair arms.

Vertical lines were dominantly observed for chair front legs, a finding likely a result of the fact that the popular cabriole leg style follows a vertical line direction. Vertical lines in skirt backs were interpreted most often through gathers and pleats. Chair seats exhibited vertical lines through a variety of ways, particularly in the sides of the upholstered seat or wood frame, and upholstery pattern motifs such as stripes. Vertical lines were seen in skirt fronts through pleats and fabric pattern motifs.

As noted in the review of literature, horizontal lines reinforced the illusion of width (Horn & Gurel, 1981). Horizontal lines were mostly interpreted in dress bodices through the

neckline, collar, seams, and in skirts through details towards the bottom or at the hem. DeLong (1998) notes that horizontal lines "…may divide the body into a series of sections…." (p. 177), an observation that can be seen in the illusion of different sections created by the use of seams throughout the dresses and the detail of skirt hems.

For chair backs, the seat rail, back rail, and crest rail often exhibited a horizontal line direction, often emphasized by an upholstered inset at the back. The fact that approximately the same number of chair backs exhibited vertical lines and horizontal lines indicates that no particular decorative style dominated—as both low, wide back and tall balloon-back styles were seen. Miller (2005) confirms the existence of various decorative styles in chairs, noting that chair design had never been more diverse than in the late nineteenth century. Horizontal lines in dress sleeves were primarily interpreted through the direction of the cuffs or the overall fabric pattern. Horizontal lines in chair arms were primarily seen in the detail of the incised lines of the wood.

Horizontal lines in skirts were primarily observed at the hem, functioning to reinforce the slight flare of the skirt towards the bottom, which also helped to define the skirt as a trumpet form. Horizontal lines in skirt backs were interpreted in the details at the bottom of the skirt, such as the decorative trimmed panels at the hem or train. As noted previously, horizontal lines were observed in the low, wide seats of chairs and direction of the crest rail and seat rail. Horizontal lines were observed in skirt fronts in the fabric patterns and decorative panels at the skirt hems. For chair front legs, horizontal lines appeared in the detail of turning and the general direction of rocker gliders.

Diagonal lines, which are associated with movement and therefore contribute an "active, somewhat unstable quality" (Horn & Gurel, 1981, p. 294), were observed least often within both women's dress fashions and chairs. This finding is not surprising based on the characterization of

Victorian women as rather immobilized by their dress and inherently linked to the home, functioning as a calming source of stability in the midst of rapid, growing technological change of the outside world. Flanders (2003) notes that women and the home were together viewed as "…the source of refuge and retreat" and of "strength and renewal" (p. 5). M. Taylor (2006) uses the term "conceptual conflation" to describe woman's close connection to the home during the period, and Gordon (1996) confirms that between 1875 and 1925, this connection was particularly strong.

Diagonal lines appeared in dress bodices most often through darts that followed the body's contours, the pointed deep "V" of the bottom of bodices, and details of the lapels or neckline. Diagonal lines in chair backs, when they appeared, manifested in a variety of ways—mainly through incised lines in the wood frame, but also through lattice work, tufting, diagonal slope, and organic pattern details. Pina (2003) confirms the observation that tufted upholstery on seating of the period resulted in a linear quality through "the lines connecting the buttons…" (p. 135). Diagonal lines in dress sleeves were only seen in details of the cuffs, or as in one case—through gathers at the shoulder. Diagonal lines in chair arms were only observed in arms featuring a slight outward slope (#2.5, #2.10).

Diagonal lines in dress skirt backs, when observed, took the form of gathers, tiers, and pattern details. Diagonal lines in chair seats were interpreted in a variety of ways including details of the upholstery such as pattern or tufting, decoration at the seat rail, or the slight outward curve of the seat. Diagonal lines in skirt fronts when seen, took the form of asymmetrical detailing, darts, and fabric pattern detail. Diagonal lines in chair front legs, when seen, were interpreted primarily through X-shapes in wood carvings or formed by the intersection of the legs.

Diagonal lines attribute an active quality and are representative of movement (DeLong, 1998), while horizontal lines "…parallel objects at rest or repose" (Horn & Gurel, 1981, p. 293), and suggest quietness and passivity (Davis, 1980). In light of this contrast, there may be a connection between the observation of more diagonal lines in the top half of women's dress fashions (bodice and sleeves) as compared to the bottom half (skirt front and back). Gernsheim (1981) observes that "the combination of plain, tight bodice and complicated skirt" gave a 'plain above, fancy below' appearance" (p. 68). This description can also be applied to the tailor made garment, which lent a masculine, active quality to women's dress, and became popular beginning in the 1880s as women began leading more active lifestyles. Kidwell and Christman (1974) note that by the 1870s, more women began venturing outside the home—often pursuing education or work. On the contrary, the heavy, elaborately draped nature of bustled skirts were representative of traditional notions of femininity—leisurely lifestyles confined to the home, where a woman's only concern was the embodiment and display of beauty. Blanchard (1995) indicates that Aesthete's rejection of the fashionable bustle was also a "symbolic rejection of domestic confinement" (p. 31).

DeLong (1998) notes that hard (sharp) edged lines can be enhanced by smooth, unfilled surfaces, and are often perceived as angular and decisive. This proved to be true as sharp edged lines were observed primarily in unfilled or undecorated surfaces that were smooth, or were interpreted in simple, angular lines. This may explain why surfaces that lacked detail and featured simple lines (such as chair front legs) were designated as sharp edged, while highly embellished surfaces were not.

Sharp edged lines dominated within all parts for both women's dress fashions and chairs. Sharp lines were most commonly observed in dresses through structural embellishments such as

pleats and darts, as well as details of fabric patterns. Sharp lines in chairs were very often linked to the material of wood (as opposed to fabric), and were seen in the incised lines or carvings. When observed in fabrics, the borders of the upholstery were the most common interpretations of sharp lines.

Sharp lines appeared in dress bodices mainly through details of structural embellishments. Sharp lines appeared in chair backs due to the wood medium of the frame which offered simple, easily distinguishable lines. All samples for women's dress fashions featured sharp lines in the sleeve area through overall simplicity of the outline. Only half of the samples for chairs featured sharp lines in the arm area through overall simplicity of the wood frame outline and incised lines. Although more sharp lines than fuzzy lines were seen in dress skirt fronts, only sharp lines were observed in chair legs. The reason for this was likely the primary use of wood as the medium, which usually lends simplicity of line, versus patterned upholstery that was featured in other parts of the object.

DeLong (1998) notes that soft, or fuzzy edged lines are associated with lines that are curving, indistinct, and blurred; and are often accompanied by filled or textured surfaces or transparency. This was also observed to be true, as indistinct lines of patterns, surface embellishments, and complicated fabric draperies resulted in fuzzy edged lines. It is surprising however, that in light of the dominance of curved lines and surface embellishments in the objects, fuzzy lines did not dominate.

Fuzzy lines were primarily observed in both data sets when there was an abundance of detail in the fabric pattern or the pattern was a monochromatic color scheme. When fuzzy lines were observed in the dress sample it was usually due to abundance of detail concentrated in that area or lines of fabric patterns that were slightly undistinguishable such as lace, ribbed, or raised

detail of cotton pile. Fuzzy lines in chairs often resulted from complicated upholstery details, trimmings, or an abundance of detail (such as complex carvings) concentrated within a single area.

DeLong (1998) theorizes an association between curved and soft (fuzzy) edged lines, which are often used in eveningwear, with the fact that the dresses are worn for events which "…encourage visual lingering" (p. 182). Restrained curved lines were dominant in the dresses, and those with trains also featured curved lines in the overall outline. Some trains also featured fuzzy edged lines in the lace trim. There certainly may be an association between visual lingering enhanced by curved, fuzzy lines. I would argue that most of the dresses of the period (not just those designated for evening), because they feature a dominance of curved lines, may encourage such visual lingering.

DeLong's (1998) theory of visual lingering recalls the idea of women as objects to be admired, under the subjection of the male gaze. Saisselin notes that women of the late nineteenth century, "…installed in sumptuous interiors and admired for their beauty as living *objets d'art,* began to be idealized as consummate *bibelots*—exotic trinkets, or art objects—which, like the prizes of the collector, existed to be touched, and so, possessed" (as cited in Hartzell, 2009, p. 66). To the Victorian woman, the embodiment and impartation of beauty was an important endeavor. Steele (1985) asserts that being beautiful was considered woman's first duty to society.

Shape

Bevlin (1994) notes that geometric shapes dominate human construction. The dominance of geometric shapes indicated that this was true for women's dress fashions and chairs, both of which are products of human design. Horn and Gurel (1981) list lapels, outlines, and the spaces

created by seam lines and darts as examples of shape in clothing—all of which were observed in women's dress fashions in the sample. Lapels often exhibited triangular or organic shapes, and the spaces created by seams or darts often resulted in the appearance of rectangular panels. Rectangular shapes were observed within both data sets and were primarily elongated. In women's dress fashions, rectangles were seen in various ways such as hems panels, fabric patterns, knife pleats, sleeve cuffs, structural embellishment panels, and tiers. In chairs, rectangles appeared in the detail of the back rail, seat rail, or armrests, as well as in incised lines or carvings of the wood frame.

In women's dress fashions, bodices featured circular shapes in buttons and necklines. Skirt trains were also a source of circular shapes in women's dress fashions. Other ways in which circles appeared in women's dress fashions included rosette embellishments and fabric patterns (lace and netting detail). Chairs featured circles in the deep buttoning of upholstery, beading, scrollwork, inlays, carvings, and the shape of ears at the back frame. Ovals were only seen in the fabric pattern details of women's dress fashions and the shapes of chair backs, armrests, and details of carvings.

According to DeLong (1998), shapes can serve as the focus of visual interest in the object if they are "distinctly defined" in surface or edges, isolated, simple in outline, and feature continuous edges that do not overlap (p. 190). Shapes were more difficult to identify in women's dress fashions due to the abundance of structural and surface embellishments, which usually lacked simple outlines and defined edges, were not isolated, and often overlapped. Shapes were more easily identifiable when featured in fabric patterns of women's dress fashions and chairs, and within chairs overall.

DeLong (1998) also notes that geometric shapes can be simpler to perceive than organic shapes, due to our familiarity with them. This may explain why more geometric than organic shapes were identified. Organic shapes in women's dress fashions and chairs certainly made the process of identifying them more difficult. Organic shapes categorized as "other" were primarily observed in women's dress fashion bodices, particularly at the center or lapels. These shapes were also observed in the bows of sleeves, structural embellishment panels, and lace details. "Floral/foliage" organic shapes within women's dress fashions were primarily observed within fabric patterns. The majority of "floral/foliage" organic shapes in chairs described upholstery patterns, while those categorized as "other" were also interpreted in carvings and incised lines.

DeLong (1998) indicates that the repetitive use of organic shapes can create feelings of "disorder" and "excitement" (p. 192). The presence of organic shapes (often interpreted in the varied combination of surface and structural embellishments) in women's dress fashions of the period, evokes more feelings of disorder than order. According to Crochet (1999) the abundant use of embellishments in Victorian interiors "visually tantalized" the senses (p. 200). Gordon (1996) draws a comparison between the "eclectic," "fragmented" interior and the fact that "detailing on women's clothes in the 1880s was at its most complicated and ornate" (p. 297).

Form

Because geometric forms generally mask the body's contours (Horn & Gurel, 1981), it makes sense that they were dominantly observed in women's dress fashions of the period, as they are body subordinate in nature. Chair arms featured more box forms than dress sleeves, a difference that may be explained by the fact that chair arms do not literally encase the human form (arms), as sleeves do. Both skirt backs and chair seats exhibited a high frequency of

trumpet forms, although it was not the dominant form for either (skirts featured more pyramidal forms, and chair seats more sphere forms due to details such as turning).

Trumpet forms in dress were seen in the silhouette of both the skirt back and front, emphasized by the outward flare towards the bottom and hem details such as panels, trim, godets, and trains. The skirt was not recognized as a bell form because the sides were more straight than full and rounded, and the overall effect was more vertical than horizontal. It was not identified as a cone form due to the restrained curves of the fabric draperies that softened the A-line silhouette of the skirt. For chairs, trumpet forms (often inverted) were observed in the seat or back areas. Hourglass forms in women's dress fashions appeared in the overall silhouette of the bodice, enhanced by the use of darts and interior boning. For chairs, hourglass forms were observed in the overall silhouette of the back or details of wood turning throughout.

Cylinders in women's dress fashions were a primary observation for most of the sleeve outlines, particularly the upper portion of the sleeve before the elbow bend. Chairs, particularly those with upholstered armrests, featured cylinder forms as well. Chair front legs also exhibited cylinder forms. Spheres were only observed in dress bodices in standing collars. In chairs, spheres were interpreted more literally and in a variety of ways including turning, spindles, finials, roundels, and trimmings.

It should be noted that the side view of the skirt area was also evaluated in the study, due to the significance of the bustle or back fullness in women's dress fashions of the period. The side view was evaluated under "skirt back" in the checklist, and was primarily observed as a pyramidal form, due to the fullness at the top of the skirt back which projected out into an angular form, combined with the flat front of the skirt.

The observation of angular, pyramidal forms in skirts of women's dress fashions of the period makes sense in light of what is written about the evolution of the bustle during the late nineteenth century. Tortora and Eubank (2005) note that the latter part of the 1880s saw the return of "large, rigid, shelf-like bustles" which appeared more constructed than before (p. 332). Literature observes that this mid-1880s bustle was more angular and horizontal in projection than before (Boucher, 1987; Olian, 1997).

The pyramidal form of skirts is also confirmed by Blum (1974), who observes that the silhouette of the bustle of the mid 1880s had a harder edge than that of the earlier period, noting that from the side "… it appears to be a small triangle set forward on a very large square" (p. 149). What Blum (1974) is really referring to is form—since it is three-dimensional (not shape, which only includes flat, two-dimensional surfaces). Because of this, the skirt back is primarily classified as a pyramidal form, not a triangular shape.

Differences within forms observed in data sets include the dominant observation of pyramidal forms in the side view of the skirt back for women's dress fashions, while no pyramidal forms were observed in chairs. Also, a significant variety of forms were observed in chairs but not in women's dress fashions such as: boxes, cubes, ovoids, barrels, bells, trumpet/cube variations, domes, as well as other variations.

Box forms in chairs were observed in the upholstery, wood frames, arms, and carvings. Cubes appeared primarily in chair backs, turning and spindles. Ovoid forms appeared in turning details, but also in carvings and arm forms. Organic "freeform curves" described cabriole or rocker legs of chairs. Barrel and bell forms appeared in turning details of the chair front legs. Some of the chair backs featured bell, ovoid variation, or dome variation forms. An interesting note is that cones were the only forms not observed within either data set.

The “other” category for organic forms described some of the forms observed in dress sleeves that were not coat sleeve styles, such as leg of mutton or kick-up sleeves. “Other” organic forms also described forms in the skirt front and skirt back areas when complicated drapery resulted in no other identifiable forms on the checklist. Chairs primarily featured “other” organic forms for the front legs.

In observing form in chairs of the period, whether or not the object was upholstered determined the degree to which it appeared three-dimensional. Pina (2003) confirms this—as she notes that the tufted upholstery of Victorian chairs “…affected the three-dimensional quality” (p. 135). The reclining armchair (#2.1) featured tufted upholstery with deep buttoning (see Figure 23). The women’s dress fashions appeared three-dimensional in the skirt area as a result of the fullness of the fabric at the back, as well as when the skirt featured complex draperies or puffs on the sides.

An observation derived from the data was that women’s dress fashions of the period, aided by back fullness, manipulation of fabric, or the bustle, resulted in a three-dimensional focus on form (versus two-dimensional shape). An example of when two-dimensionality of shape might be the focus would be women’s dress fashions of the 1920s, which aimed to flatten the body’s contours, and featured geometric shaped outlines and patterns. A side note regarding form is that for the skirt area, bell forms would likely be observed in women’s dress fashions of the Crinoline period of the mid-nineteenth century. Gernsheim (1981) too describes the skirts of the early 1860s as bell-shaped.

Design Modes

Furniture design from the nineteenth century onward became “polarized into machine-oriented and nature-oriented modes” (Ferebee, 1970, p. 10). Ferebee (1970) asserts that

"buildings and objects expressing either mode will be found to share a set of characteristics," specifically—objects made by machine "…tend toward geometric form and angular line", while objects that utilize hand-based techniques often exhibit "biomorphic forms," and curved lines (p. 10). These opposing modes and sets of characteristics are presented in a chart format (see Appendix N). In the context of the Victorian period, Ferebee (1970) designates the machine-oriented mode as "proto-functionalist" and nature-oriented mode as "picturesque." She also notes that wood and other natural materials, surface ornament, concealment of texture, and the use of historical-revival motifs often characterize the picturesque mode.

Many picturesque design qualities were observed for the chairs sample. Restrained curved lines dominated and organic shapes were observed just as frequently as geometric shapes. All chairs were constructed of either wood or wicker and exhibited ornamentation such as carvings, incised lines, inlays, patterns, and trimmings. Chairs often concealed the foundational texture of the wood frames through gilded finishes, upholstery, padding, and trimmings. Some of the chairs utilized historical-revival characteristics (specifically Renaissance, Empire, and Rococo). Picturesque design qualities were also observed in the women's dress fashions sample through the dominance of restrained curved lines, heavy use of ornamentation, and the concealment of texture through embellishments.

There was, however, also evidence of proto-functionalist design qualities in the chairs sample. Although restrained curved lines did dominate, straight lines were also observed and were not far behind in frequency. Geometric forms dominated, indicating a proto-functionalist link, and geometric shapes were observed just as equally as organic shapes. For the women's dress fashions sample, proto-functionalist qualities were also noted in the observation of straight lines and dominance of both geometric shapes and forms.

The fact that evidence of both proto-functionalist and picturesque design qualities were observed in the samples may reflect the technological climate of the period. During the 1880s, the mass-production of furniture had increased greatly, aided by technological developments of the Industrial Revolution, and fueled by the publics increasing desire for novelty. As a result, design reformers, typified by the Arts and Crafts Movement, criticized the use of the machine as a design mode. Whiton and Abercrombie (2002) confirm that the nineteenth century was characterized by the conflict between two opposing forces: "progress towards the future versus a retreat to the past; the charm of the handmade versus the efficiency of the machine-made; beauty versus usefulness" (p. 501).

This dichotomy of the hand-made versus machine-made also describes the design of women's dress fashions during the period. For the most part, women during the 1880s sewed their dresses at home or purchased them from dressmakers, due to the limitations of mass production (which mainly focused on outerwear, undergarments and menswear). By the end of the decade however, a wider variety and selection of ready made women's dress fashions began to be available (Kidwell & Christman, 1974). Perhaps there is a connection between the observation of both proto-functionalist and picturesque design qualities during a decade that experienced a shift in the availability of machine-made women's dress fashions.

Decorating Surfaces

The data analysis findings confirmed that "the embellished surface was the defining element of late nineteenth century American decorative arts" ([TFAOI], 2001)—an observation also found to be true in describing women's dress fashions. Both women's dress fashions and chairs of the period, as evidenced by those in the study sample, featured an abundant variety of structural and surface ornamentation. Examples of structural embellishments in women's dress

fashions included darts, pleats, gathers, shirring, and draping. Examples of structural embellishments in chairs included incised lines, carvings, beading, tufting, and turning. Surface embellishments observed in women's dress fashions included bows, ribbons, rosettes, beaded tassels, appliqués, lace, ruffles, tiers, and trim. Surface embellishments observed in chairs included continuous strip trim, tassels, upholstery, and draped textiles.

Much has been written about the persistence of surface decoration in fashion, furniture, and design of the Victorian period. Crochet (1999) notes that the Victorian interior "…exhibited ornamental detail on virtually every surface plane" and was in part defined by its superfluous use of ornament which "visually tantalized" the senses (p. 200). Russell (1983) also notes that the Victorian period was "…an age in which the inhabitants of a room were literally lost amidst a sea of layered decorative detail" (p. 382). Gordon (1996) compares the similarity of surface ornamentation of women's dress fashions and furniture during the period, noting that the complexly carved surface of furniture echoed the "dark bead embroidery that might adorn the surface of a fashionable gown" (p. 287).

Ferebee (1970) also confirms that "…the Victorian furniture designer concentrated on the surface of a thing at the expense of structure" (p. 25). The data analysis findings noted that surfaces of wood usually featured detailed ornamentation. Miller (2005) notes that gilt bronze and ivory and mother of pearl inlays were often used in furniture ornamentation to show off one's wealth and status. The Herter Brothers side chair (#2.3) is an example of this, as it features a gilt maple frame and mother of pearl inlay at the back rail (see Figure 24).

An important finding is that the process of discerning characteristics of the elements of design was often complicated due to the abundance of surface and structural decoration in both women's dress fashions and chairs of the period. This may explain why so many variations in

the elements of design were observed. The abundance of surface and structural embellishments resulted in major diversity of characteristics of line and shape within a single surface, and at times interfered with the perception of form. Cosbey et al. (2003), in their study of women's dress fashions from 1873 through 1912, found a positive association between increase in social role ambivalence and greater diversity in styles offered. This finding could also infer a positive association with the diversity seen in the characteristics of the elements of design observed in women's dress fashions of the period.

Another possible influence on the wide variety of the elements of design observed in the women's dress fashion sample may be related to the fact that machine-made lace became increasingly popular towards the end of the century, and was also available in pieces for embellishing dresses (Moore, 1949). This development contributed to the ease of using fancy embellishments in home dress-making, making more surface ornamentation possible, therefore increasing the potential variations in the characteristics of the elements of design.

Written sources (Payne et al., 1992) note that asymmetrical decoration in women's dress fashions was a popular design feature during the 1880s. An interesting observation is that none of the chairs featured asymmetrical decoration, indicating that this does not appear to be a shared feature between chairs and women's dress fashions of the period. It should be noted that the only potential display of asymmetry in chairs would likely be structural or surface embellishments, as the need to accommodate the human form necessitates the mirroring of its symmetry. Griffin and Collins (2007) confirm that in design for clothing, furniture, and interiors the "…basic instinct for form springs from necessity" (p. 103). The same is true for women's dress fashions, and it should be noted that only two dresses—the light brown patterned two-piece dress (#1.2) and the

brown with green striped ombré two-piece dress (#1.3) exhibited asymmetrical decoration through structural or surface embellishments.

M. Taylor (2006) observes that fabrics and trimmings were “transposed from the ‘decorated’ female body onto the interior” during the late- nineteenth century (p. 532). The upholstered and trimmed side chair (#2.8) is dressed with a draped textile piece at the top of the back that descends down the back of the chair, much in the same way that a shawl might be placed over the bodice of a woman’s dress (see Figure 25).

The Herter Brothers side chair (#2.3) also serves as an example of dressing through the use of surface embellishments (see Figure 24). Referencing the side chair, Peirce (1999) observes: "the exquisite craftsmanship, lush gilding, and sparkling inlaid mother-of-pearl give the effect of glittering jewelry” (p. 213). Peirce (1999) notes that “the center of the front seat rail features a central brooch-like setting for the largest circular mother-of-pearl inlay" (p. 213). His analogy of the embellishments as jewelry relates the idea of accessorizing chairs just as one might accessorize a dress.

The use of gilding and inlays in the Herter Brothers side chair also serves as an example of the display of conspicuous consumption. Gordon (1996) notes that both women’s dress and interior decoration of the home functioned to communicate the status or wealth of the men which owned them. Gordon (1996) uses the term “front” to describe the combination of women’s dress fashions and interior decorating and furnishings that functioned together to project “the desired image to the world at large” (p. 283).

Padding and Covering

Haugland asserts that the way in which Victorian women decorated their spaces paralleled the process of “…lining, padding, and ultimately, concealing the female form…” (as

cited in Hartzell, 2009, p. 59). Seven of the chairs in the sample were upholstered, all of which featured upholstery at the seat and back. Peirce (1999) notes that the shapes of chairs during the 1880s "…were determined as much by the emphasis on upholstery as by the traditional wooden frames" (p. 216).

The upholstered and trimmed side chair (#2.8) is a strong example of the use of upholstery and padding to conceal the objects underlying form (see Figure 25). The side chair features an upholstered seat and back, with a seat composed of layers of padded velvet, and a woven skirt that terminates in fringe trim—which almost completely covers the legs. The top of the skirt at the seat rail features a patterned continuous strip trim, and the borders of the upholstered seat and back feature coordinating rope trim. The entire form of the side chair is manipulated by the use of padding, upholstery, and trimmings. Peirce (1999) also confirms this, observing that "no wooden frame encloses the square seat cushion, but its shape is defined and emphasized by velvet panels that form its sides" (p. 216).

The abundance of surface and structural embellishments observed in women's dress fashions and chairs also functioned to mask the underlying form. This confirms the literature which notes that "basic shapes of furniture were concealed under upholstery, drapery, tassels, and fringes, and costume followed the same general principle" (Horn & Gurel, 1981, p. 336). The literature also noted that both architects and fashion designers work with and against the human form (Quinn, 2003); however this also applies to chairs. Women's dress fashions of the period are body subordinate, in that they conceal the human form through the bustle, abundant use and draping of fabrics, embellishments, and trimmings. At the same time, chairs of the period may conceal the wood frame through the use of padding, upholstery, embellishments, and trimmings (see Figure 25).

The use of textiles to conceal calls to mind Hartzell's (2009) assertion that "…textiles functioned…as *protection* from modernity—the plush padding of the private interior shielding its occupants from the public "nakedness" of iron-and-glass factories, exhibition halls, and department stores…" (pp. 67-68). As illustrated in the upholstered and trimmed side chair (#2.8), this concealment of form through the use of textiles and padding may be related to the desire to protect or obscure the underlying form—just as long, heavy, elaborately draped skirts concealed woman's legs and her true form during the period.

The seat of the upholstered and trimmed side chair (#2.8), which has a woven skirt that almost completely covers the legs, recalls the well known stereotype about Victorian women covering furniture legs out of concern for modesty, as they covered their own. However, Steele (1985) claims that no actual documentation exists of women actually covering the legs of furniture. It is noteworthy that the side chair does not completely conceal the entire form of the leg, and that no other chairs in the sample set concealed the front legs at all.

Sitting

It may also be relevant that some chairs appear to have been designed with features to accommodate women's dress fashions of the period. Miller (2005) notes that chairs from the mid-nineteenth century onward were "influenced by fashion, which resulted in the design of low, wide seats to accommodate full skirts" (p. 310). Five chairs in the sample set featured low, wide seats (#2.1, #2.4, #2.6, #2.8, #2.10). Moore (1949) notes that the collapsible nature of the 1880s bustle means that it "easily moves to one side when the wearer sits down…" (p. 113).

Chairs without arms were also likely the most comfortable options for fashionably dressed women because they allowed more width to accommodate the bustle. Three chairs in the sample set did not have arms (#2.3, #2.6, #2.8). Other special features of chairs observed in the

sample included the reclining back of armchair (#2.1) and the campaign hall chair (#2.7) which folds and has a removable back slat. These design features can be compared to the adaptable nature of the bustle, in that it is responsive to the body's actions (particularly sitting).

Miller (2005) observes that the late nineteenth century saw a "greater emphasis on comfort, reflected in curvaceous forms and deep-buttoned upholstery" (p. 17). This was confirmed in the deep buttoning of the reclining armchair (#2.1), and restrained curved lines that dominated the forms of chairs. Miller (2005) also notes that padded arms, seats, and backs provided increased comfort. Seven of the chairs in the sample featured both upholstered seats and backs, and four of the seven chairs with arms featured upholstered arm rests. Easy chairs, which were usually large and low-seated with a sloping back, were the most comfortable options for chairs (Pina, 2003). The reclining armchair (#2.1) fits this description (see Figure 23).

A stark contrast to this emphasis on comfort was seen in the campaign hall chair (#2.7). Pina (2003) notes that hall chairs, due to their stiff forms and lack of upholstery, were used primarily by servants in low status spaces. In this case, hall chairs such as this one may be least related to women's dress fashions of the period, as fashionably dressed women were not likely the intended sitters. All rockers in the sample (#2.2, #2.9, #2.10) featured low seats with high backs, typical features of rockers described by Wagoner (1990). Two of the rockers did not feature upholstery; however one did (#2.10).

Merging

Gordon (1996) asserts that during the late-nineteenth century "body and interior space were…almost interchangeable; symbolically, one could stand for the other" (p. 281). Observations during the process of data collection and analysis indicated that specific parts of the objects often mirrored each other in appearance. Perhaps the most obvious parallel is that chair

seats are often padded and upholstered, just as skirt backs often have a padded, upholstered appearance due to the bustle or stiffness created by back fullness. Gordon (1996) confirms this link of chairs and women's dress fashions of the period, noting that padded pillow-like bustles "adorned both sofas and women's derrieres" (p. 289). Moore (1949) theorizes that the pillow-like cushion worn as part of the obi at the back (and used as seating) by Japanese women, may be related to the development of the bustle. In light of this, an interesting discovery is a chair designed around the 1870s deemed the 'bustle chair' because it features a padded section where the back meets the seat and was used to support the bustle of a woman's dress (see Figure 26).

Horizontal decoration at the end of the seat (on the seat rail) also paralleled the placement of horizontal decoration at the hem of skirts. The placement and shape of the crest rail at the chair back appeared similar to that of the bodice neckline (particularly the rounded or square appearance). It was also interesting that the ends of chair arms often featured different decorative characteristics than the arms, just as the decorative details at the cuffs differed from those on the body of the sleeve.

M. Taylor (2006) writes that "women decorated rooms as a reflection of self, individuality, and eventually personality," and did so "in parallel with their own bodies and clothes, extending one into the other" (p. 530). Because literature indicates that women were the primary decorators of their homes, we might infer that they also played a role in selecting the chairs used to furnish their homes. If this is so, then it may not be surprising to see chairs with elements of design and features similar to women's dress fashions of the period. As Haweis notes, dress and furniture "…both mirror the mind of the owner and the temper of the age" (as cited in M. Taylor, 2006, p. 535). In light of this, restrained curved lines, heavy use of fabrics,

trimmings, padding, and an abundance of structural and surface embellishments may have appealed to women's tastes in addition to complimenting their fashionable ensemble.

Figure 23. Reclining Armchair, Sample #2.1
Image Used Courtesy of the High Museum of Art, Atlanta.
(1982.314) Virginia Carroll Crawford Collection

Figure 24. Herter Brothers Side Chair, Sample #2.3
Image Used Courtesy of the High Museum of Art, Atlanta.
(1982.316) Virginia Carroll Crawford Collection

Figure 25. Upholstered and Trimmed Side Chair, Sample #2.7
Image Used Courtesy of the High Museum of Art, Atlanta.
(1984.117) Virginia Carroll Crawford Collection

Figure 26. “Bustle Chair”, c. 1870s
Image Used Courtesy of the Auburn Museum and Historic Home, Natchez, MS

CHAPTER 6

CONCLUSION

Significance

This study was an experiment in an interdisciplinary approach to visually analyzing and comparing women's dress fashions and chairs. A real need for such interdisciplinary approaches exists within academia, in order to grow in our knowledge and understanding of how the designed environment around us is connected. My hope is that this study will encourage other interdisciplinary studies between dress and interior furnishings.

The checklist developed for the completion of the objectives for this study may serve as a foundation for future interdisciplinary studies between dress and interior furnishings. The data derived from the use of the checklist may aid in assessing the existence, scope, and nature of the visual relationship between the objects being studied. Thus the findings from this study can increase our understanding of the relationship between women's dress fashions and chairs during the 1880s. Future studies may allow us to start developing a sort of continuum for charting levels of "cultural consistency" (Roach & Musa, 1980) or "conceptual conflation" (M. Taylor, 2006) throughout history. This could encourage even more discussion of the relationship between dress and interior furnishings.

Examination of the Objectives

1. To develop a visual analysis checklist using the elements of design as a framework to compare women's dress fashions and chairs.

A checklist was developed utilized the elements of design of line, shape, and form as the basis for visual identification. The elements of color and texture were omitted due to limitations of the objects. The checklist was slightly modified to accommodate the differences in women's dress fashions and chairs, and was constructed by the object parts in order to facilitate their comparison. The checklists are available in Appendices E-F.

2. To explore the aesthetic relationship between women's dress fashions and chairs of the period 1880-1889 using the data collected from the checklist.

This was achieved during the process of data analysis—specifically with the comparing and contrasting of the data sets. The findings regarding the visual relationship of women's dress fashions and chairs were explored extensively in the discussion chapter.

Examination of the Hypotheses

H1: Women's dress fashions and chairs from the period 1880-1889 exhibit similar characteristics in the element of design of line.

This hypothesis was supported. Results indicated a strong relationship between all characteristics of line (path, direction, and edge) for the objects as a whole. Overall, both women's dress fashions and chairs of the 1880s exhibited a dominance of restrained curved lines, vertical and horizontal lines, and sharp edged lines.

In addition, similar characteristics were found within the following object parts upon comparison. Dress bodices and chair backs featured an equal number of restrained curved lines and straight lines. Skirt backs and chair seat/seat rails featured an equal number of restrained curved lines and full curved lines. Restrained curved lines were dominant in skirt fronts and chair front legs.

A major finding is that the shared associations for line were significantly more conclusive than those for shape and form. Therefore, line was the strongest shared element for women's dress fashions and chairs of the 1880s. This may be due to the fact that line is the fundamental element of design and therefore can be found in any designed object.

H2: Women's dress fashions and chairs from the period 1880-1889 exhibit similar characteristics in the element of design of shape.

Data obtained about this hypothesis is inconclusive. The dominant shape category type observed overall in women's dress fashions was geometric unequally sided shapes, while chairs exhibited an equal dominance of both geometric unequally and equal-sided shapes. Rectangles were the most frequent shape in dresses, and although "other" organic shapes were most frequent in chairs, rectangles were the second highest frequency.

Similar characteristics found within the object parts upon comparison include a dominant frequency of rectangle shapes found in skirt fronts and chair front legs. Moderate associations were found for shapes observed in skirt backs and chair seats, as rectangles appeared the most, although chairs also featured organic "floral/foliage" shapes equally. No associations were found for shapes observed in dress bodices and chair backs, as well as dress sleeves and chair arms.

H3: Women's dress fashions and chairs from the period 1880-1889 exhibit similar characteristics in the element of design of form.

This hypothesis was supported for the general categories of forms observed for the objects as a whole. Overall, geometric unequally sided forms were dominant for both women's dress fashions and chairs. The hypothesis was not supported for the specific types of forms observed between the data sets.

Similar characteristics found within the object parts upon comparison only included moderate associations. Dress sleeves and chair arms both exhibited a high frequency of cylinder forms, although chair arms featured more box forms. Moderate associations were also observed between skirt backs and chair seats, as both exhibited a high frequency of trumpet forms, although it was not the dominant form for either. No associations were found for dress bodices and chair backs, or skirt fronts and chair front legs.

Recommendations for Future Studies

Because the focus of the study was on the visual nature of women's dress fashions and chairs, it made sense to use these objects as the primary sources. The decision to use objects as primary sources served as an example of a study where an object-based approach was both appropriate and relevant. Suggestions for future object-based studies include evaluating the feasibility of locating a significant number of objects that meet the study criteria. Adequate research should be done ahead of time in order to determine the local availability and access to the objects to be studied. Future studies would also benefit from the use of a larger sample size—this was a limitation of the study necessitated by the lack of local availability and access. Using museum collections as a source for objects (versus historic house museums) is preferred due to the likelihood of more precise dating and cataloguing practices.

In addition, it should be noted that locating sources for similar object-based studies focusing on earlier periods of history will prove extremely difficult. In this case, illustrations may be more appropriate as sources. Likewise, using twentieth century objects may be easier to locate and accompanied by more information. Other interior furnishings besides chairs would also serve as rich sources for a similar comparative object-based study, such as window treatments or interior textiles.

The elements of design provided a framework from which to systematically study and evaluate the aesthetics of women's dress fashions and chairs of the 1880s. One of the major difficulties in evaluating aesthetics lies in defining them; therefore the elements of design were utilized as a means to establish some sort of objectivity to the study of the visual relationship. As DeLong and Petersen (2004) note: "Application of aesthetic concepts is a useful methodology to expand study of historic costume from an object base" (p. 112). The use of the elements of design was relevant because they served as identifiers that helped break down the aesthetics of an object into data that could be coded.

As Ferebee (1970) observes—"a designer's choice in combining the elements of design results in a "statement" that "provide[s] a key to understanding the culture from which they emerge" (p. 8). Because it is well known that the aesthetic nature of an object is inherently linked to the culture of the period, the data concerning the elements of design resulted in information that helped define the visual nature of women's dress fashions and chairs of the period. As a result, this data facilitated the comparison of women's dress fashions and chairs in order to recognize visual similarities—which is "essential in dissolving the strict boundaries between design disciplines" (Griffin & Collins, 2007, p. 7). Suggestions for future studies include the evaluation of other elements of design that were limited by this particular study (color, texture), as well as evaluating the principles of design.

The process of visual analysis resulted in data that increased understanding of which characteristics of the elements of design of line, shape, and form were observed most frequently in the objects, as well as how they were interpreted within the object parts. This allowed the women's dress fashions and chairs data sets to be compared and contrasted so that the hypotheses could be tested. The use of photographs or illustrations would serve as another

experiment for a similar visual analysis study, although limitations of these mediums (as discussed in the methodology chapter), should first be considered.

Other suggestions for future studies include the use of more extensive validity measures and appropriate reliability measures (see Cosbey et al., 2002) in order to enhance the instrument and data. Specifically, the use of inter-rater reliability measures (such as testing 10% of the sample) would be appropriate methods for future studies using this checklist. Once the checklist has been tested for validity and reliability, it can be used as an instrument to collect data in future studies.

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APPENDICES

APPENDIX A

ELEMENTS OF DESIGN FROM SOURCES

(Behrens, 1984)
- Line
- Shape
- Value
- Color
- Texture

(Bevlin, 1994)
- Line
- Space
- Shape/form
- Texture
- Color

(Davis, 1980)
- Line
- Shape/form
- Space
- Light
- Color
- Texture
- Pattern

(DeLong, 1987)
- Line
- Shape
- Point
- Color
- Surface Definition

(DeLong, 1998)
- Line
- Shape
- Point
- Color
- Texture

(Fiore & Kimle, 1997)

- Line
- Shape
- Space
- Movement
- Light
- Color
- Texture

(Griffin & Collins, 2007)

- Line
- Shape
- Form
- Space
- Color
- Texture

(Horn & Gurel, 1981)

- Line
- Form
- Space
- Color
- Texture

(Mills & Smith, 1985)

- Line
- Shape
- Space
- Color
- Texture

(Preble, D. & Preble, S., 2004)

- Line
- Shape
- Space
- Mass
- Light
- Color
- Texture
- Time
- Motion

APPENDIX B

REFERENCE GUIDE FOR IDENTIFYING ELEMENTS OF DESIGN

KEY: ELEMENTS OF DESIGN

- **LINE**- an elongated mark, the connection between two points, or the effect made by the edge of an object where there is no actual line on the object itself. May enclose space to define a shape or silhouette (Davis, 1996, p. 75).

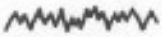
Path

(a) Straight

(b) Restrained curve

(c) Full curve

(e) Jagged



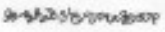
(f) Looped

(g) Wavy

(h) Scalloped

(i) Zigzag

(j) Crimped



Direction

(a) Vertical

(b) Horizontal

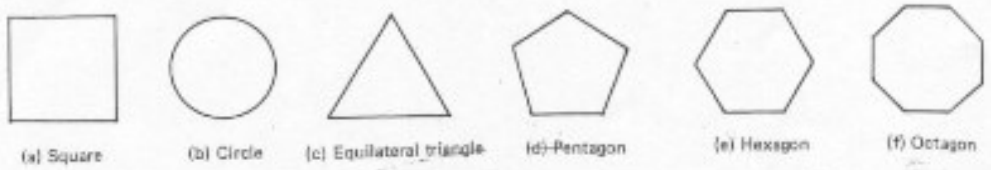
(c) Diagonal

Edge/sharpness

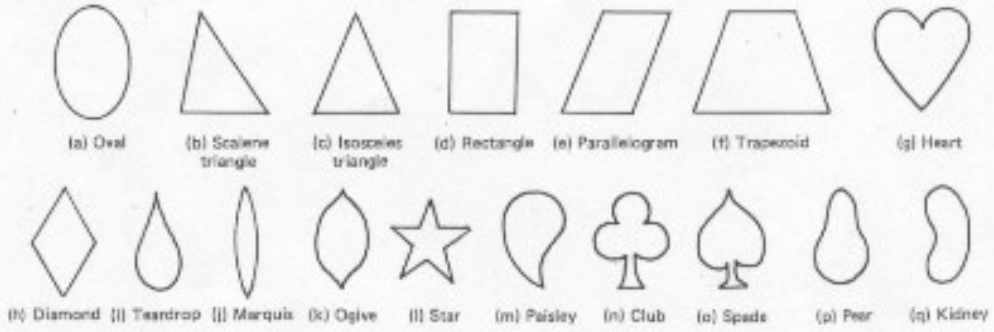
(a) Sharp

(b) Fuzzy

- **SHAPE**- a flat, two-dimensional area enclosed by a line, includes flat decorative design such as fabric pattern motifs and appliqués, and flat garment parts such as collars and pockets (Davis, 1996, p. 88).
    - Geometric- a shape that uses mathematical exactness (Davis, 1996, p. 366).
        - Geometric: equal-sided

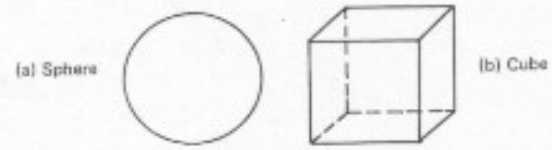


        - Geometric: unequally-sided

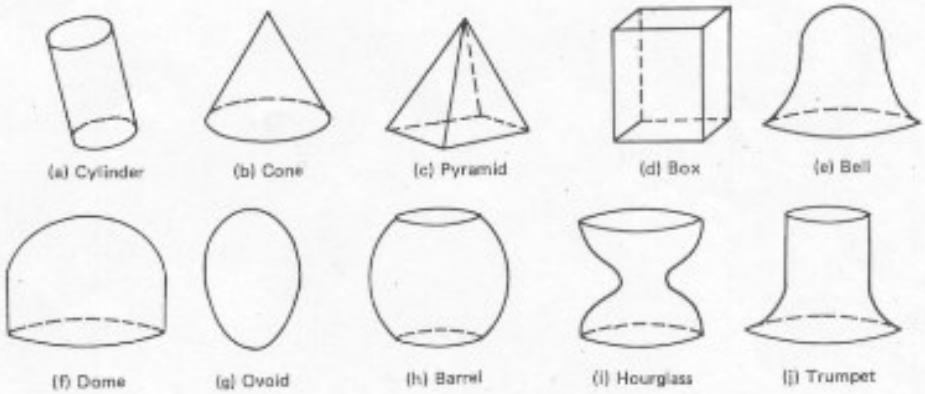


    - Organic- an irregular, non-geometric shape (Preble & Preble, 2004, p. 503); natural shapes that are derived from the natural environment, including the human figure (Bevlin, 1994).

- **FORM**- a three-dimensional area enclosed by a surface (Davis, 1996, p. 88).
    - Geometric- a shape that uses mathematical exactness (Davis, 1996, p. 366).
        - Geometric: equal-sided



        - Geometric: unequally-sided



    - Organic- an irregular, non-geometric shape (Preble & Preble, 2004, p. 503); natural shapes that are derived from the natural environment, including the human figure (Bevlin, 1994).

APPENDIX C

REFERENCE GUIDE FOR EVALUATING SHAPE IN DRESS

HOW 2D SHAPES ARE INCORPORATED IN DRESS
(Davis, 1996)

FIGURE 6-15 Flat, two-dimensional shapes in dress are incorporated in any of three ways: (1) as flat structural garment parts such as pockets (a), insets (b, f), collars (b, c, l), or cut-outs (h); (2) as decorative pattern motif shapes (a, e, g, i, j, k); or (3) as three-dimensional garment part forms whose silhouettes create flat shapes in photographs or pictures (d, l).

APPENDIX D

REFERENCE GUIDE FOR EVALUATING FORM IN DRESS

HOW 3D FORMS IN DRESS ENVELOPE THE FIGURE
(Davis, 1996)

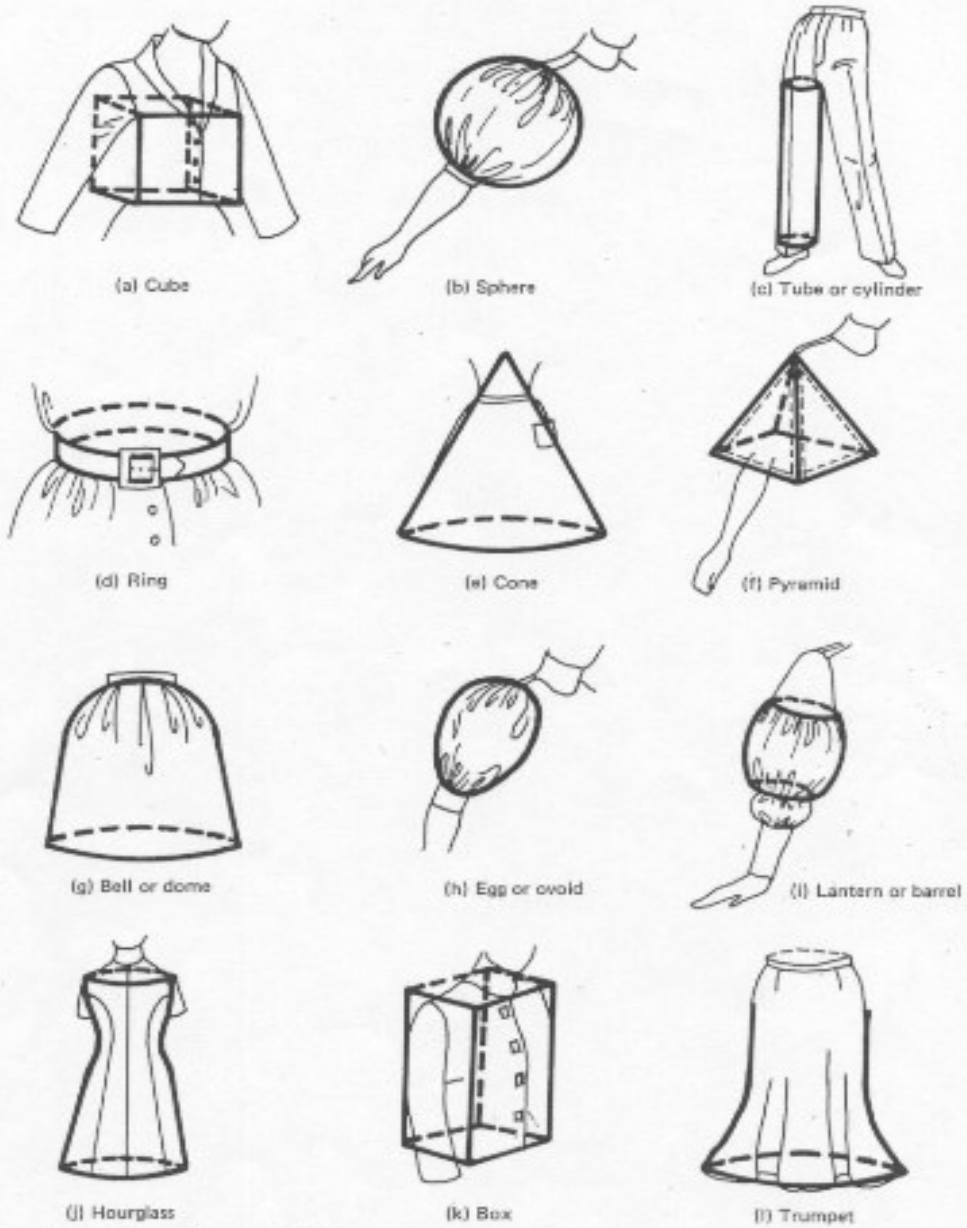


FIGURE 6-16 Three-dimensional forms in dress envelope the figure. Only the cube (a) and sphere (b) are equally sided; all others (c–l) are unequally sided and provide visual variation as well as the basis for garment part fit.

APPENDIX E

VISUAL ANALYSIS CHECKLIST FOR WOMEN'S DRESS FASHIONS

VISUAL ANALYSIS CHECKLIST

Sample # _____ (Women's Dress Fashions)

Title _____ **Accession #** _____
Object location _____
Maker _____
Origin _____
Dated _____ **Circa-dated** Y N

Type:

Skirt & Bodice Ensemble Dress

Description:

Bodice Front _____
Sleeves _____
Skirt Back _____Skirt Front _____
Material(s) _____
Color(s) _____
Pattern(s) & location_____
Structural embellishment(s) & location:
_____
_____
Surface embellishment(s) & location:
_____
_____
Decorative/style notes:

WOMEN'S DRESS FASHION PARTS	ELEMENTS OF DESIGN	CHARACTERISTICS	NOTES
BODICE FRONT	**LINE**		
	Path	straight	
		curved: restrained full	
		other: jagged looped wavy	
		scalloped zigzag crimped	
	Direction	vertical horizontal diagonal	
	Edge	sharp fuzzy	
SLEEVES	**LINE**		
	Path	straight	
		curved: restrained full	
		other: jagged looped wavy	
		scalloped zigzag crimped	
	Direction	vertical horizontal diagonal	
	Edge	sharp fuzzy	

SKIRT BACK	**LINE** **Path** **Direction** **Edge**	straight curved: restrained full other: jagged looped wavy scalloped zigzag crimped vertical horizontal diagonal sharp fuzzy	
SKIRT FRONT	**LINE** **Path** **Direction** **Edge**	straight curved: restrained full other: jagged looped wavy scalloped zigzag crimped vertical horizontal diagonal sharp fuzzy	
BODICE FRONT	**SHAPE**	geometric: equal-sided square circle equilateral triangle pentagon hexagon octagon	

		geometric: unequally sided oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive star paisley club spade pear kidney organic: floral other	
SLEEVES	**SHAPE**	geometric: equal-sided square circle equilateral triangle pentagon hexagon octagon geometric: unequally sided oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive	

		star paisley club spade pear kidney <u>organic:</u> floral other	
SKIRT BACK	**<u>SHAPE</u>**	<u>geometric: equal-sided</u> square circle equilateral triangle pentagon hexagon octagon <u>geometric: unequally sided</u> oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive star paisley club spade pear kidney <u>organic:</u> floral other	

SKIRT FRONT	**SHAPE**	geometric: equal-sided square circle equilateral triangle pentagon hexagon octagon geometric: unequally sided oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive star paisley club spade pear kidney organic: floral other	
BODICE FRONT	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel	

		hourglass trumpet bell ovoid organic:	
SLEEVES	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel hourglass trumpet bell ovoid organic:	
SKIRT BACK	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel hourglass trumpet bell ovoid	

		organic:	
SKIRT FRONT	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel hourglass trumpet bell ovoid organic:	

APPENDIX F

VISUAL ANALYSIS CHECKLIST FOR CHAIRS

VISUAL ANALYSIS CHECKLIST

Sample # _____ **(**Chairs)

Title _____ Accession # _____
Object location _____
Maker _____
Origin _____
Dated _____ Circa-dated Y N

Type:

Armchair Side chair Rocker Other _____

Description:

Back _____
Arms _____
Seat/Seat Rail _____
Front Legs_____
Upholstery Y N _____ Material(s) _____
Color(s) _____
Pattern(s) & location_____
Structural embellishment(s) & location:
_____
_____
Surface embellishment(s) & location:
_____
_____
Decorative/style notes:

CHAIR PARTS	ELEMENTS OF DESIGN	CHARACTERISTICS	NOTES
BACK	**LINE**		
	Path	straight	
		curved: restrained full	
		other: jagged looped wavy	
		scalloped zigzag crimped	
	Direction	vertical horizontal diagonal	
	Edge	sharp fuzzy	
ARMS	**LINE**		
	Path	straight	
		curved: restrained full	
		other: jagged looped wavy	
		scalloped zigzag crimped	
	Direction	vertical horizontal diagonal	
	Edge	sharp fuzzy	

SEAT/SEAT RAIL	**LINE** **Path** **Direction** **Edge**	 straight curved: restrained full other: jagged looped wavy scalloped zigzag crimped vertical horizontal diagonal sharp fuzzy	
LEGS (FRONT)	**LINE** **Path** **Direction** **Edge**	 straight curved: restrained full other: jagged looped wavy scalloped zigzag crimped vertical horizontal diagonal sharp fuzzy	
BACK	**SHAPE**	geometric: equal-sided square circle equilateral triangle pentagon hexagon octagon	

		geometric: unequally sided oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive star paisley club spade pear kidney organic: floral other	
ARMS	**SHAPE**	geometric: equal-sided square circle equilateral triangle pentagon hexagon octagon geometric: unequally sided oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive	

		star paisley club spade pear kidney <u>organic:</u> floral other	
SEAT/SEAT RAIL	**<u>SHAPE</u>**	<u>geometric: equal-sided</u> square circle equilateral triangle pentagon hexagon octagon <u>geometric: unequally sided</u> oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive star paisley club spade pear kidney <u>organic:</u> floral other	

LEGS (FRONT)	**SHAPE**	geometric: equal-sided square circle equilateral triangle pentagon hexagon octagon geometric: unequally sided oval scalene triangle rectangle isosceles triangle parallelogram trapezoid heart diamond teardrop marquis ogive star paisley club spade pear kidney organic: floral other	
BACK	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel	

		hourglass trumpet bell ovoid organic:	
ARMS	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel hourglass trumpet bell ovoid organic:	
SEAT/SEAT RAIL	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel hourglass trumpet bell ovoid organic:	

LEGS (FRONT)	**FORM**	geometric: equal-sided sphere cube geometric: unequally sided cylinder cone pyramid box dome barrel hourglass trumpet bell ovoid organic:	

APPENDIX G

INFORMATION ON OBJECT LOCATIONS

Alamance County Historical Museum, Inc.

Type:	Historic House Museum
Location:	Burlington, NC
Dated:	1790-1875 (construction of the house)
Significance:	Birthplace of Edwin Michael Holt, a pioneer in the southern textile industry. Listed in the National Register of Historic Places.
Collection:	Period rooms with mid-nineteenth century furnishings, in addition to artifact collections and changing exhibits including antique clothing, quilts and military artifacts.
Curatorial contact:	Laurie Smith, achm@triad.twcbc.com
Website:	www.alamancemuseum.org

Archibald Smith Plantation Home

Type:	Historic House Museum
Location:	Roswell, GA
Dated:	1845
Significance:	Built by Archibald Smith, one of Roswell's founders, the home and grounds represent one of the best examples of architectural, cultural and historical interpretation found in the Metropolitan Atlanta area region.

Collection:	Period rooms featuring furniture and artifacts reflecting three generations and 150 years of the Smith family.
Curatorial contact:	Lydia Ellington, lellington@roswellgov.com
Website:	www.archibaldsmithplantation.org

Hickory Hill, Historic Home of Thomas E. Watson

Type:	Historic House Museum
Location:	Thomson, GA
Dated:	1900s-1920
Significance:	Home of Georgia author, lawyer and statesman Thomas E. Watson (1856-1922).
Collection:	Original furniture owned by Watson, as well as Watson memorabilia and his personal library.
Curatorial contact:	Michelle Zupan, mzupan@hickory-hill.org
Website:	www.hickory-hill.org

High Museum of Art

Type:	Art museum
Location:	Atlanta, GA
Dated:	1640-present (objects)
Significance:	The High Museum of Art's decorative arts and design collection is the most comprehensive survey of American decorative arts in the southeastern United States.
Collection:	Decorative arts and design collection highlights include: The Virginia Carroll Crawford Collection of American decorative art with important

works by Alexander Roux, Herter Brothers, Tiffany & Co. and Frank Lloyd Wright.

Curatorial contact: Berry Lowden Perkins, Berry.perkins@woodruffcenter.org

Website: www.high.org

Historic Clothing & Textile Collection, Department of Textiles, Merchandising & Interiors, University of Georgia

Type: Study collection

Location: Athens, GA

Dated: 1800s- 1990s (objects)

Significance: University housed study collection that also includes examples of ready-to-wear designer clothing.

Collection: Over 1,500 garments, accessories, and textiles including women's, men's, and children's clothing, hats, shoes, jewelry, quilts and coverlets. Also includes a collection of magazines and authentic photographs.

Curatorial contact: Dr. José Blanco, jblanco@fcs.uga.edu

Website: http://www.fcs.uga.edu/tmi/historic/

APPENDIX H

DATA ANALYSIS: LINE IN WOMEN'S DRESS FASHIONS

DATA ANALYSIS: FREQUENCY TABULATIONS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: LINE

OBJECT PART: BODICE FRONT	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
LINE PATH											
STRAIGHT	1	1	1	1	1	1	1	1	1	1	10
CURVED-RESTRAINED	1	1	1	1	1	1	1	1	1	1	10
CURVED-FULL				1	1	1		1	1	1	6
OTHER- JAGGED											0
OTHER-LOOPED											0
OTHER-WAVY											0
OTHER-SCALLOPED	1	1									2
OTHER-ZIGZAG									1		1
OTHER-CRIMPED											0
LINE DIRECTION											
VERTICAL	1	1	1	1	1	1	1	1		1	9
HORIZONTAL	1	1	1		1		1	1		1	7
DIAGONAL		1	1	1	1		1		1	1	7
LINE EDGE											
SHARP	1	1	1	1	1	1	1	1	1	1	10
FUZZY	1	1	1	1							4

OBJECT PART: SLEEVES	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
LINE PATH											
STRAIGHT	1	1	1	1	1				1	1	7
CURVED-RESTRAINED	1	1	1	1	1	1	1	1	1	1	10
CURVED-FULL									1	1	2
OTHER- JAGGED											0
OTHER-LOOPED											0
OTHER-WAVY											0
OTHER-SCALLOPED	1					1	1				3
OTHER-ZIGZAG											0
OTHER-CRIMPED											0
LINE DIRECTION											

VERTICAL	1	1	1	1	1	1	1	1	1	1	10
HORIZONTAL	1	1				1	1	1	1	1	7
DIAGONAL		1	1		1					1	4
LINE EDGE											
SHARP	1	1	1	1	1	1	1	1	1	1	10
FUZZY		1	1				1		1		4

OBJECT PART: SKIRT BACK	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**	**1.9**	**1.10**	**TOTALS**
LINE PATH											
STRAIGHT	1	1	1	1	1			1	N/A	1	7
CURVED-RESTRAINED		1	1	1	1	1	1	1	N/A	1	8
CURVED-FULL	1	1	1	1	1	1	1		N/A	1	8
OTHER- JAGGED									N/A		0
OTHER-LOOPED									N/A		0
OTHER-WAVY		1					1		N/A		2
OTHER-SCALLOPED				1		1			N/A		2
OTHER-ZIGZAG									N/A		0
OTHER-CRIMPED									N/A		0
LINE DIRECTION											
VERTICAL	1		1	1	1	1	1	1	N/A	1	8
HORIZONTAL	1	1		1	1	1	1	1	N/A	1	8
DIAGONAL		1		1		1			N/A	1	4
LINE EDGE											
SHARP	1		1	1	1	1	1	1	N/A	1	8
FUZZY		1	1						N/A	1	3

OBJECT PART: SKIRT FRONT	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**	**1.9**	**1.10**	**TOTALS**
LINE PATH											
STRAIGHT	1	1	1	1	1		1	1	N/A	1	8
CURVED-RESTRAINED	1	1	1	1	1	1	1	1	N/A	1	9
CURVED-FULL		1		1			1		N/A	1	4
OTHER- JAGGED									N/A		0
OTHER-LOOPED									N/A		0
OTHER-WAVY									N/A		0
OTHER-SCALLOPED	1			1		1	1		N/A		4
OTHER-ZIGZAG									N/A		0
OTHER-CRIMPED									N/A		0

LINE DIRECTION											
VERTICAL	1	1	1	1	1		1	1	N/A	1	8
HORIZONTAL	1	1		1	1	1	1	1	N/A	1	8
DIAGONAL		1		1					N/A	1	3
LINE EDGE											
SHARP	1	1	1	1	1	1		1	N/A	1	8
FUZZY		1	1	1			1		N/A		4

DATA ANALYSIS: TOTAL FREQUENCY TABULATIONS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: LINE

LINE PATH		
	CURVED-RESTRAINED	37
	STRAIGHT	32
	CURVED-FULL	20
	OTHER-SCALLOPED	11
	OTHER-WAVY	2
	OTHER-ZIGZAG	1
	OTHER-LOOPED	0
	OTHER- JAGGED	0
	OTHER-CRIMPED	0
LINE DIRECTION		
	VERTICAL	35
	HORIZONTAL	30
	DIAGONAL	18
LINE EDGE		
	SHARP	36
	FUZZY	15
N/A	BODICE FRONT	0
N/A	SLEEVES	0
N/A	SKIRT BACK	1
N/A	SKIRT FRONT	1
N/A	TOTAL	2

DATA ANALYSIS: COMMENTS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: LINE

OBJECT PART: BODICE FRONT

LINE PATH

STRAIGHT	1.1	windowpane weave/plaid- pattern, shirring
	1.2	ribbed pattern, brocade pattern
	1.3	striped pattern of cotton pile, seams (underbodice panel)
	1.4	pleats, neckline center detail
	1.5	pleats, shirring, pattern @ lapel & collar, pointed bottom
	1.6	row of stitches down CF, french darts
	1.7	center closure
	1.8	narrow pleats @ upper, pleated ruffles @ CF, closure @ CF, standing collar detail
	1.9	darts, pointed bottom
	1.10	collar detail
CURVED-RESTRAINED	1.1	implied line- row buttons (closely spaced), lace applique, gathers
	1.2	overall silh., darts, center point, brocade pattern lines, collar detail, floral patt. detail
	1.3	silhouette, lapels, pleats @ lapels, detail of cotton pile, darts
	1.4	neckline sides, pleats, silhouette
	1.5	darts, pleats, shirring, silhouette, lapels outline
	1.6	silhouette, bust darts
	1.7	darts, neckline, silhouette, rounded center point of bottom
	1.8	pleated ruffle panel & ruffles, gathers @ waist, silhouette
	1.9	silhouette, Vneck, rounded curve @ bust @ closures
	1.10	silhouette, darts, pleats, gathers, bottom velveteen band, sunflower stem- pattern
CURVED-FULL	1.4	lace details @ side panels
	1.5	collar
	1.6	round neckline
	1.8	collar
	1.9	circle pattern of netting

	1.10	collar, sunflower detail- pattern
OTHER-SCALLOPED	1.1	lace applique edges @ collar & lapels
	1.2	lace edges @ collar
OTHER-ZIGZAG	1.9	ribbon @ neckline

LINE DIRECTION

VERTICAL	1.1	dominant; gathers, lace applique, shirring, buttons, pattern
	1.2	darts, brocade pattern
	1.3	cotton pile @ lapel, tassels
	1.4	pleats
	1.5	dominant; lapels, shirring, darts
	1.6	row stitches down CF, all darts
	1.7	center closure, neckline sides, darts
	1.8	gathers, narrow pleats, ruffle pleats
	1.10	collar- braided center, pleats
HORIZONTAL	1.1	pattern, stitched lines @ ruched panels, collar details
	1.2	ribbed silk pattern, neckline, brocade pattern detail
	1.3	cotton pile stripes, seams
	1.5	shirring seams, collar direction
	1.7	neckline center
	1.8	dominant; ruffled pleat panel
	1.10	velveteen band
DIAGONAL	1.2	brocade floral detail, darts with body contours
	1.3	darts, pleats @ one lapel, pointed bottom bodice
	1.4	neckline
	1.5	deep V bodice bottom, pattern lines @ lapels & collar
	1.7	pointed bottom bodice- rounded to point
	1.9	deep V @ bottom of vneck
	1.10	darts, gathers, collar, direction of sunflower stems- pattern

LINE EDGE

SHARP	1.1	pattern
	1.2	all other

	1.3	all other
	1.4	all other
	1.5	dominant
	1.6	dominant
	1.7	dominant
	1.8	dominant
	1.9	dominant
	1.10	dominant
FUZZY	1.1	abundance of detail & embellishments
	1.2	ribbed pattern
	1.3	cotton pile details
	1.4	lace @ side panels

OBJECT PART: SLEEVES

LINE PATH

STRAIGHT	1.1	windowpane/plaid pattern
	1.2	ribbed silk pattern
	1.3	cuff details
	1.4	cuff details
	1.5	cuff pattern, cuff outline
	1.9	ribbon details
	1.10	velveteen cuffs
CURVED-RESTRAINED	1.1	outline of bishop sleeve
	1.2	outline of coat sleeve
	1.3	outline of coat sleeve
	1.4	outline of coat sleeve
	1.5	outline of coat sleeve
	1.6	outline of coat sleeve, seam lines
	1.7	outline of coat sleeves, elbow bend, seam lines
	1.8	outline of coat sleeve
	1.9	outline of short straight sleeve, netting overlay is loose @ sleeves
	1.10	outline of leg of mutton sleeve with kickup detail, sunflower stems- pattern
CURVED-FULL	1.9	satin bows, circle pattern

	1.10	silhouette @ shoulder, sunflower center detail- pattern
OTHER-SCALLOPED	1.1	cuffs- lace edges
	1.6	lace panels @ forearm
	1.7	lace @ cuffs
LINE DIRECTION		
VERTICAL	1.1	general direction, pattern
	1.2	general direction
	1.3	general direction
	1.4	general direction
	1.5	general direction
	1.6	general direction, seam lines
	1.7	general direction, seam lines
	1.8	general direction
	1.9	general direction
	1.10	general direction
HORIZONTAL	1.1	pattern, cuffs
	1.2	ribbed silk pattern, sleeve cuff detail @ top
	1.6	lace panels @ forearm
	1.7	cuffs
	1.8	cuffs
	1.9	ribbon/bow bands @ cuffs
	1.10	cuffs
DIAGONAL	1.2	sleeve cuff brocade detail
	1.3	cuff details
	1.5	cuff pattern
	1.10	gathers @ shoulders
LINE EDGE		
SHARP	1.1	pattern
	1.2	all other
	1.3	all other
	1.4	dominant
	1.5	dominant

	1.6	dominant
	1.7	all other
	1.8	dominant
	1.9	all other
	1.10	dominant
FUZZY	1.2	ribbed silk pattern
	1.3	cotton pile @ cuffs
	1.7	lace @ cuffs, esp due to scalloped edges
	1.9	loose netting @ sleeves

OBJECT PART: SKIRT BACK

LINE PATH

STRAIGHT	1.1	vertical gathers, pattern, shirring panel
	1.2	pattern
	1.3	striped cotton pile, pleated godets @ hem
	1.4	lace pleats @ hem
	1.5	vertical straight lines t/out for gathers, hem detail, knife pleats
	1.8	folds t/out, knife pleats @ hem
	1.10	pleats
CURVED-RESTRAINED	1.2	overall silhouette
	1.3	overall silhouette
	1.4	gathers @ overskirt
	1.5	overall silhouette
	1.6	silhouette, lace panels @ hem & sides
	1.7	silhouette, gathers & seam down back
	1.8	silhouette
	1.10	silhouette, sunflower stem detail- pattern
CURVED-FULL	1.1	bustle- upper
	1.2	puffs @ sides, train, bustle
	1.3	bustle- upper
	1.4	gathers, train silhouette, border trims, pleated rosettes
	1.5	bustle- upper
	1.6	lace panels @ top

	1.7	circular train, hem panels, ruched panel
	1.10	sunflower center detail- pattern, bustle- upper
OTHER-WAVY	1.2	pleated ruffles @ hem of train
	1.7	knife pleated edges
OTHER-SCALLOPED	1.4	lace trim @ train
	1.6	lace panel edges
LINE DIRECTION		
VERTICAL	1.1	pattern
	1.3	stripes of cotton pile, pleated godets @ hem
	1.4	gathers
	1.5	knife pleats, gathers t/out
	1.6	gathers
	1.7	gathers, seams, knife pleats
	1.8	folds, knife pleats
	1.10	pleats
HORIZONTAL	1.1	pattern, hem detail
	1.2	pattern, ruffles @ hem & trim
	1.4	train border @ lace trim
	1.5	hem panel direction
	1.6	lace panel @ hem
	1.7	ruched seam detail, direction of train panels
	1.8	hem detail
	1.10	ruffle @ hem
DIAGONAL	1.2	gathers
	1.4	gathers, darts
	1.6	lace tiers @ side
	1.10	sunflower stems- pattern
LINE EDGE		
SHARP	1.1	pattern
	1.3	all other
	1.4	dominant

	1.5	dominant
	1.6	dominant
	1.7	dominant
	1.8	dominant
	1.10	all other
FUZZY	1.2	ribbed silk pattern
	1.3	cotton pile stripes- ombred
	1.10	hemline trim

OBJECT PART: SKIRT FRONT

LINE PATH

STRAIGHT	1.1	pattern, shirred panel, gathers, lower portion rows of ruffles
	1.2	ribbed pattern, pleats, brocade pattern background
	1.3	striped cotton pile, pleated godets @ hem
	1.4	pleats @ center
	1.5	hem trim details
	1.7	pattern of lace, hem of lace
	1.8	folds t/out, knife pleats @ hem
	1.10	loose pleats @ top
CURVED-RESTRAINED	1.1	silhouette lines
	1.2	silhouette lines, brocade pattern floral detail, corsage detail @ top (way draped)
	1.3	silhouette- slight outward curve
	1.4	silhouette
	1.5	silhouette
	1.6	silhouette, lace panels
	1.7	silhouette
	1.8	silhouette
	1.10	ruffle hem, sunflower stems- pattern, silhouette
CURVED-FULL	1.2	rosettes @ left
	1.4	lace side panels
	1.7	floral detail of lace pattern
	1.10	sunflower detail- pattern

OTHER-SCALLOPED	1.1	lace ruffle edges @ bottom rows
	1.4	lace hem & lace side panel edges
	1.6	lace panel edges
	1.7	lace edges
LINE DIRECTION		
VERTICAL	1.1	pattern
	1.2	pleats, brocade background detail
	1.3	striped cotton pile, pleated godets @ hem
	1.4	pleats
	1.5	knife pleats @ hem
	1.7	line patterns
	1.8	fold lines t/out, knife pleats @ hem
	1.10	loose pleats
HORIZONTAL	1.1	pattern, ruffle rows
	1.2	ribbed silk pattern, tiers of pleats @ bottom
	1.4	lace trim, hem detail
	1.5	hem panel direction
	1.7	lace panel edges
	1.8	hem panel
	1.10	ruffle trim @ hem
DIAGONAL	1.2	way corsage is draped- assymetrical
	1.4	pleats @ sides via body contours
	1.10	sunflower stems- pattern
LINE EDGE		
SHARP	1.1	pattern
	1.2	pleats
	1.3	all other
	1.4	pleats
	1.5	dominant
	1.6	dominant
	1.8	dominant
	1.10	dominant

FUZZY	1.2	all other- abundance of detail, embellishments
	1.3	cotton pile stripes
	1.4	lace @ hem & sides
	1.7	dominant; lace and patterned detail

APPENDIX I

DATA ANALYSIS: SHAPE IN WOMEN'S DRESS FASHIONS

DATA ANALYSIS: FREQUENCY TABULATIONS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: SHAPE

OBJECT PART: BODICE FRONT	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
GEOMETRIC EQUAL-SIDED											11
SQUARE				1			1				2
CIRCLE	1					1			1		3
EQUILATERAL TRIANGLE	1	1		1	1		1		1		6
PENTAGON											0
HEXAGON											0
OCTAGON											0
GEOMETRIC UNEQUALLY SIDED											12
OVAL	1									1	2
SCALENE TRIANGLE			1								1
RECTANGLE	1		1	1							3
ISOSCELES TRIANGLE	1		1					1	1		4
PARALLELOGRAM											0
TRAPEZOID											0
HEART											0
DIAMOND					1						1
TEARDROP											0
MARQUIS		1									1
OGIVE											0
STAR											0
PAISLEY											0
CLUB											0
SPADE											0
PEAR											0
KIDNEY											0
ORGANIC											5
FLORAL/FOLIAGE		1								1	2
OTHER		1	1		1						3

OBJECT PART: SLEEVES	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
GEOMETRIC EQUAL-SIDED							N/A	N/A			5
SQUARE							N/A	N/A			0
CIRCLE							N/A	N/A	1		1
EQUILATERAL TRIANGLE	1	1		1	1		N/A	N/A			4
PENTAGON							N/A	N/A			0
HEXAGON							N/A	N/A			0
OCTAGON							N/A	N/A			0
GEOMETRIC UNEQUALLY SIDED							N/A	N/A			7
OVAL	1						N/A	N/A		1	2
SCALENE TRIANGLE			1				N/A	N/A			1
RECTANGLE	1					1	N/A	N/A		1	3
ISOSCELES TRIANGLE							N/A	N/A			0
PARALLELOGRAM							N/A	N/A			0
TRAPEZOID							N/A	N/A			0
HEART							N/A	N/A			0
DIAMOND					1		N/A	N/A			1
TEARDROP							N/A	N/A			0
MARQUIS							N/A	N/A			0
OGIVE							N/A	N/A			0
STAR							N/A	N/A			0
PAISLEY							N/A	N/A			0
CLUB							N/A	N/A			0
SPADE							N/A	N/A			0
PEAR							N/A	N/A			0
KIDNEY							N/A	N/A			0
ORGANIC							N/A	N/A			4
FLORAL/FOLIAGE		1					N/A	N/A		1	2
OTHER				1			N/A	N/A	1		2

OBJECT PART: SKIRT BACK	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
GEOMETRIC EQUAL-SIDED		N/A		N/A				N/A			2
SQUARE		N/A		N/A				N/A			0
CIRCLE		N/A		N/A			1	N/A	1		2
EQUILATERAL TRIANGLE		N/A		N/A				N/A			0
PENTAGON		N/A		N/A				N/A			0
HEXAGON		N/A		N/A				N/A			0

OCTAGON		N/A		N/A				N/A			0
GEOMETRIC UNEQUALLY SIDED		N/A		N/A				N/A			7
OVAL		N/A		N/A				N/A		1	1
SCALENE TRIANGLE		N/A		N/A				N/A			0
RECTANGLE	1	N/A	1	N/A	1	1	1	N/A			5
ISOSCELES TRIANGLE		N/A	1	N/A				N/A			1
PARALLELOGRAM		N/A		N/A				N/A			0
TRAPEZOID		N/A		N/A				N/A			0
HEART		N/A		N/A				N/A			0
DIAMOND		N/A		N/A				N/A			0
TEARDROP		N/A		N/A				N/A			0
MARQUIS		N/A		N/A				N/A			0
OGIVE		N/A		N/A				N/A			0
STAR		N/A		N/A				N/A			0
PAISLEY		N/A		N/A				N/A			0
CLUB		N/A		N/A				N/A			0
SPADE		N/A		N/A				N/A			0
PEAR		N/A		N/A				N/A			0
KIDNEY		N/A		N/A				N/A			0
ORGANIC		N/A		N/A				N/A			2
FLORAL/FOLIAGE		N/A		N/A				N/A		1	1
OTHER		N/A		N/A			1	N/A			1

OBJECT PART: SKIRT FRONT	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**	**1.9**	**1.10**	**TOTALS**
GEOMETRIC EQUAL-SIDED								N/A			4
SQUARE								N/A			0
CIRCLE		1					1	N/A	1		3
EQUILATERAL TRIANGLE	1							N/A			1
PENTAGON								N/A			0
HEXAGON								N/A			0
OCTAGON								N/A			0
GEOMETRIC UNEQUALLY SIDED								N/A			9
OVAL	1							N/A		1	2
SCALENE TRIANGLE								N/A			0
RECTANGLE	1		1	1	1	1		N/A			5
ISOSCELES TRIANGLE		1	1					N/A			2
PARALLELOGRAM								N/A			0
TRAPEZOID								N/A			0

	HEART								N/A			0
	DIAMOND								N/A			0
	TEARDROP								N/A			0
	MARQUIS								N/A			0
	OGIVE								N/A			0
	STAR								N/A			0
	PAISLEY								N/A			0
	CLUB								N/A			0
	SPADE								N/A			0
	PEAR								N/A			0
	KIDNEY								N/A			0
ORGANIC									N/A			5
	FLORAL/FOLIAGE		1		1			1	N/A		1	4
	OTHER							1	N/A			1

DATA ANALYSIS: TOTAL FREQUENCY TABULATIONS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: SHAPE

GEOMETRIC UNEQUALLY SIDED		35
GEOMETRIC EQUAL-SIDED		22
ORGANIC		16
GU	RECTANGLE	16
GE	EQUILATERAL TRIANGLE	11
GE	CIRCLE	9
O	FLORAL/FOLIAGE	9
O	OTHER	7
GU	OVAL	7
GU	ISOSCELES TRIANGLE	7
GE	SQUARE	2
GU	DIAMOND	2
GU	SCALENE TRIANGLE	2
GU	MARQUIS	1
GU	PARALLELOGRAM	0
GU	TRAPEZOID	0
GU	TEARDROP	0
GU	PAISLEY	0
GU	PEAR	0
GU	KIDNEY	0
GE	PENTAGON	0
GE	HEXAGON	0
GE	OCTAGON	0
GU	HEART	0
GU	OGIVE	0
GU	STAR	0
GU	CLUB	0
GU	SPADE	0

N/A	BODICE FRONT	0
N/A	SLEEVES	2
N/A	SKIRT BACK	3
N/A	SKIRT FRONT	1
N/A	TOTAL	6

DATA ANALYSIS: COMMENTS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: SHAPE

OBJECT PART: BODICE FRONT

GEOMETRIC EQUAL-SIDED		
SQUARE	1.4	neckline (square w/ point @ center)
	1.7	neckline
CIRCLE	1.1	buttons
	1.6	round neckline
	1.9	netting- pattern
EQUILATERAL TRIANGLE	1.1	lace embroidered detail, pointed bottom
	1.2	rounded center point of bottom
	1.4	neckline (square w/ point @ center)
	1.5	dominant; lapel line patterns, bottom point
	1.7	bottom point
	1.9	bottom point
GEOMETRIC UNEQUALLY SIDED		
OVAL	1.1	lace detail
	1.10	sunflower detail- pattern
SCALENE TRIANGLE	1.3	cotton pile details- lapel & bottom point
RECTANGLE	1.1	elongated- windowpane/plaid pattern
	1.3	cotton pile stripes (under)
	1.4	elongated- pleats
ISOSCELES TRIANGLE	1.1	lapels
	1.3	lapels
	1.8	gathers @ waistline

		1.9	neckline
	DIAMOND	1.5	dominant; pattern- lines
	MARQUIS	1.2	leaves- pattern
ORGANIC			
	FLORAL/FOLIAGE	1.2	pattern
		1.10	pattern
	OTHER	1.2	center detail
		1.3	freeform curve of lapel
		1.5	lapels
OBJECT PART: SLEEVES			
GEOMETRIC EQUAL-SIDED			
	CIRCLE	1.9	netting- pattern
	EQUILATERAL TRIANGLE	1.1	lace detail
		1.2	cuff details
		1.4	cuff details
		1.5	cuff patterns
GEOMETRIC UNEQUALLY SIDED			
	OVAL	1.1	lace detail
		1.10	sunflower- pattern
	SCALENE TRIANGLE	1.3	cotton pile detail @ cuffs
	RECTANGLE	1.1	windowpane/plaid pattern
		1.6	elongated- lace
		1.10	cuffs
	DIAMOND	1.5	cuff patterns

ORGANIC

FLORAL/FOLIAGE	1.2	pattern @ cuffs
	1.10	pattern
OTHER	1.4	bow details
	1.9	bow details

OBJECT PART: SKIRT BACK

GEOMETRIC EQUAL-SIDED

CIRCLE	1.7	train
	1.9	netting pattern

GEOMETRIC UNEQUALLY SIDED

OVAL	1.10	sunflower- pattern
RECTANGLE	1.1	windowpane/plaid pattern
	1.3	elongated- stripes of pattern
	1.5	hem panel
	1.6	elongated- tiers of lace
	1.7	knife pleats
ISOSCELES TRIANGLE	1.3	pleated godets @ hem

ORGANIC

FLORAL/FOLIAGE	1.10	pattern
OTHER	1.7	ruched panels

OBJECT PART: SKIRT FRONT

GEOMETRIC EQUAL-SIDED

CIRCLE	1.2	rosettes
	1.7	flower detail- pattern of lace
	1.9	netting pattern
EQUILATERAL TRIANGLE	1.1	lace detail

GEOMETRIC UNEQUALLY SIDED

OVAL	1.1	lace detail
	1.10	sunflower- pattern
RECTANGLE	1.1	windowpane/plaid pattern
	1.3	elongated- stripes
	1.4	elongated- pleats
	1.5	elongated- hem panel
	1.6	elongated- tiers of lace @ hem
ISOSCELES TRIANGLE	1.2	pleated panels of ribbed material, brocade details towards bottom
	1.3	pleated godets @ hem

ORGANIC

FLORAL/FOLIAGE	1.2	pattern
	1.4	lace pattern
	1.7	lace pattern
	1.10	pattern
OTHER	1.7	geometric abstract shape of lace

APPENDIX J

DATA ANALYSIS: FORM IN WOMEN'S DRESS FASHIONS

DATA ANALYSIS: FREQUENCY TABULATIONS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: FORM

OBJECT PART: BODICE FRONT	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
GEOMETRIC EQUAL-SIDED											6
SPHERE	1	1	1		1			1		1	6
CUBE											0
GEOMETRIC UNEQUALLY SIDED											10
CYLINDER											0
CONE											0
PYRAMID											0
BOX											0
DOME											0
BARREL											0
HOURGLASS	1	1	1	1	1	1	1	1	1	1	10
TRUMPET											0
BELL											0
OVOID											0
ORGANIC											0
FREEFORM CURVES											0
DOME VARIATION											0
OVOID VARIATION											0

OBJECT PART: SLEEVES	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	TOTALS
GEOMETRIC EQUAL-SIDED											0
SPHERE											0
CUBE											0
GEOMETRIC UNEQUALLY SIDED											8
CYLINDER	1	1	1	1	1	1	1	1			8
CONE											0
PYRAMID											0
BOX											0
DOME											0

BARREL											0
HOURGLASS											0
TRUMPET											0
BELL											0
OVOID											0
ORGANIC											2
OTHER									1	1	2

OBJECT PART: SKIRT BACK	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**	**1.9**	**1.10**	**TOTALS**
GEOMETRIC EQUAL-SIDED									N/A		0
SPHERE									N/A		0
CUBE									N/A		0
GEOMETRIC UNEQUALLY SIDED									N/A		17
CYLINDER									N/A		0
CONE									N/A		0
PYRAMID	1	1	1	1	1	1	1	1	N/A	1	9
BOX									N/A		0
DOME									N/A		0
BARREL									N/A		0
HOURGLASS									N/A		0
TRUMPET	1		1	1	1	1	1	1	N/A	1	8
BELL									N/A		0
OVOID									N/A		0
ORGANIC									N/A		1
DOME VARIATION									N/A		0
TRUMPET/CUBE VARIATION									N/A		0
OTHER		1							N/A		1

OBJECT PART: SKIRT FRONT	**1.1**	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.7**	**1.8**	**1.9**	**1.10**	**TOTALS**
GEOMETRIC EQUAL-SIDED									N/A		0
SPHERE									N/A		0
CUBE									N/A		0
GEOMETRIC UNEQUALLY SIDED									N/A		9
CYLINDER									N/A		0
CONE									N/A		0
PYRAMID									N/A		0
BOX									N/A		0

	DOME									N/A		0
	BARREL									N/A		0
	HOURGLASS									N/A		0
	TRUMPET	1	1	1	1	1	1	1	1	N/A	1	9
	BELL									N/A		0
	OVOID									N/A		0
ORGANIC										N/A		1
	OTHER		1							N/A		1

DATA ANALYSIS: TOTAL FREQUENCY TABULATIONS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: FORM

GEOMETRIC UNEQUALLY SIDED		44
GEOMETRIC EQUAL-SIDED		6
ORGANIC		4
GU	TRUMPET	17
GU	HOURGLASS	10
GU	PYRAMID	9
GU	CYLINDER	8
GE	SPHERE	6
O	OTHER	4
GU	CONE	0
O	FREEFORM CURVES	0
GU	DOME	0
GU	BARREL	0
GU	BOX	0
GU	BELL	0
GU	OVOID	0
GE	CUBE	0
O	DOME VARIATION	0
O	OVOID VARIATION	0
O	TRUMPET/CUBE VARIATION	0
N/A	BODICE FRONT	0
N/A	SLEEVES	0
N/A	SKIRT BACK	1
N/A	SKIRT FRONT	1
N/A	TOTAL	2

DATA ANALYSIS: COMMENTS
SAMPLE 1- WOMEN'S DRESS FASHIONS
ELEMENT OF DESIGN: FORM

OBJECT PART: BODICE FRONT

GEOMETRIC EQUAL-SIDED SPHERE	1.1	standing collar
	1.2	standing collar
	1.3	standing collar
	1.5	standing collar
	1.8	standing collar
	1.10	standing collar
GEOMETRIC UNEQUALLY SIDED HOURGLASS	1.1	silhouette
	1.2	silhouette
	1.3	silhouette
	1.4	silhouette
	1.5	silhouette
	1.6	silhouette
	1.7	silhouette
	1.8	silhouette
	1.9	silhouette
	1.10	silhouette

OBJECT PART: SLEEVES

GEOMETRIC UNEQUALLY SIDED CYLINDER	1.1	bishop sleeve w/ fullness
	1.2	coat sleeve
	1.3	coat sleeve- elbow bend, particulary upper portion
	1.4	coat sleeve
	1.5	coat sleeve- bend @ elbow

	1.6	coat sleeve- bend @ elbow
	1.7	coat sleeve- bend @ elbow
	1.8	coat sleeve- slight downward slope @ elbow
ORGANIC		
OTHER	1.9	short, straight sleeve
	1.10	leg of mutton sleeve, kick-up sleeve @ shoulder

OBJECT PART: SKIRT BACK

GEOMETRIC UNEQUALLY SIDED

PYRAMID	1.1	slight- side silhouette w/ flat front
	1.2	side silhouette
	1.3	side silhouette w/ bustle fullness
	1.4	side silhouette
	1.5	slight- side silhouette
	1.6	side silhouette
	1.7	side silhouette, train complicates the form
	1.8	side silhouette
	1.10	side silhouette, built in bustle
TRUMPET	1.1	slight- back silhouette
	1.3	back silhouette, godets @ hem emphasize
	1.4	long train exaggerates this form
	1.5	emphasized by hem detail
	1.6	rounded all over
	1.7	silhouette back, circular train
	1.8	back silhouette
	1.10	back silhouette, straight sides, hard to ID b/c not on mannequin
ORGANIC		
OTHER	1.2	due to abundance of drapery

OBJECT PART: SKIRT FRONT

GEOMETRIC UNEQUALLY SIDED

	TRUMPET	1.1	silhouette
		1.2	silhouette with side puffs
		1.3	silhouette via godets @ hem
		1.4	silhouette
		1.5	emphasized by hem detail
		1.6	silhouette
		1.7	more rounded tiers
		1.8	silhouette
		1.10	silhouette
ORGANIC			
	OTHER	1.2	side puffs of fabric drapery complicate form

APPENDIX K

DATA ANALYSIS: LINE IN CHAIRS

DATA ANALYSIS: FREQUENCY TABULATIONS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: LINE

OBJECT PART: BACK	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
LINE PATH											
STRAIGHT	1	1	1	1	1	1		1			7
CURVED-RESTRAINED	1	1	1	1	1	1	1	1		1	9
CURVED-FULL		1	1	1	1	1	1	1	1	1	9
OTHER- JAGGED								1			1
OTHER-LOOPED								1			1
OTHER-WAVY		1		1	1	1	1				5
OTHER-SCALLOPED							1				1
OTHER-ZIGZAG											0
OTHER-CRIMPED											0
LINE DIRECTION											
VERTICAL	1	1	1	1	1	1	1	1	1	1	10
HORIZONTAL	1	1	1	1	1	1	1	1		1	9
DIAGONAL	1	1		1	1		1	1			6
LINE EDGE											
SHARP	1	1	1	1	1	1	1	1	1	1	10
FUZZY	1	1		1	1			1			5

OBJECT PART: ARMS	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
LINE PATH											
STRAIGHT	1		N/A	1	1	N/A	1	N/A			4
CURVED-RESTRAINED	1	1	N/A	1	1	N/A		N/A	1	1	6
CURVED-FULL	1		N/A	1	1	N/A	1	N/A	1	1	6
OTHER- JAGGED			N/A			N/A		N/A			0
OTHER-LOOPED			N/A			N/A		N/A			0
OTHER-WAVY		1	N/A	1	1	N/A		N/A			3
OTHER-SCALLOPED			N/A	1		N/A		N/A			1
OTHER-ZIGZAG			N/A			N/A		N/A			0
OTHER-CRIMPED			N/A			N/A		N/A			0
LINE DIRECTION											

VERTICAL	1	1	N/A	1		N/A	1	N/A	1		5
HORIZONTAL		1	N/A	1	1	N/A	1	N/A			4
DIAGONAL			N/A		1	N/A		N/A		1	2
LINE EDGE											
SHARP			N/A	1	1	N/A	1	N/A	1	1	5
FUZZY	1	1	N/A	1		N/A		N/A			3

OBJECT PART: SEAT/SEAT RAIL	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.8**	**2.9**	**2.10**	**TOTALS**
LINE PATH											
STRAIGHT			1		1	1	1	1			5
CURVED-RESTRAINED	1	1	1	1	1		1		1	1	8
CURVED-FULL		1	1	1	1			1		1	6
OTHER- JAGGED											0
OTHER-LOOPED								1			1
OTHER-WAVY					1	1					2
OTHER-SCALLOPED											0
OTHER-ZIGZAG											0
OTHER-CRIMPED											0
LINE DIRECTION											
VERTICAL			1		1	1		1	1	1	6
HORIZONTAL	1	1	1	1	1	1	1	1		1	9
DIAGONAL	1	1		1	1		1	1			6
LINE EDGE											
SHARP		1	1		1	1	1	1	1	1	8
FUZZY	1	1		1	1			1			5

OBJECT PART: FRONT LEGS	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.8**	**2.9**	**2.10**	**TOTALS**
LINE PATH											
STRAIGHT	1			1	1			1			4
CURVED-RESTRAINED	1	1	1	1			1		1	1	7
CURVED-FULL	1			1	1	1			1		5
OTHER- JAGGED											0
OTHER-LOOPED											0
OTHER-WAVY											0
OTHER-SCALLOPED											0
OTHER-ZIGZAG				1							1
OTHER-CRIMPED											0

LINE DIRECTION											
VERTICAL	1	1	1	1	1	1		1			7
HORIZONTAL	1	1			1	1			1	1	6
DIAGONAL				1	1	1	1				4
LINE EDGE											
SHARP	1	1	1	1	1	1	1	1	1	1	10
FUZZY											0

DATA ANALYSIS: TOTAL FREQUENCY TABULATIONS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: LINE

LINE PATH		
	CURVED-RESTRAINED	30
	CURVED-FULL	26
	STRAIGHT	20
	OTHER-WAVY	10
	OTHER-SCALLOPED	2
	OTHER-LOOPED	2
	OTHER-ZIGZAG	1
	OTHER- JAGGED	1
	OTHER-CRIMPED	0
LINE DIRECTION		
	VERTICAL	28
	HORIZONTAL	28
	DIAGONAL	18
LINE EDGE		
	SHARP	33
	FUZZY	13
N/A	BACK	0
N/A	ARMS	3
N/A	SEAT	0
N/A	FRONT LEGS	0
N/A	TOTAL	3

DATA ANALYSIS: COMMENTS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: LINE

OBJECT PART: BACK

LINE PATH

STRAIGHT	2.1	upholstery
	2.2	woven detail (center, sides)
	2.3	back rail & detail
	2.4	dom; wood cutouts (upper), border, beaded edges, cont. strip trim, 3 inc. lines (top rail)
	2.5	wood lines, incised lines (crest rail)
	2.6	dominant; upholstery, incised lines (frame), stripes (frame), silhouette
	2.8	dominant; gilt incised border (frame), upholstery border (sides only)
CURVED-RESTRAINED	2.1	dominant; slight sloping (frame)
	2.2	dominant; balloon back
	2.3	dominant; frame, top rail- crescent, upholstery, floral pattern (upholstery)
	2.4	floral/foliage pattern (uph.), wood cutouts (lower), sloping side silh (via back & leg tilt)
	2.5	dom; carved drapery swags, inc. lines, cont. strip trim, frame sides, silh=restr/full curves
	2.6	incised lines foliage (1 each side frame)
	2.7	dominant; silhouette (wood frame without any upholstery)
	2.8	dom; frame, uph, top rail, silh, patt. (uph.), textile draped over back- pattern, border
	2.10	dominant; frame, upholstery
CURVED-FULL	2.2	center only (ballon back)
	2.3	serpents (back rail)
	2.4	some of florals in pattern (upholstery), cutout center incised detail
	2.5	floral patt (uph.), roundels at ears/carved drapery swags, ctr detail (crest), uph. border
	2.6	spindles (back rail), top finials (crest)
	2.7	ears detail (crest rail)
	2.8	spindles (top rail), circle like scrolls of ears (crest), pattern- floral and bows (upholstery)
	2.9	dominant; ears, frame, cane back
	2.10	carvings & scrollwork (center, frame sides), pattern (upholstery)

OTHER- JAGGED	2.8	textile piece borders
OTHER-LOOPED	2.8	rope upholstered (trim)
OTHER-WAVY	2.2	surrounding border of curves
	2.4	cont. strip trim (around upholstery)
	2.5	cont. strip trim (around upholstery)
	2.6	trim
	2.7	carved detail (leaves)
OTHER-SCALLOPED	2.7	carved monkey face (center)

LINE DIRECTION

VERTICAL	2.1	dominant- exaggerated tallness
	2.2	dominant
	2.3	gilt frame- sides (simplicity of line emphasizes verticality)
	2.4	only sides- bordered beaded edges
	2.5	frame sides, side borders of upholstery
	2.6	striped pattern (upholstery), incised lines- 5 per side (frame), 2 sides trim
	2.7	center detail only (back rail)
	2.8	frame sides, rect box detail (frame sides), rope trim (borders upholstery)
	2.9	dominant
	2.10	dominant- exaggerated tallness
HORIZONTAL	2.1	top line of upholstery border, pillow against back at seat
	2.2	only top line of upholstery border (crescent)
	2.3	only back rail
	2.4	dominant
	2.5	crest, top line of upholstery border
	2.6	lines of finials, dbl inc. lines (crest rail), top & bott. trim, inc. lines (back rest, spindles)
	2.7	dominant
	2.8	dominant; back rail, upholstery rope trim (top & botttom)
	2.10	only crest rail
DIAGONAL	2.1	reclining back, lines of tufting

	2.2	lattice work (back rest)
	2.4	finials & leaves, wood cutouts & incised lines (center)
	2.5	some incised lines (crest rail)
	2.7	some detail- incised lines and carvings (back/crest rail)
	2.8	some detail- pattern (upholstery)- direction of stems, bows, paisley
LINE EDGE		
SHARP	2.1	frame sides
	2.2	wicker frame lines
	2.3	emphasis; upholstery borders & pattern is sharp, gilt wood frame, all details
	2.4	emphasis via simplicity of line
	2.5	wood frame lines & details
	2.6	emphasis via simplicity of line
	2.7	moderate due to abundance of detail of wood carvings & dark wood color
	2.8	wood frame, rope trim aids defining edges uph., gilded borders aid in edge of rect box dtl
	2.9	emphasis via simplicity of line
	2.10	emphasis via simplicity of line
FUZZY	2.1	rounded form of tufted upholstery
	2.2	some wicker detail is very small, braided lines
	2.4	only continous strip trim (due to wavy path)
	2.5	trim, woven pattern, colors blend together
	2.8	carved ears, uph. patt.(a lot detail, paisley almost unID due to similar background color)
OBJECT PART: ARMS		
LINE PATH		
STRAIGHT	2.1	silhouette
	2.4	arm rests, rows of tacking, wood cutouts & detail (sides of arms)
	2.5	incised lines of wood
	2.7	silhouette, abstract incised lines on top of
CURVED-RESTRAINED	2.1	frame sides & carvings, carved foliage
	2.2	dominant
	2.4	incised lines

	2.5	incised lines (4 ea/side), sloped line of arms emphasized by uph. arm rests, uph. patt.
	2.9	silhouette
	2.10	silhouette
CURVED-FULL	2.1	only circular scroll carvings (ends)
	2.4	incised lines, hourglass shaped base & stylized floral carvings (ends)
	2.5	carved roundels (ends), upholstered pattern
	2.7	knob-like detail (ends), abstract shapes on top of arm
	2.9	only arm rests
	2.10	scrollwork, arms terminate in full curves
OTHER-WAVY	2.2	braided detail (ends), woven detail (throughout)
	2.4	cont. strip trim
	2.5	trim
OTHER-SCALLOPED	2.4	borders of floral details (ends)
LINE DIRECTION		
VERTICAL	2.1	general direction
	2.2	general direction, woven bands of wicker
	2.4	general direction, incised lines @ side cutouts, incised lines of hourglass end detail
	2.7	general direction
	2.9	general direction
HORIZONTAL	2.2	woven bands of wicker
	2.4	incised lines at side cutouts
	2.5	pattern detail (upholstered arm rests)
	2.7	abstract lines on top
DIAGONAL	2.5	slight outward slope of arms, incised lines (3 ea/side), pattern detail (arm rests)
	2.10	slight outward slope of arms
LINE EDGE		
SHARP	2.4	incised lines on wood
	2.5	fairly simple pattern, incised lines and wood silhouette

	2.7	simplicity of silhouette (wood)
	2.9	simplicity (wood)
	2.10	simplicity (wood), upholst arm rests
FUZZY	2.1	carvings (wood), roundedness (upholstery)
	2.2	wavy lines of wicker
	2.4	padded arm rests, wavy continous strip trim

OBJECT PART: SEAT/SEAT RAIL

LINE PATH

STRAIGHT	2.3	upholstery borders
	2.5	dominant upholstery detail, incised lines at center (seat rail)
	2.6	upholstery borders, stripes (upholstery pattern)
	2.7	horizontal rows wood slats as seat base
	2.8	upholstery borders of silk and velvet layers, rope trim of uph., cont. strip trim (seat rail)
CURVED-RESTRAINED	2.1	dominant; rounded tufted upholstery, pattern of upholstery
	2.2	seat rail side details
	2.3	seat rail pattern & detail
	2.4	upholstery pattern- leaves etc.
	2.5	front silhouette, floral pattern (upholstery), incised lines (seat rail)
	2.7	sides curve slightly up to meet arms in diagonal direction
	2.9	dominant- outline
	2.10	dominant- outline
CURVED-FULL	2.2	wicker seat, seat rail (loops detail)
	2.3	details at seat rail (MOP inlay borders, serpents), uph. pattern, archit. detail (seat rail)
	2.4	floral petals (upholstery pattern)
	2.5	upholstery pattern detail, outline of seat at back, incised lines (seat rail)
	2.8	upholstery pattern
	2.10	upholstery pattern
OTHER-LOOPED	2.8	rope trim
OTHER-WAVY	2.5	trim (seat rail)
	2.6	trim

LINE DIRECTION

VERTICAL	2.3	lines over inlays, seat sides
	2.5	upholstery pattern, 3 small incised lines at center (seat rail)
	2.6	striped pattern upholstery, seat sides
	2.8	rope trim (seat sides), fringe hanging over seat rail
	2.9	rocker
	2.10	seat sides
HORIZONTAL	2.1	dominant; seat is low & wide, seat rail also horiz direction w/ horiz carving
	2.2	wicker banding (seat rail), general direction
	2.3	lines of seat rail, seat direction
	2.4	dominant; extremely wide seat, seat rail
	2.5	dominant pattern detail (upholstery), incised lines (seat rail)
	2.6	seat & seat rail
	2.7	dominant; horizontal rows of wood slats
	2.8	wide seat, rope trim around seat, seat rail
	2.10	top & bottom upholstery borders- seat & seat rail
DIAGONAL	2.1	tufting of upholst
	2.2	seat rail details- dir of loops
	2.4	upholstery pattern details
	2.5	incised lines (seat rail), upholstery pattern details
	2.7	sides of seat curve slighty upward to meet arms in diagonal direction
	2.8	side borders jut out slightly, skirt fabric detail, tassel detail at top

LINE EDGE

SHARP	2.2	dominant (wicker)
	2.3	dominant; upholstery is slightly fitted
	2.5	incised lines and frame (wood)
	2.6	dominant (contrasting luster of striped pattern), overerall uph borders
	2.7	dominant (wood) simple horizontal slats
	2.8	upholstery borders, rope trim defines edges also
	2.9	dominant (cane)
	2.10	dominant (wood & upholstery)
FUZZY	2.1	dominant; tufted upholstery and pattern blurs boundaries
	2.2	woven center detail (wicker)

	2.4	dominant; pattern colors close in hue
	2.5	padded upholstery, pattern
	2.8	pattern details

OBJECT PART: FRONT LEGS

LINE PATH

STRAIGHT	2.1	details at top & center
	2.4	top lines of rect box & stem detail
	2.5	general path
	2.8	general path
CURVED-RESTRAINED	2.1	carved lines
	2.2	dom; cabriole style legs, connected to rocker gliders contrib. to outward curves @ends
	2.3	dominant; cabriole leg
	2.4	lower hourglass shape & detail, leaves detail
	2.7	dominant; 7 legs
	2.9	bottom detail (rocker legs)
	2.10	dominant (rocker legs)
CURVED-FULL	2.1	turning
	2.4	carved flower detail
	2.5	turning
	2.6	dominant; turning
	2.9	rocker legs
OTHER-ZIGZAG	2.4	line detail (lower bottom)

LINE DIRECTION

VERTICAL	2.1	general direction, incised lines (top box)
	2.2	general direction
	2.3	general direction
	2.4	general direction
	2.5	general direction
	2.6	general direction
	2.8	general direction
	2.1	rocker legs (front view)

HORIZONTAL	2.1	incised lines of turning
	2.2	wicker banding
	2.5	turning
	2.6	turning
	2.9	rocker legs (side view)
	2.10	rocker legs (side view)
DIAGONAL	2.4	detail of leaves & lower part
	2.5	X-shaped carved detail atop each leg
	2.6	x-shapes carved atop each leg
	2.7	dominant; x-shaped legs

LINE EDGE

SHARP	2.1	dominant (wood)
	2.2	dominant (wicker)
	2.3	dominant (wood)
	2.4	dominant (wood)
	2.5	dominant (wood)
	2.6	dominant (wood)
	2.7	dominant (wood)
	2.8	dominant (wood)
	2.9	dominant (wood)
	2.10	dominant (wood)

APPENDIX L

DATA ANALYSIS: SHAPE IN CHAIRS

DATA ANALYSIS: FREQUENCY TABULATIONS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: SHAPE

OBJECT PART: BACK

	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
GEOMETRIC EQUAL-SIDED											7
SQUARE						1		1			2
CIRCLE	1	1	1				1	1			5
EQULATERAL TRIANGLE											0
PENTAGON											0
HEXAGON											0
OCTAGON											0
GEOMETRIC UNEQUALLY SIDED											13
OVAL							1		1		2
SCALENE TRIANGLE				1							1
RECTANGLE	1		1	1		1		1			5
ISOSCELES TRIANGLE											0
PARALLELOGRAM											0
TRAPEZOID											0
HEART											0
DIAMOND	1	1									2
TEARDROP											0
MARQUIS											0
OGIVE											0
STAR											0
PAISLEY								1			1
CLUB											0
SPADE											0
PEAR		1									1
KIDNEY							1				1
ORGANIC											14
FLORAL/FOLIAGE	1		1	1	1	1		1		1	7
OTHER		1	1	1	1		1	1		1	7

OBJECT PART: ARMS

	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
GEOMETRIC EQUAL-SIDED											3
SQUARE			N/A	1		N/A		N/A			1
CIRCLE	1	1	N/A			N/A		N/A			2
EQULATERAL TRIANGLE			N/A			N/A		N/A			0
PENTAGON			N/A			N/A		N/A			0
HEXAGON			N/A			N/A		N/A			0
OCTAGON			N/A			N/A		N/A			0
GEOMETRIC UNEQUALLY SIDED											4
OVAL			N/A		1	N/A		N/A			1
SCALENE TRIANGLE			N/A			N/A		N/A			0
RECTANGLE			N/A	1		N/A	1	N/A		1	3
ISOSCELES TRIANGLE			N/A			N/A		N/A			0
PARALLELOGRAM			N/A			N/A		N/A			0
TRAPEZOID			N/A			N/A		N/A			0
HEART			N/A			N/A		N/A			0
DIAMOND			N/A			N/A		N/A			0
TEARDROP			N/A			N/A		N/A			0
MARQUIS			N/A			N/A		N/A			0
OGIVE			N/A			N/A		N/A			0
STAR			N/A			N/A		N/A			0
PAISLEY			N/A			N/A		N/A			0
CLUB			N/A			N/A		N/A			0
SPADE			N/A			N/A		N/A			0
PEAR			N/A			N/A		N/A			0
KIDNEY			N/A			N/A		N/A			0
ORGANIC											9
FLORAL/FOLIAGE	1		N/A	1	1	N/A		N/A		1	4
OTHER	1		N/A		1	N/A	1	N/A	1	1	5

OBJECT PART: SEAT/SEAT RAIL

	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
GEOMETRIC EQUAL-SIDED											7
SQUARE	1	1				1			1		4
CIRCLE	1	1	1								3
EQULATERAL TRIANGLE											0

PENTAGON											0
HEXAGON											0
OCTAGON											0
GEOMETRIC UNEQUALLY SIDED											16
OVAL											0
SCALENE TRIANGLE											0
RECTANGLE	1		1		1		1	1		1	6
ISOSCELES TRIANGLE											0
PARALLELOGRAM											0
TRAPEZOID			1	1				1		1	4
HEART											0
DIAMOND	1				1			1			3
TEARDROP			1								1
MARQUIS					1						1
OGIVE											0
STAR											0
PAISLEY								1			1
CLUB											0
SPADE											0
PEAR											0
KIDNEY											0
ORGANIC											11
FLORAL/FOLIAGE	1		1	1	1			1		1	6
OTHER		1	1		1			1		1	5

OBJECT PART: FRONT LEGS

	2.1	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.8**	**2.9**	**2.10**	**TOTALS**
GEOMETRIC EQUAL-SIDED											3
SQUARE						N/A	N/A	N/A			0
CIRCLE				1		N/A	N/A	N/A		1	2
EQULATERAL TRIANGLE					1	N/A	N/A	N/A			1
PENTAGON						N/A	N/A	N/A			0
HEXAGON						N/A	N/A	N/A			0
OCTAGON						N/A	N/A	N/A			0
GEOMETRIC UNEQUALLY SIDED											5
OVAL						N/A	N/A	N/A			0
SCALENE TRIANGLE						N/A	N/A	N/A			0
RECTANGLE	1	1		1	1	N/A	N/A	N/A			4

	ISOSCELES TRIANGLE						N/A	N/A	N/A			0
	PARALLELOGRAM						N/A	N/A	N/A			0
	TRAPEZOID						N/A	N/A	N/A			0
	HEART						N/A	N/A	N/A			0
	DIAMOND						N/A	N/A	N/A			0
	TEARDROP						N/A	N/A	N/A	1		1
	MARQUIS						N/A	N/A	N/A			0
	OGIVE						N/A	N/A	N/A			0
	STAR						N/A	N/A	N/A			0
	PAISLEY						N/A	N/A	N/A			0
	CLUB						N/A	N/A	N/A			0
	SPADE						N/A	N/A	N/A			0
	PEAR						N/A	N/A	N/A			0
	KIDNEY						N/A	N/A	N/A			0
ORGANIC												4
	FLORAL/FOLIAGE	1					N/A	N/A	N/A			1
	OTHER			1	1		N/A	N/A	N/A		1	3

DATA ANALYSIS: TOTAL FREQUENCY TABULATIONS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: SHAPE

GEOMETRIC UNEQUALLY SIDED		38
ORGANIC		38
GEOMETRIC EQUAL-SIDED		20
O	OTHER	20
GU	RECTANGLE	18
O	FLORAL/FOLIAGE	18
GE	CIRCLE	12
GE	SQUARE	7
GU	DIAMOND	5
GU	TRAPEZOID	4
GU	OVAL	3
GU	TEARDROP	2
GU	PAISLEY	2
GE	EQULATERAL TRIANGLE	1
GU	SCALENE TRIANGLE	1
GU	MARQUIS	1
GU	PEAR	1
GU	KIDNEY	1
GE	PENTAGON	0
GE	HEXAGON	0
GE	OCTAGON	0
GU	ISOSCELES TRIANGLE	0
GU	PARALLELOGRAM	0
GU	HEART	0
GU	OGIVE	0
GU	STAR	0
GU	CLUB	0
GU	SPADE	0
N/A	BACK	0
N/A	ARMS	3

N/A	SEAT	0
N/A	FRONT LEGS	3
N/A	TOTAL	6

DATA ANALYSIS: COMMENTS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: SHAPE

OBJECT PART: BACK

GEOMETRIC EQUAL-SIDED		
SQUARE	2.6	wood frame
	2.8	wood frame, upholstered inset
CIRCLE	2.1	deep buttoning (upholstery)
	2.2	center loops (wicker detail)
	2.3	details at back rail- MOP inlay sides, cutouts
	2.7	high relief detail (center)
	2.8	detail of ears (center)
GEOMETRIC UNEQUALLY SIDED		
OVAL	2.7	small detail below center
	2.9	elongated, connected to seat
SCALENE TRIANGLE	2.4	1 ea/ side @ center of wood cutout & @ bottom sides
RECTANGLE	2.1	elongated
	2.3	lower back rail, MOP inlay
	2.4	overall shape of back, 4 ea/side wood cutouts @ top
	2.6	upholstery inset, back rail inset
	2.8	incised & gilded details (wood frame sides)
DIAMOND	2.1	shape created by tufting of upholstery
	2.2	lattice work (back rest)
PAISLEY	2.8	upholstery pattern
PEAR	2.2	dominant; inner center shape

KIDNEY	2.7	small detail under high relief
ORGANIC		
FLORAL/FOLIAGE	2.1	stylized pattern (upholstery)
	2.3	upholstery pattern
	2.4	upholstery pattern
	2.5	upholstery pattern
	2.6	incised line designs (wood)
	2.8	upholstery pattern
	2.10	upholstery pattern
OTHER	2.2	half oval shapes, balloon back overall shape
	2.3	dragon (upholstery pattern), crescent shape (upholstered inset)
	2.4	abstract geometric shapes- rectangles & curves (carvings)
	2.5	incised lines & carvings (drapery swags, etc.)
	2.7	carved details (back slat), arch shape in center (overall)
	2.8	ribbons & bows of upholstery pattern
	2.10	balloon back, curved shps (uph. patt.), carved motifs (wood frame, crest rail)
OBJECT PART: ARMS		
GEOMETRIC EQUAL-SIDED		
SQUARE	2.4	detail- border framing floral (end)
CIRCLE	2.1	double scroll carvings (end)- beading inner part also emphasizes circle shape
	2.2	woven detail (ends)
GEOMETRIC UNEQUALLY SIDED		
OVAL	2.5	overall- elongated- armrests
RECTANGLE	2.4	overall- armrests, incised detail @ sides of wood
	2.7	overall
	2.10	overall- elongated-armrests
ORGANIC		
FLORAL/FOLIAGE	2.1	upholstered pattern (arm rests)

	2.4	upholstered pattern (arm rests), carved details of wood (ends)
	2.5	upholstered pattern
	2.10	upholstered pattern
OTHER	2.1	wood carvings
	2.5	wood carvings- curved shapes, incised lines- geometric abstract
	2.7	incised lines- curved abstract shapes (top of arms)
	2.9	wood cutout inset- curved shapes
	2.10	scrollwork carving at sides, upholstered pattern- curved shapes

OBJECT PART: SEAT/SEAT RAIL

GEOMETRIC EQUAL-SIDED

SQUARE	2.1	square is slightly rounded due to tufting
	2.2	small, repeated woven pattern on seat (checkerboard)
	2.6	overall shape, upholstered
	2.9	overall shape, slightly rounded, caned
CIRCLE	2.1	deep buttoning of upholstered seat
	2.2	details at seat rail (loops)
	2.3	2 MOP inlays, beading (seat rail)
RECTANGLE	2.1	elongated- linenfold detail (seat rail)
	2.3	vertical lines atop MOP inlay (seat rail)
	2.5	4 incised lines (wood- seat rail)
	2.7	elongated, repeated- rows of wood slats
	2.8	elongated- 2 upholstered pads, cont strip trim
	2.10	elongated (seat rail)
TRAPEZOID	2.3	dominant; overall shape of seat
	2.4	dominant; overall shape of seat
	2.8	dominant; overall shape of seat
	2.10	dominant; overall shape of seat
DIAMOND	2.1	tufting of upholstery
	2.5	2 incised lines- wood (seat rail)
	2.8	under fabric woven detail (hangs from seat over legs), cont strip trim

TEARDROP	2.3	MOP inlay center detail (seat rail)
MARQUIS	2.5	2 incised lines in wood (seat rail)
PAISLEY	2.8	detail in upholstery pattern
ORGANIC		
FLORAL/FOLIAGE	2.1	stylized pattern (upholstery)
	2.3	upholstered pattern
	2.4	upholstered pattern
	2.5	upholstered pattern
	2.8	upholstered pattern
	2.10	upholstered pattern
OTHER	2.2	overall shape is square/circle hybrid, details at seat rail (wood)
	2.3	upholstered pattern- dragon, arch detail (seat rail)
	2.5	overall shape, incised lines-geom. Abstract (seat rail)
	2.8	ribbons & bows (upholstered pattern)
	2.10	curved shapes (upholstered pattern)
OBJECT: FRONT LEGS		
GEOMETRIC EQUAL-SIDED		
CIRCLE	2.4	center of carved floral detail (wood carvings)
	2.10	foot detail (wood)
EQUILATERAL TRIANGLE	2.5	incised detail- top (wood)
GEOMETRIC UNEQUALLY SIDED		
RECTANGLE	2.1	top box (wood carvings)
	2.2	horizontal banding (wicker)
	2.4	detail of stem, box, border (wood carvings)
	2.5	incised details- top (wood)
TEARDROP	2.9	interlooping curves in center (rocker legs)

ORGANIC

FLORAL/FOLIAGE	2.1	flower carving, acanthus leaves (center)
OTHER	2.3	freeform curves (incised lines)
	2.4	carved shapes
	2.10	freeform curves

APPENDIX M

DATA ANALYSIS: FORM IN CHAIRS

DATA ANALYSIS: FREQUENCY TABULATIONS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: FORM

OBJECT PART: BACK

	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
GEOMETRIC EQUAL-SIDED											5
SPHERE		1				1		1			3
CUBE						1		1			2
GEOMETRIC UNEQUALLY SIDED											10
CYLINDER											0
CONE											0
PYRAMID											0
BOX	1			1							2
DOME											0
BARREL											0
HOURGLASS		1					1			1	3
TRUMPET		1	1								2
BELL					1						1
OVOID		1					1				2
ORGANIC											3
FREEFORM CURVES			1								1
DOME VARIATION							1				1
OVOID VARIATION									1		1

OBJECT PART: ARMS

	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	TOTALS
GEOMETRIC EQUAL-SIDED											1
SPHERE			N/A			N/A	1	N/A			1
CUBE			N/A			N/A		N/A			0
GEOMETRIC UNEQUALLY SIDED											9
CYLINDER		1	N/A	1	1	N/A		N/A			3
CONE			N/A			N/A		N/A			0
PYRAMID			N/A			N/A		N/A			0
BOX	1		N/A	1		N/A	1	N/A		1	4

DOME			N/A			N/A		N/A			0
BARREL			N/A			N/A		N/A			0
HOURGLASS			N/A	1		N/A		N/A			1
TRUMPET			N/A			N/A		N/A			0
BELL			N/A			N/A		N/A			0
OVOID			N/A			N/A		N/A	1		1
ORGANIC			N/A			N/A		N/A			0

OBJECT PART: SEAT/SEAT RAIL	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.8**	**2.9**	**2.10**	**TOTALS**
GEOMETRIC EQUAL-SIDED											5
SPHERE		1				1		1			3
CUBE	1					1					2
GEOMETRIC UNEQUALLY SIDED											5
CYLINDER											0
CONE											0
PYRAMID											0
BOX											0
DOME					1						1
BARREL											0
HOURGLASS											0
TRUMPET			1	1						1	3
BELL											0
OVOID		1									1
ORGANIC											3
DOME VARIATION							1				1
TRUMPET/CUBE VARIATION								1			1
OTHER									1		1

OBJECT PART: FRONT LEGS	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.8**	**2.9**	**2.10**	**TOTALS**
GEOMETRIC EQUAL-SIDED											3
SPHERE					1	1					2
CUBE	1										1
GEOMETRIC UNEQUALLY SIDED											7
CYLINDER								1			1
CONE											0
PYRAMID											0
BOX	1			1							2

	DOME											0
	BARREL	1					1					2
	HOURGLASS				1							1
	TRUMPET											0
	BELL					1						1
	OVOID											0
ORGANIC												5
	FREEFORM CURVES		1	1				1		1	1	5

DATA ANALYSIS: TOTAL FREQUENCY TABULATIONS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: FORM

GEOMETRIC UNEQUALLY SIDED		31
GEOMETRIC EQUAL-SIDED		14
ORGANIC		11
GE	SPHERE	9
GU	BOX	8
O	FREEFORM CURVES	6
GU	HOURGLASS	5
GU	TRUMPET	5
GE	CUBE	5
GU	CYLINDER	4
GU	OVOID	4
GU	BARREL	2
GU	BELL	2
O	DOME VARIATION	2
O	OVOID VARIATION	2
GU	DOME	1
O	OTHER	1
O	TRUMPET/CUBE VARIATION	1
GU	CONE	0
GU	PYRAMID	0
N/A	BACK	0
N/A	ARMS	3
N/A	SEAT	0
N/A	FRONT LEGS	0
N/A	TOTAL	3

DATA ANALYSIS: COMMENTS
SAMPLE 2- CHAIRS
ELEMENT OF DESIGN: FORM

OBJECT PART: BACK

GEOMETRIC EQUAL-SIDED		
SPHERE	2.2	turning- inner most detail
	2.6	2 finials @ ears (crest rail), 7 spindles (back rail)
	2.8	spindles, roundels-detail @ ears
CUBE	2.6	frame/upholstered inset (some 3D quality due to upholstery)
	2.8	upholstered inset
GEOMETRIC UNEQUALLY SIDED		
BOX	2.1	upholstery & frame
	2.4	upholstered inset & frame
HOURGLASS	2.2	back to arm
	2.7	back to seat
	2.10	slight- balloon back
TRUMPET	2.2	inverted- balloon back
	2.3	inverted- all other structural embellishments are 2D except serpents
BELL	2.5	curved lines accentuate bell form
OVOID	2.2	turning
	2.7	center detail in high relief (back slat)
ORGANIC		
FREEFORM CURVES	2.3	serpent detail (back rail)
DOME VARIATION	2.7	back slat, no upholstery- rest not 3D
OVOID VARIATION	2.9	half of

OBJECT PART: ARMS

GEOMETRIC EQUAL-SIDED

SPHERE	2.7	sphere & ring- knob detail turning (ends)

GEOMETRIC UNEQUALLY SIDED

CYLINDER	2.2	wicker arm
	2.4	upholstered arm rests
	2.5	upholstered arm rests
BOX	2.1	elongated- rounded edges via upholstered arm rests
	2.4	wood arm, detail (ends)
	2.7	elongated (arms)
	2.10	elongated (upholstered arm rests)
HOURGLASS	2.4	wood detail turning (ends)
OVOID	2.9	elongated (wood arm rests)

OBJECT PART: SEAT/SEAT RAIL

GEOMETRIC EQUAL-SIDED

SPHERE	2.2	turning (seat rail); seat form is flat/2D & not upholstered
	2.6	2 spindles (seat rail)
	2.8	ball trimmings
CUBE	2.1	rounded due to upholstery
	2.6	seat form (upholstered)

GEOMETRIC UNEQUALLY SIDED

DOME	2.5	upholstered
TRUMPET	2.3	slight
	2.4	slight
	2.10	slight
OVOID	2.2	turning (seat rail)

ORGANIC		
DOME VARIATION	2.7	back & seat conn. due to absence of back (only top slat), silh=hourglass
TRUMPET/CUBE VARIATION	2.8	also- silhouette as whole is also similar to hourglass but more geometric
OTHER	2.9	UNID; not upholstered- more 2D

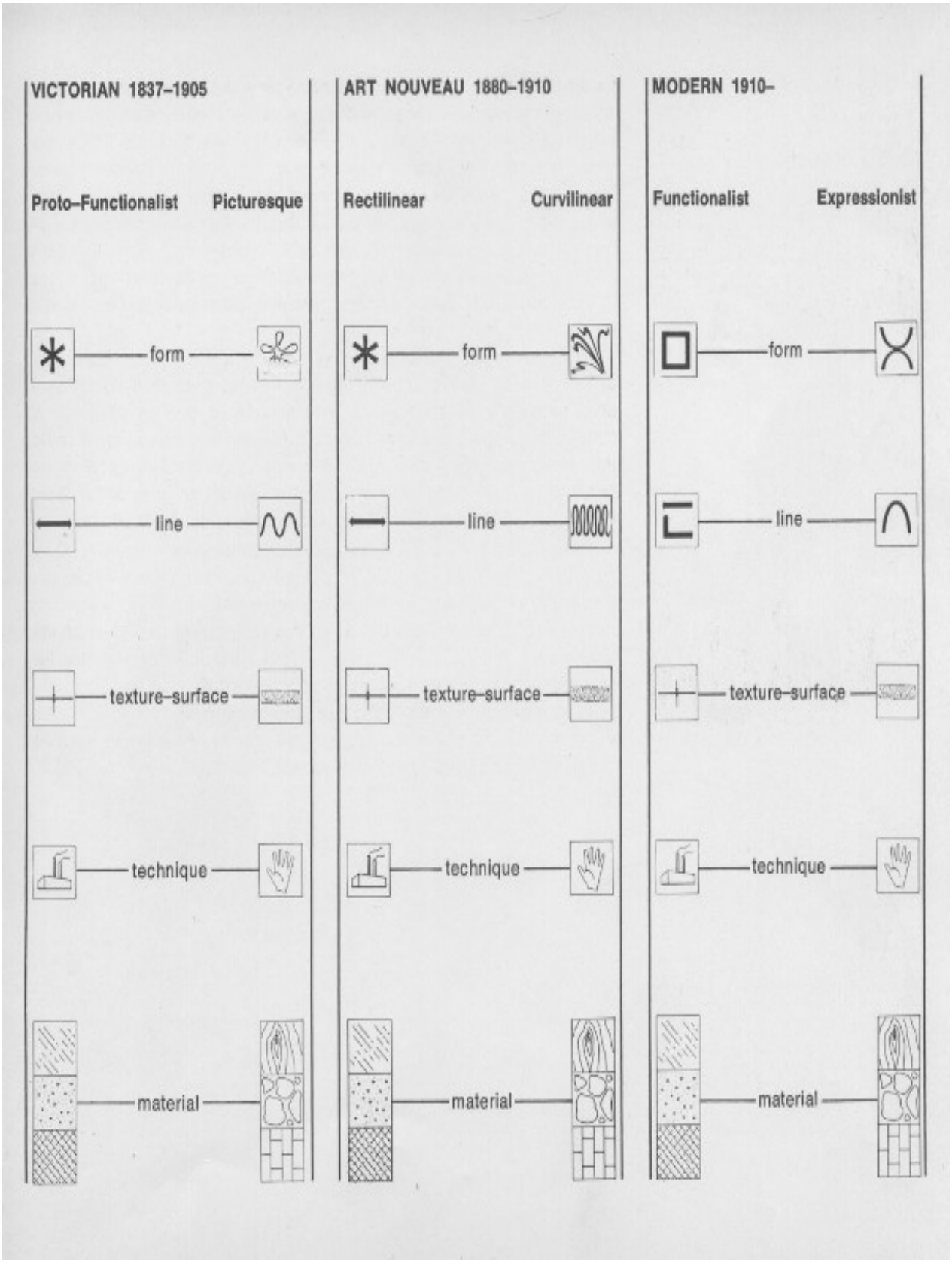
OBJECT PART: FRONT LEGS

GEOMETRIC EQUAL-SIDED		
SPHERE	2.5	turning
	2.6	turning
CUBE	2.1	turning @ center of legs
GEOMETRIC UNEQUALLY SIDED		
CYLINDER	2.8	total form
BOX	2.1	carved turning @ top of legs
	2.4	top form
BARREL	2.1	turning @ bottom of legs
	2.6	turning
HOURGLASS	2.4	bottom form turning
BELL	2.5	turning- form
ORGANIC		
FREEFORM CURVES	2.2	cabriole leg
	2.3	cabriole leg
	2.7	7 legs on each side
	2.9	interlooping curves (rocker)- legs are focal point
	2.10	restrained curves (rocker)

APPENDIX N

STYLISTIC ELEMENTS OF DESIGN MODES IN HISTORY

(FEREBEE, 1970, p. 11)


VICTORIAN 1837–1905
Proto–Functionalist
Picturesque
form
line
texture–surface
technique
material
ART NOUVEAU 1880–1910
Rectilinear
Curvilinear
form
line
texture–surface
technique
material
MODERN 1910–
Functionalist
Expressionist
form
line
texture–surface
technique
material