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Two-Year Institutions
Chris Moran-Wisdom
Last summer I had a virtual reality experience when I went on the "Back to the Future" ride at Universal Studios in Southern California. We can't quite simulate that kind of time travel experience here today. But it seems appropriate on this very special occasion—the 50th year since the first meeting of our association—to do some time travel, at least conceptually. The theme of this conference (reflection, contemplation, celebration) implies that we can understand our present by critically analyzing our history and contemplating our future. In other words, we can understand where we are going if we understand where we have been and where we are headed. How can we best prepare for the 21st century? Perhaps we can begin by unravelling a few of the common threads that comprise our history: When we examine our field and association, what have been some of the contributing factors to our common culture? What has been the guiding ethos (or ethical value system)? What topics have been of concern to us, and why?

As we address these questions, it is helpful to consider the words of Cornel West:

It is very important as we reflect on prophetic thought in postmodern times, in these very deep and difficult crises of our day, to always view ourselves as part of a tradition. A long and grand tradition trying to forge a sense of dignity and decency, keeping alive quests for excellence and elegance (West, 1993, p. 3).

In the context of textiles and clothing, these deep and difficult crises of our day include the fragmentation of some of our programs and a need to rethink our core purpose. But I want to argue that, paradoxically, in many respects our day has come. The world around us is in a time of transition. Call it what you will: the "time between the parentheses" (Naisbitt, 1982), postmodernism, the information age, or a postindustrial or postdisciplinary era. At any rate, there seems to be a common prevailing sense that some of the old frameworks and orthodoxies are no longer working for us; we need creative new syntheses and understandings to link our past with our future. In the spirit of creating new understandings and linkages, we need to find ways of "enhancing avenues of communication among consumers and manufacturing, retailing, and governmental groups." This goal is one of the three major themes of our current Critical Linkages II project. It is hardly a new theme; it was pointed out in 1944 at the first meeting(s) of our association, in the Central and Eastern Regions in Chicago and New York City, respectively. These meetings were organized by Beulah Coon of the U.S. Office of Education (Proceedings, CR and ER, respectively, 1944).

What else concerned our early association colleagues? They asked what kinds of leaders are needed by and for the textiles and clothing field and explored how they could foster the necessary leadership. Clearly, one of the intended purposes of these meetings was an exploration of the dual role of preparing (primarily female) students for (a) diverse occupations and (b) family life. The participants at these 1944 meetings focused on the competencies needed for a range of occupations. At some points in the meetings, apparently our early colleagues wondered if they had emphasized professional success after graduation to the extent that they had lost sight of the needs of the homemaker. But the proceedings suggest that there was general consensus on the importance of erring on the side of identifying viable occupations outside the home for their students, within the larger context of providing students with an education that would sustain them throughout their lives, regardless of what they eventually decided to do. Our early members apparently emphasized the importance of fostering intellectual skills by means of a well-rounded, interdisciplinary liberal arts and sciences education, coupled with practical career competencies. This focus revolved around the contexts of creating, selecting, and using clothing.

At the Eastern Region meeting in 1944, the keynote speaker—Ruth O'Brien, the Assistant Chief of the U.S. Bureau of Human Nutrition and Home Economics—questioned the following relative to textiles and clothing, as well as everyday life in general: What do people want to know? In response to this question, she identified three responses: (a) how to have a successful home, (b) how to make a living, and (c) how to
have a good time. She applied these basic insights more directly to textiles and clothing in the following ways: (a) having a successful home, in part, through the wise selection, use and care of clothing and household textiles so as to assure the sound financial management of family resources, (b) acknowledging the wide range of interesting and well-paying careers offered in the field of textiles and clothing and available to both women and men who are thoroughly trained, and (c) the appreciation of "lovely clothing and beautiful textiles"—not only for their intrinsic value, but also for the historical and cultural tradition(s) to which they refer (Proceedings, Eastern Region, 1944). This last point affirmed and validated the importance of textiles and clothing in the context of aesthetic appreciation.

If we were to pose the question, "What do people want to know?" today, we would probably restate the above principles in a manner that emphasizes (a) the quality of textile products in the context of everyday life in diverse consumer cultures, rather than focusing on the importance of a "successful" (universal notion of) home and family life, (b) career possibilities within the larger context of sustainable economic development (i.e., development that is kind to the environment and that also contributes to the economic well-being of our students and to cooperation in the global marketplace), and (c) diverse aesthetic standpoints, recognizing that there are multiple ways of perceiving or appreciating beauty, in conjunction with such identities as gender, race/ethnicity, sexual orientation, age, and social class. Postmodernist discourse informs this last point, based on the notion that just as there is no single truth with a capital T, there is also no single standard for "lovely clothing and beautiful textiles." Hence, we need to study and appreciate diverse ways that consumers put their "looks" together; in the process, we need to rediscover the "pleasure principle" in our study. But most of all, we need to recognize that there is no single history; rather, there are multiple histories, and not all have yet been told or expressed.

Moving back to our colleagues in 1944, it is apparent that students were among their primary stakeholders. These students' futures were of great concern to our early members. In what Lois Dickey (1990) has called the "exploratory period" of textiles and clothing as an area of study (between 1944 and 1953), part of what was explored was the most appropriate curriculum that would prepare students as well as possible for careers inside or outside the home. In this exploration, Mary Ellen Roach-Higgins (1993) notes that in theory, there was a focus on issues and careers for both women and men, but in practice, it became a focus for females only. This "reality" can be attributed in part to the history of the subject matter, along with its probable devaluation along gender lines (i.e., it was an educational and career path that few males were likely to follow). But there is an additional factor that should not be underestimated: During the 1950s, in particular, the American Home Economics Association assumed a rather narrow, conservative view of family life and the future role of our students therein (Roach-Higgins, 1993). Consider, for example, the catalog copy of some of home economics programs within which textiles and clothing curricula were housed. In her historical analysis of these curricula in the context of home economics programs, Colleen Frey (1991) quotes from a number of our institutions' catalogs in the 1950s and notes there was an assumption that "since a high proportion of home economics graduates ultimately marry and go into homes of their own, it is important that the basic curriculum prepare them for homemaking," and that "homemaking is both the choice and the destiny of most young women." Hence, the purpose of the curriculum was described in some of these catalogs as developing "intelligent homemakers" and offering "the advantage of preparing for homemaking combined with an education for a wage earning profession—selling fabrics and garments in department stores" (see Frey, 1991, pp. 18-19).

But did textiles and clothing curricula during this period ascribe totally to the agenda of home economics at large? This is a question that deserves more study and analysis. Mary Ellen Roach-Higgins (1993) points out that, paradoxically, in the midst of this family-oriented ideology of home economics in the 1950s, textiles and clothing scholars began to move "away from construction of clothing for family members by family members...and toward statements of purpose placed within a macro social and cultural framework" (p. 7). During the late 1950s and early 1960s, textiles and clothing scholars addressed issues of concept development, with an eye toward comprehensive and purposeful curricular development (see Hawthorne, 1991 and Hutton, 1991). Resulting from these conceptualizing efforts were interdisciplinary frameworks that integrated the various arts and sciences pertaining to textiles and clothing (see Rudd, 1991).

How can we contextualize these models of interdependency as well as other common threads throughout our history? Shedding some light on this subject are the insights from the book Women of Academe: Outsiders in the Sacred Grove (Alsenberg and Harrington, 1988). Based on interview data with academic women,
Aisenberg and Harrington established connections between many of their value systems or ways of knowing and female culture. The attributes commonly found in academic female culture, they found, included the tendencies (a) to combine theory with practice, (b) to transcend disciplinary boundaries, (c) to integrate life and work, and (d) to admit ambiguity. These values or ways of knowing are not necessarily restricted to academic women; however, a clear link can be established between these values or ways of knowing and female culture in the United States, if not in other societies. Hence, it is helpful to consider these factors, especially, in an analysis of the intellectual histories of fields predominately developed by women.

Combining Theory with Practice

In a dialogue with bell hooks, Cornel West (in hooks and West, 1992) contrasts what it means to be an academic versus an intellectual: “An academic usually engages in rather important yet still narrow scholarly work, whereas an intellectual is engaged in the public issues that affect large numbers of people in a critical manner” (p. 29). Another way of stating the role of an intellectual is to focus on an ethos of service to society—an ethos that is embedded in the history of our area of study. But before we become too self-congratulatory, we need to question: service to whom—to which sector of society? Are certain groups of people more or less able to clarify our subject matter or to benefit from its knowledge base in a particular way? What determines our scope? Who gets to decide? Clearly, we have a subject matter that is relevant to everyday life, but we need to analyze critically how many sectors of society our work studies and touches.

Furthermore, in conjunction with the link in our intellectual histories between theory and practice, we need to continue to acknowledge and celebrate what probably constitutes our most unique asset: integrative product knowledge. As Rudd (1991) has noted, our subject matter focuses on the interdependent processes that link the characterization of textile products with their use. But how successfully, or how often, do we point these interdependent processes to our students, or even to ourselves? More generally, to what extent do we acknowledge one of our most fundamental strengths: our ability to move back and forth freely between abstract and concrete realms of thought—i.e., between theory and practice?

Transcending Disciplinary Boundaries

Another of our greatest strengths is and has been our ability to see connections among phenomena and ideas. Yet the interdisciplinary character of our subject matter is probably one that we take for granted, even in a time when the academy is highlighting the importance of interdisciplinary areas of knowledge. Our collective intellectual history is replete with models of interdependency and interdisciplinarity. (See Rudd, 1991 and Kaiser and Damhorst, 1991, for illustrations of these models in the 1960s and again in the late 1980s, respectively.) How can we explain our penchant for Venn diagrams or other models that highlight the intersections rather than the distinctions among diverse disciplines? Aisenberg and Harrington (1988) suggest that a fascination with the fuzzy or transcendence of borders is a common ingredient of academic female culture. But to what extent do we highlight our uniqueness—our integrative abilities—within the academy? Have we become more or less interdisciplinary in our thinking over time?

Integrating Life and Work

Undeniably, a common thread in our intellectual histories is an intense fascination with the object(s) of our study. Aisenberg and Harrington (1988) identify the importance of a life-transforming experience in the intellectual histories of many academic women, resulting in a close personal relationship between one’s work and one’s life experiences and, ultimately, a desire to share this transforming experience with others such as students. In the context of studying textiles and clothing, it is not surprising that most of us have linked our area of study with our everyday lives: “We have one of the most universal, relevant, appealing, personal, concrete, visual areas of subject matter in the academic community” (Horn, 1984, p. 6).

In this connection, it is probably our collective intellectual curiosity that constitutes the sustaining force of our inquiry and instruction, in the form of our fascination with our object(s) of study. This intellectual curiosity is highly evident among our dedicated emeritus members who remain very active in the association and continue to contribute ideas and service in a wide variety of ways. And, it is intellectual curiosity that propels us to study the linkages between theory and practice, or between abstract and concrete realms of thought/experience, as well as to share these linkages with each other and our students.
Admitting Ambiguity

Ambiguity is par for the course of our object(s) of study. Change is part and parcel of the fashion process as well as the technological advances and social forces that modify the course of our study. But perhaps there is an even more fundamental dimension of ambiguity in the study of clothing that pertains to the human body in everyday life. Elizabeth Wilson suggests that clothing links "the biological body to the social being, and public to private"; in so doing, it "marks an unclear boundary ambiguously, and unclear boundaries disturb us" (Wilson, 1985, p. 2).

It is probably no accident that the study of clothes and the materials that comprise them is one that is laden with gender-related significance (see Frey, 1991; Kaiser, 1991; Michelman, 1991). Clothing and textiles are closely linked not only to the body, but also to political economies of production and consumption. We need to interrogate these political economies creatively and critically if we are to admit ambiguity in a manner that enables an understanding of the tensions or ambivalences resulting from ambiguity.

In this connection, our ability to transcend either-or thinking can be linked to our tendency to deal effectively with ambiguity by bridging categories ordinarily perceived as oppositional or dichotomous: (a) male versus female culture, (b) production versus consumption, (c) economic development versus quality of life, (d) research versus teaching, (e) science versus art, (f) science versus technology, (g) art versus craft, (h) basic versus applied research, and (i) objective versus subjective modes of inquiry or experience.

Of no surprise to most of us is the fact that to accept the above dichotomies is somewhat self-defeating, because we inevitably find ourselves leaning toward the latter of each of these dichotomies. As post-structuralist or deconstructionist thinkers tell us, binary oppositions generally refer to hierarchies and allude to power relations. Usually, the first item listed comes out ahead in the hierarchy: in this case, in the hierarchies of dominant academic culture. Accordingly, in the context of this dominant culture, we have found ourselves holding the short end of the stick, on a variety of dimensions.

Yet I want to argue that in many fundamental ways, we have managed to defy these dichotomies. The problem is not so much our position relative to these dichotomies as it is with the dichotomies themselves. And, our ability to see connections and to foster integrative understandings has enabled us to defy some of the arbitrary dichotomies that would have otherwise limited our thinking and effectiveness. Rather than understanding the above phenomena as dichotomies, we have generally seen them as seamless continua within contexts. By building on these continua and confronting the ambivalences that often coincide with the linkages we forge, we can not only highlight our uniqueness and importance within the academy but also contribute substantively to the current debate over the canon and the role of disciplines in a transitional era of knowing.

Back to the Future: Critical Linkages II

The current Critical Linkages II project provides us with an opportunity to build on the numerous futuring efforts throughout our history, including the intense efforts in the 1980s and the first critical linkages effort (see Kaiser and Damhorst, 1991). This project aims to frame the issues that we and our area of study need to address in the coming century. It leads us to explore how we can build on our history of integrative thinking and doing in a manner that not only celebrates our diversity but also critically examines the basis for our interconnectedness. The Critical Linkages II project addresses our diversity in the interrelated contexts of (a) our knowledge base, (b) our standpoints, and (c) our stakeholders. As the Venn diagram illustrates in Figure 1, the connections among these contexts of diversity frames the possibility for exploring new, critical linkages in a time that demands creative new syntheses and understandings (Connor, 1989).

Diversity in our knowledge base. This context enables us to examine what and how we know by considering our interdisciplinary character and the rich array of theoretical and methodological approaches we bring to our study. It allows us to examine questions such as the following: What is unique about our subject matter within the larger context of the academy? Do we go about our business of obtaining knowledge in ways that may be described as uniquely integrative? What is the historical basis for the connections within our subject matter, and to what extent should we build on these connections or develop new ones? How can we characterize the relationships among the parts of our whole? Can we successfully exploit these relationships while simultaneously linking with disciplinary and interdisciplinary areas of study outside of textiles and clothing? And, how can we strike a balance between diversity and unity (intellectual coherence) in our knowledge base?
Diversity among our stakeholders. This orientation leads us to explore ways of bridging the perspectives of industry, consumer cultures, and the public sector (i.e., government and the larger global-economic context). It encourages us to explore the following questions: Whose interests do we serve, and why? What does the future hold for our students, and are we preparing them adequately for it? What is or should be our role in relation to our diverse stakeholders? What has this role been historically, and to what extent should we build on this role or shape a new one? Should we be attempting to build better bridges among our stakeholders? If so, how should we approach this? What actions should we take?

Diversity in our standpoints. This theme enables us to understand how our identities (e.g., gender, race/ethnicity) tend to shape our standpoints and, hence, our inquiry and conduct. How have our standpoints influenced what and how we know historically? Recognizing that our area of study is dominated by a white, western, female perspective, how can we both (a) diversify our standpoints in the future and (b) develop critical linkages among these standpoints? How can we critically and creatively explore the connections between our (a) subject matter and (b) identity vectors that influence diverse standpoints—e.g., issues of gender, race/ethnicity, social class, sexual orientation, age, and other social, physical and political factors? How can we develop critical linkages between intranational and international diversity?

In summary, we have a rich tradition of integrative understandings and attention to the future of our inquiry and practice. Many characteristics of our collective intellectual history parallel what is now being touted in the larger academy as the intellectual tools needed to address the coming century. Key to our successful future is our ability to recognize, articulate, celebrate, and critique the characteristics that have made us and our subject matter a vital, unique component of our institutions and societies. Central among these characteristics are our abilities to bridge, connect, empathize, and synthesize so as to improve the quality of everyday life. I began this presentation with a reference to a personal experience embedded in popular culture, and I would like to end with a similar theme. This time I will take some liberties with a quote I recently saw on an environmentally friendly bag from Burger King: "All in all, we’re just trying to make the world a better place to eat." I would submit, as we reflect on our fiftieth anniversary, that we contemplate and celebrate the idea that "all in all, we’re just trying to make the world a better place to dress."
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This paper examines the problems inherent in the use of visual images for the study of historic costume in the Western World, identifying some of the problematic elements identified by scholars, and, in passing, touches on some of the written records that to clarify or confuse some visual record. Broad generalizations about the use of visual material are made that apply not only to the period under discussion, but to other costume periods as well.

Egyptian artists making relief carvings and wall paintings presented figures in standard poses. Iversen (1955) believes that artists represented figures according to a clearly defined set of proportions derived from the Egyptian system of measurement. Even the lifelike head of Nefertiti is thought to have been a practice piece, and the final version for which it served as a model would probably have been more mask-like and conventional. (Honour and Flemming 1982)

How these conventions affected the representation of garments is not clear. One garment that illustrates problems in Egyptian dress is a colorful, close-fitting sheath. The name kalasiris is given to this garment by some costume historians. The origin of the term seems to be an account by the Greek historian Herodotus of his visit to Egypt in the 5th century B.C. He says, "...They wear a linen tunic fringed about the legs, and called kalasiris." (Herodotus, 1942)

The garment described by Herodotus and the colorful patterned sheath dress depicted on Egyptian walls have little in common, and it is unlikely that this is the correct name of the garment. The other puzzling aspect of the garment is its construction. Few fabric structures other than knitting would permit such a close fit. Reifstahl (1944) in an extensive study of patterned Egyptian textiles has identified a number of means of achieving such patterns, but none are knitted and none of these structures is likely to fit so closely.

We are left with many questions that we cannot answer. We do know that the role of convention and canon was strong in Egyptian art, and we tend to conclude that the depiction of this garment is probably one of the conventions that governed the representation of individuals in Egyptian art.

(1) the visual images used in teaching historic costume may be limited by the conventions imposed on the artist representing the image and (2) we may not know or understand these conventions.

We are familiar with the misconception that the Greeks wore predominantly white garments which arose from the appearance of many Greek statues, bleached white during the intervening centuries. But even those Greek representations that were not white make understanding the colors of Greek dress difficult. Vase paintings provide an extensive record of Greek dress, but the "black figure" vases with their black figures on an orange-red ground and the "red figure" vases with red figures on black background, provide few clues as to color.

(3) The ravages of time may distort the information available from the visual image.

(4) The media preferred by artists often limit the information available from visual images.

Words can sometimes amplify the visual record, helping us to interpret what we see. But what of the situation in which there are words, but no images? Roman writers speak of a lightweight garment called the synthesis, worn for dinner parties instead of the toga, and of the institia, a ruffle at the skirt of married women that concealed their feet. Neither of these garments appear among the visual images that come to us from ancient Rome.

(5) Appropriate visual images may simply not be available.

In the post-Roman period most of the art remaining to us is religious art and the individuals depicted religious figures. In the 4th and 5th centuries, the evangelists were shown
in classical costume and art historians find many 8th and 9th century evangelists in manuscripts that are derived from versions that first appeared almost four centuries before (Calkins, 1993). Other holy figures became stereotyped. These stereotypes were still evident not only during the remainder of the Middle Ages, but also in subsequent periods. These long-lived traditional practices lead to another generalization:

(6) Lack of familiarity with traditions of the medium of representation may provide misleading information.

Medieval manuscripts of the 5th to the 11th centuries were intended for use by priests and monks. Their illustrations were based on traditions with which the laity would not have been familiar. It was not until the late Medieval period that the visual vocabulary had to be understood by persons other than the clergy.

(7) The purposes served by visual images must be understood if we are to interpret these images accurately.

After the 11th century, several factors helped to increase the availability of more realistic representations of costume. Manuscripts began to include illustrations of the work of ordinary people during various seasons. Production of manuscripts shifted, after the 13th century) from monasteries to urban workshops organized by lay artists. Manuscripts and wall paintings dealing with secular themes appeared. (Calkins, 1993; Houser, 1951)

Although the sculptors of the Romanesque and Gothic periods were also likely to be lay artists, the purpose of these works was to tell the unlettered population stories from Christian tradition. In doing so they used stereotypical figures who could be identified by the viewer. To evaluate the accuracy of their costumes requires not only an understanding of those conventions, but also familiarity with the stories being told.

(8) Lack of familiarity with religious or other stories being told through art can lead us to accept traditional and conventional representations as representative of current styles or may lead us to dismiss images that provide intimate glimpses of the clothing of real people.

During the Romanesque and Gothic periods (11th to the 15th centuries) numerous sculptural styles developed. Romanesque figures exhibit not only the sculpted draperies that are described by Jansen (1991) as "leading a life of their own" but also those that more realistically "suggest the body underneath." With the transition to Gothic styles, Hauser (1951) speaks of the predominance of figures with normal proportions, natural movement, and the observation of details of reality that enter all aspects of art.

By the 14th and 15th centuries, visual images depicting Europeans abound. Scott (1986) divides the major sources of information about costume into visual evidence and literary evidence. She reminds us that painted images offer the advantage of showing everyday life, different classes, and appearance from different angles, but that only sculpture reproduces the three-dimensional effect of clothing. Clearly-dated three-dimensional art sources include tombs and monumental brasses. Of these Scott cautions us about the not uncommon practice of making the tomb well after the lifetime of the person depicted.

(9) Two dimensional art often shows us only the front view of garments

(10) The date of the creation of the visual image may not be the same as the date of the style depicted.

Scott's also comments on documentary sources. Many are unpublished, they present language problems, and their dating may be problematic. For example Chaucer, who is often used as a source for costume information, described the sewing shut of sleeves (rather than buttoning them) in the Romance of the Rose. This is often taken as evidence of this practice in Chaucer's time, the 2nd half of the 14th century, however, the origin of this literary work used by Chaucer was actually 150 years earlier.

Birbari (1975) stresses the fidelity with which Renaissance artists depicted costume, but Newton (1975) reminds us that these sources are not
without their perils. Among the problems she notes are conventions in the depiction of foreigners from the Middle East, the use of theatrical costumes, and the dressing of religious figures in styles that had been established by earlier artists.

(11) The central characters in non-portrait Medieval and Renaissance paintings cannot always be trusted to depict current costume. Ordinary people are more likely to be rendered accurately.

An excellent example of the value of using words and pictures in concert is to be found in Nevinson's (1970) comparison of Holbein's portrait of the Tudor infant Prince Edward with household accounts of the period. He concludes while the portrait is a reasonably accurate representation of what the Prince actually wore, only the written accounts provide details about fabrics and underlying garments not visible in the portrait.

(12) Some kinds of garments are rarely, if ever depicted.

(13) Visual representation of textiles provides limited information about actual textiles.

Olian's (1977) examination of books published in the 16th century that purport to depict tells us that few of the artists observed this clothing first hand, many of the garments were probably not authentic, and the artists copied from each other.

(14) The work of a particular artist may derive from that of another, making it a secondary, not a primary source.

Teachers often like to use the work of great artists to illustrate historic costume, however finding useful costume materials painted by innovative masters is difficult. Hollander (1978) observes that, unlike lesser artists who often depict costume accurately and in detail, many of the truly great artists have no need to create a kind of costumed stage setting for their art.

(15) Secondary artists and genre paintings may be a more productive source of images of costume than the greatest masters.

Portraits have long been used as a source of costume information. Marshall (1981) found these problems with 17th C. Scottish portraits: artists who invent garments, posthumous portraits, non-contemporary representation of persons long dead that are purely imaginary.

Cumming (1984) suggests that caution be used with the work of Wenceslas Hollar, an artist known for depiction of 17th century engravings of fashions because he "suffered from poor sight." The late 17th C. hand-colored Parisian fashion plates produced in cooperation with dressmakers and tailors she views as "...more akin to modern fashion photographs in glossy magazines than to styles of dress which were generally worn."

(16) Fashion promotional illustrations may depict proposed styles that were never widely accepted.

Upper class portraits painted during the 18th century may be excellent sources of information about costume. In some cases, however, the words of the artist himself warn us to "view with caution." Sir Joshua Reynolds advised young artists that "Fashion ... must be entirely excluded from the art of painting." (Reynolds, 1891)

Foster (1984) notes that while garments are the main sources of costume information in the 19th Century one must go to other sources such as photographs, drawings, paintings, cartoons, and fashion plates for the total look. Briefly summarized, some of the problems of these sources are: fashion plates are colored with water colors which tint an underlying engraving producing an image that provides much less information about the texture and even the type of fabric than other media may provide. Photographs do not, generally, show us undergarments, how people dressed for outdoors in winter, or workday clothing. Cartoons, Paoletti (1981) reminds us, "...are governed by artistic conventions." Foster (1984) notes of 18th C. genre or modern-life paintings that if poor people appear, they may have been "cleaned up." Tandberg and Durand (1981) describe similar problems in the clothing of field slaves, saying "...most visual
art depicted these black slaves in an idealistic manner, wearing acceptable work clothes" and "the taking of a photograph was in itself a special occasion that prompted all blacks to wear the best clothing they could obtain."

In the 20th century fashion magazines show styles in photographs and in drawings. As we know (Warner 1992) fashion drawings often exaggerate proportions, and even photographs could be shot from angles that provide fashionable distortion. Furthermore, "the job of the fashion editor is to "show" the clothes. Photographers ... want to create art." (Wintour, 1991) This comment highlights the need to distinguish between fashion art and fashion information photography.

Many of us derive some of our visual impressions of historic costume from the exhibitions of historic costume. Even here modernisms may enter, giving us a more or less distorted view of how real clothing actually looked when it was worn. Nor can we overlook the influence of fashions in manequins and exhibition techniques.

(17) **Inaccuracies may be present even in the display of real objects from earlier times.**

Is a picture worth a thousand words? The answer must be "yes, but..." "Works of art," Nelson (1989) points out, "outlast their primary producers or consumers." When we view these images, we are out of the context, far from the physical and psychological channels through which the artist and the viewer interacted, and often unfamiliar with the communication system shared by the artist and viewer. The use of images without words can be dangerous. In this case I do not mean the words of contemporaries, which may present problems of understanding not unlike those of visual images, but rather the words of scholars who seek to unlock the key to our fuller understanding of the images of the past through the generation of ever greater knowledge not only about the creators of those images but also of the audiences to whom they were addressed.

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QST INDUSTRIES, INC. COMMEMORATIVE LECTURE

"Global Threads That Bind Us"©

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Finished garments or other textile items on the racks in fashionable stores in the United States and other developed countries represent the toil of millions of invisible hands around the world.

The workers behind these hands -- found in large numbers employed in the textile and apparel industry in both the industrialized countries and Third World nations -- represent a poignant chapter in industrial history. In fact, in most countries, this industry represents the first chapter in industrial history.

Just as the textile industry led the first Industrial Revolution, the industry was also the first to take on a global dimension. Today, various segments of the textile complex (a term we will use to include all segments of the industry, from fiber through finished products) are the most geographically dispersed of any manufacturing sector in the world. Globalization is the most significant force to have impact on how production occurs since the Industrial Revolution.

Globalization of the industry has been facilitated by advances in transportation and communication systems that have reduced distances. We might envision the shrinking world as shown here to consider how markedly we have conquered distances. In terms of time, New York is now closer to Tokyo than it was to Philadelphia in the days of the colonies. This helps us to see why manufacturers in one country now find it easier to expand their operations to other countries than once would have been possible from one end of a single country to the other. This is why I believe it is critical for students in any specialization of our field to have a global perspective of the industry.

Like the garment worker in Canada, the textile worker in North Carolina, and the weaver in Guatemala, we share the fact that we are giving a significant part of our lives to producing and/or studying textile products. And, what an incredibly exciting field it is!

Many of us around the globe are concerned with textile products that add comfort, protection, and beauty to our lives. We see significant economic contributions made to virtually every country in the world resulting from these industries. In this sense, we can talk about the "global threads that bind us."

All of us here are tied to this global industry in one way or another. Although those of us at this conference have our own specialization areas, a commonality of our field is textile-based products -- whether we focus on areas such as fiber science, design, history, or retailing of softgoods products. We are all tied to the products of the textile complex in some manner.

I would like to focus on two things in this presentation. First, I would like to look at the role of the textile and apparel industry within the context of global development. Second, I would like us to think about the economic contributions of the textile complex as a major employer of the world's occupants. As we address this, I would like for us to consider some of our commonalities with others around the world.

*Presentation was accompanied by 75 slides showing (a) models on stages of economic and industry development, and (b) textile/apparel production scenes from around the world.
And, yes, I would be remiss if I did not acknowledge that serious trade issues have arisen in recent decades. For now, however, let us put trade controversies aside. Let us focus on the common interests we have in products made from textile fibers whether we are in Singapore, South Carolina, Saipan, Seoul, or Saskatchewan. For our U.S. industry guests, you will readily see that much of the production in other countries in these photos does not represent serious threats to your firms. Secondly, if we do not think about trade issues for the duration of this presentation, we shall see common interests with others who give their lives to textile products. Perhaps the trade problems stem from the fact that we have so much in common.

First, let's look at the role of the textile and apparel industry in development, and often as a reflection of development. We can make some general observations about how the textile and apparel industries develop and mature within a country or group of countries. Although there are always exceptions, we generally find some parallel in the stages of textile and apparel industry development with the economic development of a country. Although this may be true of some other industries, this is particularly true for textiles and apparel because of the significant and unique role this sector plays in the early development of most countries.

The following model is one I have developed to illustrate textile and apparel production in early development. Simple textile and apparel production is often the first attempt toward industrialization in underdeveloped countries with little capital and technology. Countries at the earliest stage can provide labor required to grow fiber crops, raise sheep, and later to assemble garments. Next, at the assembly stage, the work force may simply assemble garments from fabrics and other components supplied by more advanced nations. (E.g., Sri Lanka must import 90% of its fabrics to support its fast-growing apparel industry.) As the industry in a developing nation begins to produce its own components for production (that is, the yarns, fabrics, and other intermediate inputs), the sector not only becomes more self-sufficient, but the production that occurs is at a more advanced level. For example, the technical aspects of manufacturing yarns or fabrics on a mass production scale (as opposed to simple hand methods) require more capital and technological expertise than does the simple assembly of garments.

Moreover, as a nation's textile/apparel sector develops its technical capabilities, it may become increasingly competitive in a wider range of textile and apparel production. For example, some of the Asian newly industrialized countries (NICs) -- e.g., Taiwan and Korea -- have become very competitive in manufactured fiber production. This represents one of the more technologically advanced segments of the global textile complex.

In the earliest developing stage, textile or apparel production may be the only industrialization. However, as nations continue to advance in the development process, the degree of reliance on the textile and apparel industries often lessens. Other industries may command higher wages and yield higher profits.

The textile complex is very significant also in the early trade of a nation. In early stages, textile and apparel items may account for as much as 60-70% of the country's manufactured exports, but as the nation develops and expands into other industries, the percentage of textiles and apparel may drop as a percentage of total exports. This is not necessarily a drop in the absolute volume of textile and apparel exports, but they become a smaller percentage of the whole.

Here, we might look at the participation of select countries in two types of textile and apparel production that vary greatly in the level of expertise, technology, and capital required. This contrast reflects varying stages of development for the
country and the textile complex.

If we consider a global perspective today, we see a proliferation of developing countries in textile and apparel production. Within this group, we see a variety of stages of development. Examples are shown. We see many new entrants as well as the more established ASEAN group and the NICs moving through to more advanced stages. The large number of these participants, however, adds to the overcapacity of global production in the textile/apparel sector -- resulting in the sensitive political nature of trade for this industry.

As countries are more developed and the textile and apparel industry matures, we see several responses that may occur as the industry starts having difficulty competing in the domestic market. Several factors contribute to this difficulty in competing, with less costly imports often being a major one. Consequently, critical changes are made to make the industry more competitive. These may include (1) assembly in low-wage nations (through 807, outward processing, etc.), (2) automation and new technology to make production more efficient, and (3) policy measures -- generally designed to limit Third World imports.

In terms of global development for the industry, the first choice to move assembly to lower-wage countries is occurring everywhere: U.S. apparel manufacturers are producing in the Caribbean; the Germans are producing in Turkey; the Taiwanese produce in Indonesia; Hong Kong has production in China; and the Koreans have gone to Vietnam. In the long term, however, this strategy often creates ironic side effects. We find that this strategy has been responsible for establishing and expanding production in many underdeveloped countries that would otherwise be less able to participate in textile and apparel production for the world market. Firms from more developed countries provide the investment, the production expertise, the technology, and the marketing know-how to develop the industry and promote products. In short, the quest for lower wages -- along with the quota system that is intended to provide a barrier to imports from developing countries -- have actually been responsible for an expansion of the number of competitor nations. This is not intended as a statement that this is desirable or undesirable. That is, as more developed nations go to less developed nations as a way of competing, they are in fact helping to develop more competitors.

Regardless of how production was established in various countries, or whether it is intended to produce for domestic use or for the world market, we see profound economic contributions of the industry. At this point, let us turn to considering the importance of the industry as a sustainer of life for the masses.

The textile complex is the world's largest manufacturing employer. In the early 1980's, the US International Trade Commission estimated that 25 million persons were employed in the industry worldwide. This figure was probably far too low even at the time. The numbers have grown substantially since then, but are hard to determine because of limited data for many developing countries. For example, a reported 13 million persons are employed in China's textile industry. This does not count those involved in natural fiber production. Try to imagine the number of workers required to produce: China's 1992 annual cotton output of more than 5 million tons; annual silk output of over 60,000 tons; and flax and ramie output of over 200,000 tons. Altogether, China's textile/apparel workforce alone exceeds the earlier ITC figure of 25 million.

In addition, large numbers of undocumented workers, mostly in the Third World, earn a living through informal, decentralized cottage industries. In India, for example, an estimated 10 million people are employed in the informal textile production sector -- a hidden sector that defies a worker head count because production occurs in dwelling places and makeshift facilities.
invisible to those compiling labor data. In Asia, more broadly, it is said that textile production accounts for more than half of all non-agricultural employment.

At the same time, however, the textile complex remains a major employer in the United States, the European Community, and Canada -- the primary markets for Third World exports. Typically, many segments of the industry provide production jobs for persons who have few or no alternatives to earning a living. The production workers who produce garments and other textile products in many regions of the United States -- like their counterparts in Asia, Latin America, or Africa -- often lack the mobility and saleable skills for other jobs.

Although volatile trade conditions have pitted industrialized countries against Third World nations, the textile industry's economic and social contributions are similar -- whether, for example, garment workers live in the rural United States or in Sri Lanka.

The mothers and the fathers leave home at the break of dawn to earn incomes so their children can have a better life than they have had. Everywhere, we find high proportions of women, minorities, and new immigrants employed. These, too, are the individuals hurt most when production moves from one country to another with lower wages.

A global overview reveals that production occurs under disparate conditions -- in modern sophisticated factories, in straw or adobe huts, or sometimes with no shelter at all. We find men, women, workers of all races, religions, and ethnic backgrounds. Among the workers are the elderly, the children, and the disabled. Refugee camps in some of the most troubled regions of the world teach inhabitants textile trades so they might learn to support themselves. In nearly all corners of the world, the textile complex contributes importantly to improved economic and social conditions for the humans who inhabit each of those regions.

As a long-established basic industry, the textile complex has contributed immeasurably to the economic development of the industrialized countries -- providing a means by which untold numbers of families and individuals have sustained themselves with the basic necessities of life. For example, employment in the U.S. textile complex permitted many to enter the mainstream of American life that went beyond a subsistence level. As a source of employment for many generations of workers engaged in their first industrial jobs, workers have been able to improve their living conditions, send children to college, and enjoy a degree of prosperity that has characterized the developed world. In many rural areas, for example, jobs in the textile or apparel industry have provided the means for indoor plumbing, better housing in general, timely medical care, and even hot school lunches for workers' children. In my rural home county in Virginia, for example, no single source has helped the level of living for families as much as the incomes from the two garment factories.

Contributions of the industry are also very significant in the developing world. Those of us in the United States need to be reminded that 95% of the world's population lives outside the United States. In fact, all the developed countries together account for only 15% of the world's population. Moreover, the developing world has nearly 60% of the world's population and only 5% of its wealth. And, as we know, textile and apparel jobs play a vital role in those economies.

I am reminded here of a story that reinforces the point on the importance of these industries in the developing countries. My former dean at Virginia Tech, Laura Harper, worked for FAO after her retirement. She was involved in developing nutrition education programs for some of the developing countries. On a follow-up visit to the Philippines, she was involved in evaluating the effectiveness of the programs. In some cases, she thought the results were disappointing, particularly as her team
observed the children who were intended to be the beneficiaries of the programs. Then they went to a small garment assembly establishment, where children were playing nearby. The children were much healthier than the team had seen previously. Her conclusion was that the nutrition education could do little to improve conditions unless the mothers had the financial means to provide adequate food. In this case, the modest wages from the garment assembly work had provided that vital difference. Similar stories could be found around the world.

So, whether we are buying hot school lunches, building indoor plumbing, or providing subsistence-level nutrition, the textile complex has played a vital role in supporting and nurturing those of us who inhabit this earth.

In the remainder of our time, I shall share a quick look at production scenes from various countries. As we look at these, I would like for you to think about what the production scenes tell you about the broader development of the country in which each is located. Secondly, I hope you will think about the contributions the industry is making to the people's lives.

In conclusion, I hope that you will remember that we share a common bond with those we have seen from many countries in these slides. We are associated with a field that has many poignant human stories behind those invisible hands. We have seen here a glimpse of the "global threads that bind us." I would like this to be a tribute to the women, men, and children who toil daily to clothe us and provide for comfort and beauty in our lives in other ways with the textile products they make.
UNITY THROUGH DIVERSITY: AN INFUSION MODEL FOR MULTICULTURAL EDUCATION IN TEXTILES AND APPAREL

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The racial and ethnic makeup of the United States is rapidly changing and by the beginning of the 21st century it is predicted that minorities will outnumber the white population for the first time. Because of changing population profiles, many colleges and universities are mandating a culturally diverse focus in the classroom. Not only are the demographics of students in higher education transforming, but also those of the work force with whom students will interact upon graduation. Research has shown that by incorporating multicultural components into the classroom, the education of all students is enhanced and understanding among groups increased (Davidman 1990). Therefore, a culturally diverse education is necessary for everyone who is going to work and be active in this pluralistic society (Hughes 1990).

For the last three years, approximately 60 faculty representing all nine departments in the College of Applied Human Sciences (AHS) at Colorado State University have participated in a project to enhance understanding of cultural diversity. This project was funded through a U.S. Department of Agriculture Challenge Grant as well as university diversity monies (Oltjenbruns and Baez 1990). Faculty underwent year-long training activities to enhance their knowledge of the ethnic past within the U.S., current diversity issues, and the impact that demographic changes will have on the country's future. Faculty training focuses on the notion that culture influences individuals' aesthetic standards, behavioral norms, beliefs, communication styles, linguistic/nonverbal expressions, patterns of thinking and learning, and values. Training emphasizes that faculty and students may occupy various positions on a continuum between ethnocentrism and intercultural competency. Understanding the behavior of individuals at various stages along this continuum and developing activities to help individuals gain greater intercultural competency are important foci of training. The goal throughout training sessions was for each faculty to enhance a targeted course through multicultural infusion. As a result, students from across the college and the university have been exposed to multicultural instruction in courses that did not originally have such a focus. This year trained faculty from AHS are following a mentoring model to aid faculty from other colleges to learn aspects of diversity. The goal is to infuse courses across campus with a multicultural perspective.

Intercultural competency is vital to the textiles and apparel field because of the evolving ethnic, racial, and social makeup of the U.S. workplace and marketplace as well as the global nature of the industry. In spite of the importance of a multicultural perspective, many faculty have received little or no training in the process and may be confused about the fit of
multiculturalism within their own classroom activities. The Multicultural Education Infusion Model for Textiles and Apparel may assist in reducing some of this confusion and anxiety. The model serves as a guide and represents interrelationships among key root disciplines, subject matter areas, and proposed core competencies for textiles and apparel (Kunz, 1993). The model has been tested by faculty in Apparel and Merchandising at Colorado State University as they identified courses in which to introduce multicultural infusion and developed teaching materials to accomplish this. Brief descriptions of the process for several courses are presented. Courses from four of the eight subject matter areas identified in textiles and apparel are represented (social/psychology/cultural, textile design, historic textiles/costume, retailing/marketing) but a multicultural infusion is possible in any course.

CLOTHING AND BEHAVIOR is a lower level class required for students in Apparel Design and Production and that satisfies the university multicultural requirement. The class addresses psychological, sociological, and cultural factors that influence dress and adornment. Course objectives include examining origins and functions of clothing; importance of clothing in self concept, social interactions, and nonverbal communication; and role of clothing as communicator of culture. One important component of the course is to assist students in understanding and appreciating aesthetic standards for dress and adornment different from those of their own culture and to recognize factors, such as economics, government, law, religion, social structure, unique to cultures that underlie those differences.

Given its philosophy and objectives, the course has always had a multicultural and diverse emphasis. Therefore, the objectives and character of the course did not change as a result of the multicultural infusion. However, an important component was added to the course. Prior to multicultural infusion there was no mechanism to examine, in a holistic manner, cultural factors that shape aesthetic traditions and the dress and adornment that result. To that end, multicultural infusion for this class entailed identifying three cultures, Guatemala, India, and Japan, that represent different traditional dress and adornment practices. Materials were collected to assist students in studying factors unique to those cultures, understanding how their unique aesthetic and adornment practices evolved, and appreciating what the practices communicate about each culture. A set of slides depicting cultural lifestyles and adornment practices was developed to assist students to comprehend information visually. Whether designing products for members of another culture, conducting business in a different cultural environment, or appreciating aesthetic traditions different from one's own, students benefit from understanding cultural differences and appreciating them with a point of view that minimizes ethnocentrism.

COMPUTER-AIDED FABRIC DESIGN is an upper level course that integrates CAD technology into design development for silkscreen, batik, and shibori bound-resist patterns. Multicultural infusion consists of slide/lectures on the cultural origins of the surface design techniques. Two
assignments were introduced in which students conduct research on a culture (either their own ethnic ancestry or another in which they are interested) for source of inspiration material to be used in CAD drawings and eventual fabric designs. Students are encouraged to look for cultural symbolism in use of color or motifs in ethnic textiles. Students write a short paper and prepare a story board of color photocopy images representing the culture. Research/presentation is done early in the semester and repeated as students design their final projects.

The main goals with multicultural infusion are to enhance students' appreciation of cultural differences through exposure to a variety of ethnic fabric designs and to heighten awareness of the cross-cultural nature of surface design processes practiced in the course. The root disciplines from which materials are drawn include art and anthropology and outcomes are textile designs with a synthesized cultural history. Through research in the class, a number of commonalities among cultures have been found. Because of this, the goal has evolved from a focus on cultural differences to one of enhancing a sense of multicultural unity through study of differences. Further, the act of creating a new design based on another culture requires some degree of acculturation.

HISTORIC COSTUME and HISTORIC TEXTILES are upper level courses required of all students in the Apparel Design and Production concentration. Both classes are also taken by students with other concentrations within the department and by students majoring in such areas as art, history, and theater.

Within historic costume, culture has traditionally been defined and limited to issues, history, and economic development of Western Europe. The multicultural infusion has broadened the scope of that definition to include a global understanding of the interrelationships of cultures outside of traditional Western Europe and the influences that all cultures have brought to bear on the development of Western dress.

The multicultural infusion into historic textiles resulted in adding a new course objective, "to become more aware and develop an appreciation for the textile contributions made by culturally diverse groups." The catalog course description was changed to include a global perspective, focusing on textiles produced by diverse cultures through history. A section was added to the course outline to include emphasis on contributions made by culturally diverse groups in the U.S. (i.e. Native Americans, Asian Americans, African Americans, and Hispanic Americans). With these additions, the course was accepted to fulfill the university multicultural requirement. A course project was added which requires students to explore textile roots from his/her own heritage. The objective of the assignment is to learn about and appreciate one's own cultural textile heritage, share it with others, and learn from others about their backgrounds.

Both of these courses draw from the root disciplines of art, anthropology, and history. Specific competencies addressed include global diversity and analytical thinking/problem solving.

MERCHANDISING PROMOTIONS is an upper level course required of all students concentrating in
Merchandising. CONSUMER BEHAVIOR is an upper level elective for students in any major or concentration. Prior to the infusion process, culture was mentioned only briefly in both courses and was referred to merely as "a demographic" that needed consideration when communicating to a target market. After the infusion process, however, a variety of methods were used to sensitize students to the multitude of cultures within the U.S. and the importance of communicating to each culture based on its singular needs, as determined through research.

Culture is defined for both courses in a very traditional manner that includes information on individual's values, interests, needs, wants, etc. Multiculture is construed to include ethnicity, country of origin, race, gender, sexual preference, size, abilities, and any number of variables that may make one group of consumers a target market different from another group. These multicultural components added to the classroom, allowed lecture and discussion to be enriched through use of examples and research findings.

The objectives of the courses did not change because the focus remained promotions and consumer behavior (respectively). Assignments, however, were altered considerably because the primary goals were to make students aware of the need for sensitivity and to give them tools to use to address differences and similarities among groups. For example, one assignment in promotions is for students to create a promotion targeted to an ethnic or racial group different from his/her own. To accomplish this, students have to read research related to culture and cultural differences among groups. They also have to find promotions that target these groups and determine what makes them distinctive from other promotions.

Disciplines from which information is drawn includes sociology and psychology, marketing, consumer behavior, and communication. The competencies addressed include diversity (although not global), human behavior, and analytical thinking/problem solving. It is important that students realize they will be targeting and merchandising to individuals who may not have the perspective of the white, Western world.

References:


Since the fall of communism, Eastern European countries have moved from dependence upon central planning, production, and distribution toward market-driven economies. These shifts should be conceptualized as movement along a continuum from communism to market-driven economies, with each country progressing toward privatization at a different rate. With the combined population in Eastern Europe and the new Soviet republics estimated at over 211 million, these countries may prove to be very attractive potential markets for U.S. retailers and apparel firms.

Eastern Europe has a long history of division, unification, recomposition, and redefinition. Key twentieth century dates for the peoples of this part of the world are 1918 (the fall of the Austro-Hungarian Empire), 1948 (the end of WWI), 1968 (the Velvet Revolution in Czechoslovakia), and 1989 (the fall of the Berlin Wall). Since 1989, the social, economic, and political contexts in each country have shifted dramatically, commencing the process of privatization, increasing personal freedoms, and establishing business relationships with the West.

Several trends in Eastern Europe create the context in which U.S. retailers and apparel manufacturers must evaluate their business opportunities in this part of the world. The violence and ethnic unrest in the former Yugoslavia and Soviet Union demonstrate the general disruption caused by the continuing political changes. The formation of new republics from the former Soviet Union and the split of Czechoslovakia into the Czech Republic and Slovakia mark another reaction to the dramatic political changes. Reconstruction of the infrastructures of these countries after more than forty years of communism, technology advancement, and other development activities are being supported in part by the infusion of western monies but varies by country. General inflation, reliance on "hard-currency" (either the German mark or the U.S. dollar), and increasing unemployment as privatization progresses are also trends.

Poland, Hungary, and the Czech Republic are the farthest along in the process of privatization while Albania, Bulgaria, and Romania currently have few or no privatized businesses. Statistics describing social conditions in these countries illustrate the potentially inaccurate conclusions that would be drawn by generalizing across all Eastern European countries. For example, literacy ranges from 75% in Albania to 98% in Russia and 99% in the Czech Republic, rurality from 35% in Albania to 73% in the Czech Republic, inflation from 20-30% in Albania to 73% in Bulgaria in 1991 and 875% in Russia in 1992, and 1991 per capita income from $820 (US) in Albania and $480 in Russia to $2,690 (US) in Hungary (The Europa World Yearbook, 1993; Bohlen, 1993).

The production and consumption of clothing and textile products is most accurate when evaluated by individual country due to historical tradition and cultural, economic, and political contexts. However, one study (Understanding the Soviet Consumer, 1991) of 600 Eastern European consumers found that perfume, jewelry, and athletic shoes are among the top ten wanted products. This study also found that some American brand names had very high brand name recognition—75% of consumers surveyed recognized the Levi name.

The session was organized by country and its objective was to analyze the opportunities and challenges for U.S. retailers and apparel manufacturers when doing business in Eastern Europe and Russia.

Method

Three presenters have on-going research studies in the Czech Republic, Poland, and Russia. Research trips to these countries and interviews with a variety of business and government persons in the retail and apparel and textile manufacturing industries were conducted in the summers of 1991 (except in the
Czech Republic), 1992, and 1993. A case study approach and analysis was used in the Czech Republic. Both qualitative and quantitative data collection and analyses were used in Poland and Russia. Statistical information from other sources was reported with the caveat that the continuous changes in these countries' borders, laws, and data collection systems prevent a totally accurate longitudinal picture. Indeed, comparisons between 1989, 1990, 1991, and 1992 are of little value in predicting the opportunities and challenges for U.S. retailers and apparel manufacturers.

The Czech Republic

In December 1992, there were 10,321,000 consumers in the Czech Republic. Real wages had increased 9.7% and consumer prices had increased 12.7% in 1992. There was an 11.8% decrease in the labor force in industrial firms with more than 25 employers (Cesky Statisticky, 1993).

Over 28% of the total exports from the Czech Republic in January-April of 1993, the first quarter that the Czech Republic was not politically connected to Slovakia, went to the Federal Republic of Germany and about 20% went to Slovakia (Cesky Statisticky, 1993). The United States was not listed in the countries receiving more than 3% of Czech exports. The U.S. provided 3.3% of the imports to the Czech Republic in the same period, far behind the 24% provided by the Federal Republic of Germany, the 19% by Slovakia, and the 14% by the countries of the former Soviet Union. Aggregate figures on apparel, textile, and retail industries were not available in a reportable format.

Privatization of business and industry is taking place in several distinctive ways. A "small" privatization occurred primarily between December 1991 and August 1992 and addressed small shops and workshops. A "great" privatization began in June 1992 with the first wave of privatization proposals being reviewed by the Privatization Ministry. Proposals for the second wave were due in June 1993. Firms contributing to other industries such as the textile industry's connection to the apparel industry, the size of firm, and the complexity of its origin of properties were the variables considered when the ministry decided in which wave firms were to be placed. Privatization methods used in the Czech Republic include: auction, direct sale, stock structures, voucher sales to Czech citizens, and restitutions to original owners of firms prior to 1948, to municipalities, and to national art and culture fund.

Historically, the geographical area of the Czech Republic was the base for textiles and apparel production for the entire Austro-Hungarian Empire. Specific Czech cities were centers according to textile fiber such as cotton, wool, and linen and ready-to-wear production.

The privatization of three state-owned or formerly state-owned firms was analyzed: Jitex, a vertical textile knitting firm in Pisek; Kras, an apparel manufacturing company in Brno; and Kmart-Czech and Slovak Republics, a 13-store retail chain. Jitex's privatization proposal included a combination of strategies: 34% voucher sale, 30% to each of three Czech investment banks, 10% to Centrotex, 10% to employees, 10% to Pisek in the form of a building, and 6% to the art and culture state fund. There are at least four different privatization proposals for the Kras firm. The most likely to be accepted has four of its seven factories sold to current management, one factory sold to its own management, and two other factories sold at public auction. Kmart-Czech and Slovak Republics was privatized in June, 1992. Eighty-seven percent of the firm is owned by Kmart, 10% by a local bank, and 3% by the employees.

All three companies are struggling to find the right proportion of export and import sales or stock. Jitex sold about 60% domestically, Kras about 44% domestically, and Kmart, by privatization agreement, imported no more than 30% of its inventory. Product assortment and depth of categories as well as sourcing opportunities were being adjusted for the market economy by all firms.

Poland

With a population of over 38 million, Poland is the largest former Eastern Bloc country. Couple that critical population mass with the predisposed affinity the Polish have for U.S. products and the result is an important foundation for U.S. business opportunities. The economy of Poland grew 4% in 1992 and is expect to grow 5% more in 1993 (Poland sees solid growth, 1993). GDP rose 2% in 1992, the first growth since market economy strategies were implemented in 1990. Another sign that
progress is being made toward a market economy is that 50% of GDP was contributed by the private sector in 1992. Since 1990, over one-fourth (2385) of the 8441 state-owned firms have moved to a different form of ownership (Poland tallies its sell-off, 1993). Over 1.5 million private firms account for 90% of retail activity, 40% of imports, and 31% of industrial output. Private sector jobs account for over one-half of nonagricultural employment.

Polish consumers are not used to comparing, evaluating, or making choices in the marketplace. Typical Polish consumers do not know exactly what their rights are as the supplier has dominated the relationship for decades and consumer markets in Poland suffer from a paradox related to supply and demand of goods. Since market reforms, consumer goods are more readily available and there is tremendous unrealized demand for Western goods. However, the new Western products in the private shops are too expensive for most Poles to buy, given current wage rates.

The Polish apparel industry employs 173,000 people. With labor costs of $0.50 per hour in 1990 and $0.54 per hour in 1991, Poland is considered a low-cost producer competitive with most developing countries (O'Rourke, 1992). Poland is attractive to the sourcing world because it has already demonstrated the ability to market a limited range of apparel products in Western markets. Leading imports to the U.S. are men's and boy's coats and jackets, woven fabrics, and textiles.

Poland had been highly dependent upon the former Soviet Union for raw materials, especially cotton. In fact, the only textile fiber grown in Poland is flax, and nearly all cotton, 80% of wool, and most of the petroleum and chemicals used for synthetic fibers are imported. With the dissolution of Comecon trading relationships, that source for raw materials is unavailable. At one time, linen textiles were exported to the U.S. but producers were hesitant to export apparel because of sizing and fashion considerations. The Polish textile industry is more threatened than the apparel industry for the above reasons and due to antiquated machinery. Export to Poland of low-cost textiles and technology transfer would be appropriate ways for U.S. textile firms to become involved with Poland.

Russia

According to the National Trade Data Bank (1993), Russians spend approximately 1/3 of their income on apparel. If that figure is accurate, the market for apparel products in Russia can be roughly estimated at $23.3 billion per year.

The textile industry in the Soviet Union did not start to develop until after WWII and grew particularly rapidly in the 1980's. Prior to the disintegration of the communist system, the former Soviet Union accounted for 2/3 of total Eastern European textile production. It was a major producer of linen and silk fabric in Eastern Europe and the largest importer of finished apparel goods.

Currently, former state-owned textile and apparel firms are undergoing privatization and foreign investment is helping this process. In 1985, there were an estimated 709,000 retail outlets in the former Soviet Union generating an estimated 445 billion rubles in 1990 sales (World Retail Directory and Sourcebook, 1991). The shops in the state-owned sector are notorious for poor service, limited merchandise selection, generally dismal store atmosphere, and backward technology. Merchandise mix was dependent upon allotments established by the central planning system and imported and luxury goods were available only in biriozkas (foreign currency shops) or other special shops.

Privatization began in Russia in 1992 through voucher sales and auctions. During the first 5 months of 1993, 2291 medium and large sized firms have been sold at voucher only auctions (Djelic & Tsukanova, 1993). Thus far, 36% of the total number of retail enterprises and 34.5% of the wholesale enterprises have been privatized (Privatization, 1993). Foreign investors are being encouraged by the Russian government to participate in privatization by purchasing vouchers from private citizens or through direct purchase of vouchers, or by negotiating a deal with an enterprise that has been bought out by its work force. Foreign participation has been sparse because of the uncertainties about the people with whom negotiations should be conducted, who makes decisions in the state-owned firms, and what roles the State Property Committee and other ministries play.
Opportunities

The huge population base in Eastern Europe, its highly educated work force, relatively low labor costs, and its proximity to the European Community make doing business in and with Eastern Europe attractive. In general, the opportunities take the form of sourcing products in Eastern Europe, exporting products to Eastern Europe, and importing products directly from Eastern European firms. Firms can also invest in manufacturing and retail channels through joint ventures or direct investment.

Challenges

All business opportunities must be evaluated within the context of the social, economic, and political environments in Eastern Europe. The countries are relatively unstable, with fighting among ethnic populations in the former Yugoslavia and Soviet Union, changing political structures in the Czech and Slovak Republics, Russia, and Yugoslavia, currencies without value for trade, and a world-wide recession. In addition, the language and cultural barriers and the continuously redefined trade, bankruptcy, and privatization laws further complicate any business transaction. Social acceptance of the profit motive is essential to the success of a free marketplace. Infrastructure to support communications, advanced technology, and transportation systems is necessary in all countries.

Clearly, doing business in Eastern Europe is not for the faint of heart. There appear to be as many landmines as goldmines. U.S. retailers and apparel manufacturers must commit for the long term and be sensitive and willing to adjust to the cultural environment in a particular East European country to reach the gold.

References


"Introduction"
Mary Littrell

Our panel on developing case studies arose from two challenges and opportunities open to textile and apparel educators. First, enriching the textiles and apparel curriculum with course content that addresses cultural, gender, age, socio-economic, and educational diversity is of critical importance to the profession. A second opportunity is the movement away from teacher-centered learning and the emergence of more student-centered approaches that involve students in critical thinking. Through an active learning approach, students become engaged in challenging assumptions, exploring values, envisioning possibilities, and creating alternative scenarios for action.

We have addressed these opportunities through adopting a cultural approach to subject matter and through developing course experiences that invite critical thinking. We believe that greater use of case studies in the classroom holds potential for enhancing diversity in the textiles and apparel curriculum. Case studies present descriptions of actual, real-life situations written from the viewpoints of the decision makers involved. Cases focus on unresolved dilemmas or problems. Students take on roles of participants as they distinguish pertinent facts, identify alternatives, formulate strategies, and make recommendations for outcomes (Erskine, Leenders, & Mauffette-Leenders, 1981; McDade, 1988).

Recommended guidelines for developing case studies include that an effective case study tells a story about a real situation; focuses on interest- arousing, challenging, or controversial issues where there is no single solution; offers multiple perspectives from participants in the situation; requires a solution and accompanying rationale; and challenges students to draw on their course content and work experiences.

In addition, we added two criteria that our cases incorporate a cultural approach and encourage critical thinking. A cultural approach was defined as assisting students to make holistic connections among the ideology, social behavior, and technology of a business and to take on the diverse perspectives of all members of an organization. A cultural perspective assumes that businesses do not operate in isolation and their success is tied to societal beliefs, family responsibilities, educational patterns, and available technology within a society; is empathic to taking on others’ perspectives; focuses on society as dynamic and changing; addresses the stresses, problems, and social conditions under which people live and work; and incorporates history in order to understand the present.

Critical thinking, our second criteria, was incorporated through activities that encouraged students to consider the diverse assumptions that participants bring to a business decision. We hoped to encourage students to question and experience new values, exercise an open mind, become self-directed in their inquiry, and envision new possibilities outside their immediate experiences.

Through our panel we want to illustrate a variety of experiences and course objectives around which cases can be developed, multiple ways to make case study scenarios interesting to students, and forms of cultural diversity and critical thinking to which students can be introduced.

"It Hangs Like a Dishrag..." A Cultural Approach to Understanding Variability in Apparel Manufacturing
Heidi Scheller

The title for this case study is a direct quote from a sewing operator who participated in one of 47 depth interview conducted for my master's thesis research. Because I conducted a naturalistic study on the meaning of quality from the perspectives of apparel producers, I had splendid data within a production context that could be transposed to create a case study for production students to learn about poor quality through a cultural approach. The research base of this case serves to dignify the value of fidelity in the representation of reality of the featured company. By "airing the dirty laundry" of a an actual company like no industry publication will, the students can be inspired to freely examine their own cultural attitudes about apparel production.

The primary objective is that students will critically analyze the culture of an apparel manufacturing firm as a source of quality production problems, and recognize appropriate solutions as they emerge from the cultural analysis. Secondary objectives require participants to recognize that variation in finished apparel products correlates with variation in materials and process, and that process is a dimension of organizational culture. The case also introduces participants to academic literature relevant to culture and quality.

The case begins as a reading exercise with a grand tour of a fictitiously named firm, Carlson Apparel. Thin description of the company is presented in the same genre as a typical business school case study. The following section teaches the students why the thin description is inadequate in revealing the depth of the culture that underlies the company's quality problems. It goes on to explain what culture is, and what questions must be asked to reveal the culture.
Next, the students read about some research that was conducted in the firm. From actual data, students are exposed to the complexity of knowledge and behavior within the firm. At that point, they turn their attention to reading an article entitled "Coming to a new awareness of organizational culture" by E. Schein. Further cultural depth is revealed in the next section as obstacles to quality which emerged are categorized as constructs built from the data. The students then read "What it means to think critically" by Stephen Brookfield. At this point, the students have absorbed enough about the company and the techniques of critical thinking that they begin a guided group discussion on identifying the consequences of the obstacles to quality that emerged in the case.

This cultural analysis requires the group to make a list of the assumptions that Carlson Apparel functions under and to question those assumptions. Three more articles are read about incentives, quality control, and statistical quality control, before the students move on to propose solutions as they emerged from the cultural analysis. The final task is for the group to develop a plan to improve production quality at Carlson Apparel.

"The Modified Mummy and Management for Continuous Improvement"
Deborah Meyer

Inspiration for the Modified Mummy case study came in several forms. Initially, the experience of living in a small southern community contrasted with the cultural differences of the writer's life in central Iowa. Secondly, a friend was involved in bringing a new management and production style into a textile and apparel company. As he began this process, I became aware of the many types of cultural difficulties he encountered. Finally, the production staff welcomed the opportunity to share details of their experience.

Objectives for this case study were to: 1) demonstrate an understanding of Total Quality Management and the concepts of team management; 2) identify human factors, benefits, and risks involved in a new management style; 3) understand the diversity of cultures within an industrial setting and its local community; and 4) choose and defend a management decision based on a cultural approach.

The case study begins by introducing the factory manager, Richard. Richard has just met with the company's regional director who inquired about Richard's interest in a position that would require moving to a small southern community and implementing a new style of management. The company produces sleeping bags (hence the title "...modified mummy..."). This management style, Management for Continuous Improvement (MCI), is a combination of the Total Quality Management (TQM) system and the team management system.

After this initial opening, students follow Richard through several conversations with his wife and colleagues who have had varying experiences with the new management style. Discussion of the management styles highlights both the benefits and detriments of the two systems. Outside readings assist students to become more familiar with the concepts upon which Richard must base his final decision. History of the community, company history and product line, and general employee background are provided. Inherent to the case is a strong business focus including profit margin, productivity, reworks, and employee absenteeism, all of which are considered with a cultural focus in mind. At the end of the case, students are given four possible outcomes regarding the decision Richard has to make. Students utilize all aspects of the case when forming opinions and making decisions to support one of the possible outcomes.

The case provides a number of ways to explore cultural diversity. The cultures of the corporate organization, the factory, and the community play a part in the decision-making of Richard, the manager. Ideology, values and feelings, social behaviors, the economic structure of the community and the education of employees are examined as related to choice of the team management approach versus autocratic line production.

"How to Catch a Buyer at Market"
Pamela Brown

Retail buyers serve as gatekeepers for the consuming public. Product selection influences the success of a business, be it large or small. In the case study, "How to Catch a Buyer at Market", I chose to focus on buyers for very small retail craft and gift stores. These locally owned and managed stores were located in the communities where I live and work. In four of the stores the owner served as both manager and buyer. Each store featured artistic craft products, many of which were textiles. Interviews with the buyers were conducted, transcribed, and organized around five themes: a description of the store and its location, general business operations, merchandise mix, how crafts and artisans are located, and how buying decisions are made.

Guiding the development of the case study were four objectives: 1) understand buyer culture as reflected through the store owner's attitudes, beliefs and experiences in managing a business; 2) develop sensitivity to the cultural environment in which an owner-manager operates a business; 3) learn how buyer preferences vary in response to the marketing skills of artisans and the needs and interests of the buyer and customers; and 4) understand how buyers make decisions leading to business success.

Within this case there are five buyer interviews. Students read each interview and identify themes among the personal characteristics, business skills, training, artistic interests, and decision-making abilities of the buyers. They identify strengths and weaknesses of the individuals and their businesses, contributing to a sense of what might be a successful and a less successful business.

As one activity, students put themselves in the place of an artisan attempting to create a salable product for a buyer at market. Emphasis is placed on defining
how a specific product would be presented to buyers at market and how the product might be evaluated by each of the buyer types. Through involvement in both the role of the buyer and the artisan, students become sensitive to the needs and interests of both in the business process.

The case was developed to define a culture without physical boundaries, ethnic commonalities, or centralized work location; yet one that serves as a broker or gatekeeper for consumers. The student is alerted to each buyer’s belief in self-accomplishment and to appreciation of a product for its worth to both the buyer and customers.

Merchandising students typically stereotype buyers as high-powered, egocentric bargain hunters. By focusing on small business, I have forced the issue of considering the diversity of American business, diversity in the kinds of people running those businesses, and the management of small business versus large.

To stimulate critical thinking among students, I have included activities that encourage students to consider stereotypical images of "buyers" and to contrast those images with actual buyer commentary. Students move from a self-oriented mindset to scenarios based on real-life situations, forcing them to think about daily interactions that small store buyers encounter.

"Just-In-Time and the Small Manufacturer"
Dana Rupe

This case focuses on a small manufacturer and the deliberation of implementing a new business strategy, a Just-In-Time (JIT) manufacturing system. The company is evaluating the technology transfer in an attempt to increase efficiency and retain market share in a competitive environment. The manufacturing facility, producing a limited-edition craft item, is located in a traditional Southern town with a population of approximately 3,000. The plant employs less than 1,500 persons and is therefore a small business.

The case was prepared to achieve four objectives: 1) understand the basic elements and implementation of a new technology, a JIT manufacturing system, 2) understand a small business environment, 3) recognize the need to include a human factor in decision-making, and 4) propose and defend recommendations for a JIT implementation strategy in the form of a final project.

Viewpoints from the artisans and how they feel about their creativity, as well as managers and their concerns for efficiency are presented to illustrate the complexities of decision-making and the importance of considering a human factor in problem solving. Because the product that the case study centers around is a unique, limited edition craft item, the integrity and quality of the work is a highly important theme. Also permeating this case study is the philosophy of the company’s founding artist. His presence and ideas are reflected throughout the organization.

The social structures presented in this case center around the relationships of the employees. Their gender, income levels, other employment options in the area, and general community environment challenge the student to consider the context in which the key players of the case operate. The management style of the organization is also an important component for consideration. A floor plan of the plant is included to illustrate the physical barriers that inhibit or facilitate communication, personal interaction, and the production process itself. The detailed description of the production process alludes to the level of acceptance of technological advancements in the organization. Finally, the ideology of the company is implied throughout the case study as references are made about the type of community in which the manufacturing plant is located, the high work ethic of the employees, and the history of the company.

This scenario forces the student to consider the assumptions under which the key players operate. They must evaluate the cultural criteria of the organization prior to considering the business strategy implementation. When the technology transfer does come into focus it is investigated in light of a small manufacturer and the particular characteristics such an organization possesses due to the nature of its size.

The cultural analysis of the above issues provides a departure for critical thinking activities. Activities begin with analysis of the culture-its people and their thoughts, concerns, and how they would be affected by the transition. After an understanding of the organization exists, only then is the student permitted to consider the business principles. Through a purposeful progression it is hoped that the student will consider the business principles in a very context-specific light. Principles will be considered not only as they relate to a small business but also as they relate to the particular culture of this manufacturer. A final project serves to summarize the objectives of the case study.

"Cultural Sensitivity in Visual Merchandising: Meeting the Needs of Artisans and Consumers"
Josephine Moreno

This case study utilizes a cultural approach to visual merchandising by focusing on a woman’s textile cooperative in Guatemala, Los Artisanos de San Juan. A large percentage of textile products for sale in the U.S. are made in developing countries and consumers desire a stronger message about their products at the point of sale.

The case study incorporated data from a variety of sources. Information about the needs of the textile cooperative was gathered from researchers who had interviewed cooperative members in Guatemala. The original organizer of the cooperative, who now lives in the U.S., supplied historical data for the case study. Existing research on international craft consumers was incorporated. Lastly, visual merchandisers located in the U.S. midwest were interviewed for guidelines on visual merchandising from a cultural perspective.

The objective of this case study was to challenge students to analyze visual merchandising from the
perspectives of artisans, visual merchandisers, and consumers and to strike a balance among the three.

Each student is given readings which focus on textile craft consumers, economic and social conditions of weavers in Guatemala, the concept of culture, and the case study itself. The case provides information about the country of Guatemala, the history of the cooperative, merchandising ideas from visual merchandising consultants in the U.S., and recommendations from textile consumers about ideal shopping environments. Class discussions focus on the values, norms, beliefs, and technology of the members of the women's textile cooperative of Los Artesanos de San Juan; social factors that affect weavers in Guatemala; and merchandising strategies and shop environments which are conducive for buying by consumers. Students discuss the effects of culture on visual merchandising strategies and techniques.

During the course of the case study, students create two visual displays, the first a table top display with a focus on ikat fabric and the production process. The second assignment is a wall display where students can use only natural materials as props (beans, corn, woods), must portray the production process, and focus upon a theme. Craft products from a woman's textile cooperative are provided, including tops, jackets, shawls, purses, and accessories.

Using this case study, undergraduate students are introduced to visual merchandising from the perspective of a non-western culture. The case study challenges students to analyze the social conditions of the weavers, incorporate indigenous ideology, and utilize technology from the culture. Students create visual displays which address the culture needs of artisans, appeal to the aesthetic desires of consumers, and sell products.

"Changing Corporate Culture with Total Quality Management"
Rosalind Paige

This case focuses upon a U.S. apparel firm which is experiencing a variety of production and quality problems. During the case, students investigate the culture of the corporation and the various problems that result from the ideologies and assumptions that prevail. Students gain an understanding of how management systems of the past are failing and develop an understanding that corporate culture change is necessary for survival in the business world of tomorrow. Discussion of the principles of Total Quality Management (TQM), and the importance of leadership for creating culture change are integrated into the case.

Students prepare for discussion and classroom participation by reading current business management literature on corporate culture, TQM principles, leadership, and critical thinking. Students then participate in a mock workshop activity involving management and non-management employees. Utilizing their critical thinking skills, students take on the roles and corresponding assumptions of both management and non-management employees. Some students represent those who are progressive and in favor of making changes in leadership and management styles and other students represent those that are resistant to any corporate change. Additionally, as part of a team, students participate in brainstorming and problem solving activities.

Certain assumptions about roles in business exist among all levels of employees in the workplace. Students are involved in critical thinking by identifying and analyzing the prevailing attitudes and assumptions that exist in the case study, taking on the perspectives of various roles from executive officer to plant line worker, challenging those assumptions, defending their viewpoints, and creating alternative solutions which would bring about a corporate culture that is more conducive to TQM. Cultural diversity is introduced to the students by examining the various types of cultures that exist within business today. Another activity, directed at the concept of leadership, encourages students to think about their own behavior as well as that of others through administration of the Meyers-Briggs personality inventory.

The objectives of the case study include students being able to: 1) explain the ideologies and assumptions of various corporate cultures, 2) explain key TQM principles, 3) analyze and challenge assumptions that exist within the context of corporate culture, 4) participate in team problem-solving and decision-making activities, and 5) describe successful leadership characteristics of a TQM culture.

"Conclusion"

In order to make case studies usable by educators other than the case study writer, it is important that "Teaching Notes" be developed to accompany the case study. Teaching notes guide the facilitator or educator through the case study and include: introduction to the case study problem and its significance to textiles and apparel; description of the target audience and proposed number of class sessions; background necessary for most effective use of the case; case objectives; discussion questions and activities; alternative solutions; and references for the case study facilitator to use in gaining additional background prior to introducing the case study in the classroom.

References
REVIEWING FOR REFEREED PUBLICATIONS: PRACTICAL AND PHILOSOPHICAL ISSUES

Marjone Norton, Virginia Tech; Joan Laughlin, University of Nebraska-Lincoln; Sharron Lennon, Ohio State University; Kim Johnson, University of Minnesota; Linda Welters, University of Rhode Island; Rinn Cloud, Virginia Tech

Publication in refereed journals is a vital part of many members professional lives. The proposed session focused on publishing in the Clothing and Textiles Research Journal. The topics addressed included the steps involved in the review process, what reviewers look for in manuscripts, the reviewer-author interaction, attributions and acknowledgements, and strategies authors can use prior to submitting manuscripts. Joan Laughlin began the session by outlining the steps involved in the processing of manuscripts by the Clothing and Textiles Research Journal. During the first review of a manuscript, the author(s) submit a manuscript for review to the editor. The editor then prepares the paperwork for processing the manuscript. The manuscript is then sent to the associate editor minus information that would identify the author(s). The associate editor identifies appropriate reviewers and mails them the manuscript. The reviewers prepare their critique of the manuscript and send their recommendations concerning publication to the associate editor. The associate editor then reviews the reviewers' critique and recommendations. The associate editor makes a separate evaluation of the manuscript and recommendation concerning publication. The editor reviews the reviewers' and associate editor's critique and recommendations. Based on this information and the editor's own evaluation of the manuscript the editor decides to accept, request a revision, or reject the manuscript. For manuscripts where the editor's decision has been to request a revision of the manuscript and authors decide to revise and resubmit, a second review takes place. The process is the same as the first review with the exception that the editor's decision is either to accept or reject the manuscript.

During the publication phase for accepted manuscripts, the editor does an intensive edit of the manuscript. The edited manuscript is then sent to the author(s) who generates a diskette and two hard copies of the manuscript. One hard copy and the diskette are sent to the managing editor. The other hard copy is sent to the editor who reviews the hard copy against the recommendations for editing. The editor then sends approval of the manuscript to the managing editor. The managing editor sends one hard copy and the diskette to the type setter. The type setter sends the galleys proof of the manuscript to the managing editor. The managing editor sends the galleys proof to the author(s) for the final proofing. The author(s) send the galleys proof to the editor. The editor accepts the galleys and sends it to the managing editor who then oversees the printing and distribution of the journal.

Sharron Lennon addressed what reviewers look at when reviewing manuscripts submitted for publication. She noted that not all reviewers look for the same thing. With this in mind, she noted that of concern to reviewers are design flaws. Questions asked by reviewers may include whether the research designed actually answers the problem stated, whether the research has been conducted with reliable and valid measures, whether there are confounded variables, and whether the researcher has introduced any bias in the dependent measures. Reviewers consider presentation of the manuscript (e.g., misspelled words, incorrect quotes, format errors). If the manuscript is poorly prepared, reviewers may assume the research idea is also poor. Reviewers look for a justification for the research and an indication of how it adds to the body of knowledge. Reviewers consider whether the results have been overinterpreted and whether the conclusions drawn are warranted. Reviewers consider whether authors have relied on secondary sources rather than going back to original sources. Reviewers also consider whether enough information has been presented to be able to replicate the research. Reviewers like to see creativity and originality in research.

Kim Johnson addressed the nature of the dialogue and responsibilities shared by authors and reviewers. Authors' responsibilities involve preparing the best manuscript that they are capable of prior to submission. It is not the reviewers' responsibility to provide fundamental suggestions to authors concerning what are the parts of a manuscript, how the manuscript should be formatted, or to correct typographical errors. Authors need to address each of the reviewers' comments during the revision stage of the manuscript. It is extremely helpful if authors indicate where a change was recommended in the first manuscript and where the change has been addressed in the revised manuscript. This would include line and page numbers for each. When the author feels the reviewers' comments have been valuable and have made a significant contribution to their manuscript, the author needs to express appreciation to the reviewer in some way.

Reviewers' responsibilities involve noting both the positive and negative aspects of the manuscript. Authors need to know not only what they have done poorly but also what they done well. Reviewers need to raise all substantive issues concerning the manuscript in
the first review. In making comments, it is the reviewers' responsibility to make straight forward and specific comments. Reviewers need to justify and substantiate their knowledge claims with specific references. Reviewers need to acknowledge their limitation as reviewers. In some cases a reviewer may be competent to evaluate the methodological aspects, but not the conceptual content or vice versa. They need to note their limitations in a letter to the associate editor.

Reviewers need to view the review process as a constructive one. The reviewers' goal is to help the author get the manuscript into print. So if reviewers find problems with manuscripts, their objective becomes to establish a method for rescuing the commendable portions of the research. This makes the review process an extension of your teaching rather than a gauntlet the author has to successfully navigate.

Reviewers need to keep in mind the research is the property of the authors. The review process is a two-way interaction. Reviewers offer critique and suggestions, and authors can accept these suggestions or reject them. It is not a one way street where reviewers dictate what must be done in order for authors to get their material into print. Reviewers should not discuss a manuscript with anybody else. To do so is the violation of professional ethics and the authors' right to privacy. Occasions may arise where a reviewer feels the need to consult with a colleague who is more knowledgeable than he/she is on a topic and such consultation is acceptable but should be limited.

A good review is one in which negative comments are expressed as diplomatically as possible. Comments need not be directed at the authors or their ability to conduct research; comments need to be directed at the manuscript. A good rule of thumb is to write the review as though the reviewer(s) were known to the author(s).

Linda Welters addressed the topic of attributions and acknowledgements concerning manuscripts. She noted that all statements of fact and all work done by others should be cited. Authors need to secure permission in writing to use quotations. Anything used in its entirety such as a poem or a letter, authors need to secure permission to use. A rule of thumb is never quote more than a few contiguous paragraphs at a time or let the quotation overshadow the quoter. Authors need to acknowledge a grant or other financial support for their research. Authors need to acknowledge the basis for the study if it developed from previous work (e.g., doctoral dissertation, paper presented at a meeting). Authors need to acknowledge assistance in conducting their research and assistance in preparing their manuscript. They also need to acknowledge sources for illustrations and permission to study an artifact.

Acknowledgements are very straightforward except for assistance. Who should authors thank? How can contributions of anonymous reviewers be acknowledged? When are contributions so significant that one should be listed as a co-author? Major contributions that may constitute authorship include formulating hypotheses, formulating the design, conducting statistical analyses, interpreting results, and writing a major portion of the paper. Minor contributions that may be acknowledged in a footnote include clerical help, designing apparatus, collecting data, structuring computer programs, and arranging for research subjects. Combinations of minor contributions may constitute authorship. An example of a situation where individuals need to be co-authors is when a manuscript, based on a graduate student’s thesis, is written by a professor. Reviewers should not be acknowledged as their contributions are an expectation of the review process.

Rinn Cloud addressed strategies that authors can use prior to submitting manuscripts to enhance the manuscript's acceptance by a publication. She noted that the learning of writing skills is an open capacity skill, that is, a skill that is never completely mastered. When individuals write up their research they have two responsibilities: (1) to learn something themselves and (2) to help the reader learn what you have learned. Strategies that authors can use prior to submission include to plan good research. It is very difficult to write a good manuscript from poorly planned research. Select a journal and study it's format. Make sure that you are submitting your manuscript in a format that matches what the journal uses. Review, edit and revise your manuscript yourself before you have someone else read it. Make sure that all co-authors have read the manuscript prior to submission. Have an informal peer review of the manuscript done prior to submission. This could include university colleagues or volunteers through the membership of the International Textile and Apparel Association.
THE CHALLENGE OF SCHOLARSHIP:
INTELLECTUAL DIVERSITY IN THE SOCIAL ASPECTS OF DRESS

Leslie D. Burns, Oregon State U., Corvallis, OR 97331
Jean A. Hamilton, U. of Missouri, Columbia, MO 65211
Margaret H. Rucker, U. of California, Davis, CA 95616
Sharron J. Lennon, Ohio State U., Columbus, OH 43210-1295

Much of our scholarship in the social aspects of dress consists of "empirical description superficially explained by reliance on some more or less relevant existing theory. As a result, little is changed or challenged, and nothing new is asserted. While such an approach to scholarship is perhaps intellectually and politically safe for the researcher, it does little to advance the legitimacy and usefulness of the scholarship of the field" (Hamilton, 1993). This panel was organized to explore the diversity in scholarship concerned with dress and social life and the extent to which scholarship is a social activity.

According to Jean Hamilton, scholarship is not social because it results in public congratulation. Rather scholarship is a social activity because it requires learning from, being inspired by, dialoging with, and providing feedback to, other scholars. In this sense, engaging in scholarship is a very humbling activity. Each scholar's understanding of social phenomena is necessarily limited, inevitably biased by unique life experiences. We learn by interacting with colleagues whose backgrounds, life experiences, and intellectual grounding are different from ours. Some of us are fortunate to be at locations in which there are other kindred scholars with whom we can have such discussions; however, for many of us this is not the case. Because the production of scholarship is a social activity, a challenge for those committed to scholarship focused on social life and dress is to establish means of dialoging with each other.

The production of scholarship affects and is affected by social organization. Dominant paradigms provide a way of thinking about phenomena and serve as blueprints for the theoretical investigation of phenomena. For researchers concerned with dress in social life, the very practice of scholarly activity might be worth reexamination, and social organization might be better designed to facilitate the production of better and more relevant scholarship for the field as well as for individual researchers.

Leslie Burns addressed the diversity, or lack thereof, found in the data collection techniques we use or in her words "is what we know more a function of how we know it - than what it is?" She discussed the extent to which a major professor and required statistics and methods courses shape one's way of knowing as a graduate student and as a new researcher. She discussed her work with Sharron Lennon as it was shaped by their major professor.

After conducting experiment after experiment, we slowly became aware of the relevance and importance of meshing qualitative and quantitative data collection techniques. In fact we have explored and compared various ways of collecting data on social perception, and continue to pursue this as a research topic. What we have discovered, so far, is that what we, as researchers, know about social perception (which in a nut shell is that
stimulus persons wearing different clothing are perceived differently by observers) may, in fact, be as much due to how the data were collected as to the phenomenon being studied, which in this case is the effect of an appearance manipulation on the perceptions formed of others. Indeed, using different data collection methods to study social perception we have discovered that differences in clothing worn by stimulus persons may not affect certain categories of perceptual responses at all.

The implications of this is that as researchers, we must be very cautious about the assumptions and generalizations we make about our collective research results, especially when the results are based upon data collected by only one method or technique. Using the social perception area of study as an example, much of the research conducted up to a few years ago was experimental in nature using adjective checklists or semantic differential scales. As researchers have expanded the data collection methods to include open-ended measures and other qualitative techniques, some of the results have been the same, but some of the results have been different than what had previously been discovered.

In a review of the data collection methods used in research with human subjects and published in HERJ and CTRJ, we found that in HERJ, 63% of the studies were either analytic or descriptive surveys. In CTRJ, 66% of the studies were either analytic or descriptive surveys. Although it may not be wise to generalize to the entire field from the published work in these two journals alone, it is fairly safe to say that surveys do make up a large part of our work. Thus the question becomes, is what we know in this field more, or at least as much, a function of this prevalent use of survey methodology than the phenomena we are striving to know more about?

She concluded with a discussion of social responsibility in research. For example, research on the influence of appearance factors on the impressions individuals form of others can easily perpetuate ethnic, social class, or other appearance-related stereotypes. Suppose that we wanted to study the effects of appearance on the accuracy of eye-witness accounts of a crime. If in this study we used pictures of all black males as the hypothetical "criminal" to serve as our stimulus materials, we would be communicating a negative racial stereotype to our subjects. We need to be aware of these possibilities and be careful to develop socially responsible stimulus materials. By developing stimuli which are easily identified using popular stereotypes we are actually reinforcing those stereotypes.

We can also structure and reinforce appearance stereotypes through our dependent measures. By providing stereotypic adjectives, we are suggesting descriptors to subjects which they might not have generated on their own, but due to the provision of the adjectives, cannot "get out of their minds." Thus we may have suggested categories that our subjects would never have used, but now will use to categorize persons similar in appearance to the stimulus person. In this case we may be responsible for perpetuating a stereotype.

Peg Rucker spoke to the issue of accountability in our research. She addressed the need of department chairs to assess whether or not research was worth doing. It is important to be able to say "yes" for the retention and advancement of individual faculty members and the protection of the program on the campus. At an even broader level, it is important for the viability of our subject matter area in the academy.
In discussing accountability, one must put the issue in context and ask "accountable to whom?" There are at least four groups to consider in this regard.

**Colleagues.** Whether we think of ourselves as interdisciplinary or multidisciplinary, we would probably all agree that our area is diverse. Our strength is being able to address various facets of complex problems; our weakness may be in having difficulty in describing our program to each other, let alone outsiders. We are apt to be challenged, both internally and externally, as to why a given project is being done in textiles and clothing and not some other department. Another problem with diversity in scholarship is that it is easy to slip into destructive competition for resources.

At Davis, we have used several mechanisms to become more knowledgable regarding each other's research. One is a graduate seminar in which faculty explain their research to graduate students, and incidentally, to each other. Another mechanism we have used has been to seek out complex problems for which two or more faculty can contribute. This helps us learn more about what each of us has to offer; then we can also use the project as an example to convince other stakeholders that diversity in scholarship can be positive. A valuable side effect of the process has been to find that such projects are generally more fundable than single-investigator studies. There are some aspects of diversity, however, that have been unnecessarily divisive. Differences of opinion with respect to methodology is one of those. As the sociopsychological area takes advantage of an expanded set of methodological tools, we should focus on why the methodology is most suitable for the problem rather than focusing on defending the methodology.

**Industry.** A common concern here is determining exactly what corporate sponsors want. On at least some occasions, after we clarify that, we may decide not to be accountable.

**Clients.** A recommendation here is to consider clients' motives in supplying them with the results of research. A personal example of mine concerns research on protective clothing. We found that the "lady of the house" was concerned with safety while the "man of the house" was concerned with reducing workmen's compensation payments. To be most effective, we had to explain our research in different terms for different clients.

**Administrators.** When asked about curriculum development, student placement, or our research, we say our curriculum is more rigorous, our students brighter and better trained, and our research uses more elegant methods of analysis; and I believe it is true in many cases. But is it always wise to say we do the same thing as psychology or sociology, only better? In what way? Why is it better? Often we do not take advantage of what is special, distinctive and important about the commodity we study.

We also need to be aware of the importance of funding for research. I am not suggesting that funding should drive research, but getting grants is one way to show you can address business and government needs in a meaningful way.

**Theoretical Guidance**

Without theoretical guidance for our research, we have a number of snapshots in time that do not allow us to make progress and therefore show how the field has progressed. You can start with theory or develop theory. I am not championing the quantitative, positivistic approach here. However, I am
saying that theory must be introduced at some point. One should not ask subjects to complete a series of tasks and just hope somehow to get a significant relationship somewhere. We must build on the empirical and theoretical work of others. To paraphrase the psychologist McCauley -- if we choose to ignore the substantial work of colleagues in our area, what should others conclude about the value of our research?

References

The Critical Linkages II project emerged from the March 1993 meeting of the ITAA Executive Council. Subsequent to the meeting, a call for participation was developed to involve as many ITAA members as possible in the project. This call encouraged members to participate in the Critical Linkages II sessions held throughout the 1993 annual meeting by submitting topics, agendas, possibilities, strategies, or any other thoughts in an abstract (paragraph) and/or outline (bullet) format. Submitters were encouraged to be creative and bold (to go out on a limb) in their framing of issues, questions, or strategies in conjunction with the project's three interconnecting themes (see the Venn diagram in Kaiser's address, this volume): diversity in our standpoints, diversity in our subject matter, and diversity among our stakeholders. The following five sessions resulted from the enthusiastic response to the call on the part of the membership. These sessions were designed to be didactic and participatory, and, as the following summaries suggest, the Critical Linkages II sessions generated a great deal of discussion, producing some new questions and themes for future, subsequent stages of the project.

DIVERSITY AMONG OUR STAKEHOLDERS: BRIDGING INTERESTS, ENHANCING OUTCOMES

Co-Chairs:
Mary Lynn Damhorst, Iowa State University, Ames, IA 50011
Margaret Rucker, University of California, Davis, CA 95616

Panelists:
Kay Hunter Braguglia, Hampton University, Hampton, VA 23668
Yvette Harps-Logan, University of Rhode Island, Kingston, RI 02881
Janet Hethorn, University of California, Davis, CA 95616
Jane M. Lamb, University of Delaware, Newark, DE 19716
Sharron J. Lennon, The Ohio State University, Columbus, OH, 43210
Judy Miler, University of Tennessee, Chattanooga, TN 37403
Cherlynn Nelson, East Carolina University, Greenville, NC 27858
Nancy Rudd, The Ohio State University, Columbus, OH 43210
Linda Welters, University of Rhode Island, Kingston, RI 02881

What implicit assumptions do we make about who our stakeholders are or should be? What are the relationships among these stakeholders? How can our connections to our diverse stakeholders be strengthened? To what extent should/could our knowledge base influence public policy, industry profits, or consumer well-being?

Panelists in this session addressed how we can integrate or balance the needs of our various stakeholders. The session dealt with such diverse topics as ethical issues that influence consumer well-being, future merchandising strategies, and the quality of our relationship with industry.

Four panelists addressed social and ethical themes that influence the health and safety of consumers in everyday life and, in some way, connect with industry practices and public policy. Janet Hethorn discussed the importance of understanding diversity among consumer cultures, noting the linkages among teen violence, clothing, and ethics in the apparel industry. Sharron Lennon described the importance of clothing as evidence in rape and sexual harassment legal cases. Both Hethorn and Lennon noted that clothing issues tend to become oversimplified in the realm of public policy and considered how clothing researchers can and should contribute to the political discourse on violence and victimization. Nancy Rudd focused on the connections between body image and health, noting how social psychology and aesthetics should be linked to address issues involving advertising, media and health (e.g., eating disorders, plastic surgery). Similarly, Jane Lamb addressed the connections among gerontology, public health and policy, and practices on the part of the apparel industry.

Several panelists discussed changes in the textile, apparel and retail industries and the corresponding need to rethink curricula. Yvette Harps-Logan and Linda Welters addressed the importance of experiential education, linking the
needs of two groups of stakeholders: students and industry. Kay Hunter Braguglia described the implications of a Delphi study of retailers for tomorrow’s merchandising students. This study suggests that retailers are aware of diversity issues relative to the workforce and global sourcing, yet do not recognize the significance of foreign language and cross-cultural education for future merchandisers. Judy Miller discussed the importance of developing curricula for the graduates of tomorrow in the context of non-store retailing and changing (increasingly visual) communications.

Cherilyn Nelson encouraged us to adopt a broad view of stakeholders in a manner that includes and integrates the needs of governmental agencies, the tax-paying public, and students—the products of our programs—with those of business.

Much of the ensuing discussion revolved around the nature of our relationship with industry, in conjunction not only with how industry perceives us, but also with how we perceive ourselves. Is industry truly aware of what we know and offer, especially in terms of addressing social change? The panelists and audience discussed the vocabulary gap between academia and industry and debated the extent to which we should learn or adopt the language of industry. The breadth of our educational mission arose as an issue in this context. That is, we need to communicate with diverse audiences: Our stakeholders include everyone who wears clothes. We have a responsibility to communicate in a way that moves beyond time-bound instruction and that fosters an understanding of ethics as well as our subject matter per se. Social change is and should be a fundamental dimension of our curricula, which should also bridge the interests of industry, consumers, and government. In this connection, participants agreed that we need to move beyond a theme of accommodation to the needs of others toward a proactive stance relative to our relationship with industry and other stakeholders.

A related question emerged from the discussion: How can we balance the need to offer students an education that will sustain them in a changing world with an ability to communicate effectively with diverse stakeholders in the here and now? Future sessions might further explore this question and consider the importance of fostering a sense of self-respect along with a respect for the needs, interests, and identities of diverse others. In other words, we need to continue to articulate the underlying assumptions that influence our interactions both within and beyond our area of study.
CRITICAL LINKAGES II
OUR COLLECTIVE IDENTITY—PAST, PRESENT AND FUTURE:
GENDER RELATIONS IN THE ACADEMY

Co-Chairs:
Kimberly Miller, University of Kentucky, Lexington, KY 40502
Gloria Williams, University of Minnesota, St. Paul, MN 55108

Panelists:
Catherine A. Cerny, Virginia Tech, Blacksburg, VA 24061
Sally Fails, Brigham Young University, Provo, UT 84602
Judy Zaccagnini Flynn, Framingham State College, Northboro, MA 01532
Ruth E. Hawthorne, Terre Haute, IN 47803
Charlene Lind, Brigham Young University, Provo, UT 84602
Suzanne Loker, University of Idaho, Moscow, ID 83843
Susan Michelman, University of Massachusetts, Amherst, MA 01002

This session explored gender as a central theme in the formation of our area of study, within the larger context of a male-dominated academy. A number of the panelists discussed the roots of textiles and clothing within home economics, among the first fields to introduce women to higher education. Charlene Lind and Sally Fails linked this historically female centeredness in our academic departments with a type of comfort zone, in which gender is not an issue in day-to-day politics. They noted the importance of breaking out of this comfort zone by becoming more conscious of the politics of the academy as a whole.

Ruth Hawthorne noted the value of looking at other female-dominant academic cultures and professions, and exploring how they have related to dominant male culture within the academy. She discussed the Cartesian mind-body duality as the basis for status and occupational hierarchies, with the body being linked to feelings, practical endeavors, the private sphere, and, hence, femininity. Catherine Cerny discussed the intellectual and strategic importance of examining our study in relation to gendered ways of knowing. Similarly, Suzanne Loker argued that we should draw on our interdisciplinary strengths to articulate our contributions to and centrality in higher education, based in part on the enhancement of educational and professional opportunities for women. She suggested that we should focus on conceptualizing textiles and clothing within the broader contexts of gender, culture, politics, and global awareness. Susan Michelman addressed our relationship with feminist scholars in fields such as women’s studies and revised her earlier call for a “meaningful alliance” to one of a “meaningful commitment” to examine the feminist question in textiles and clothing.

Also explored was the importance of acknowledging the intellectual contributions of our leaders in relation to their lived experiences and to the professional development of our field. Judy Flynn noted that, unlike many “root” social science disciplines, we rarely expose undergraduate and graduate students to the important researchers, writers, and teachers of our field. She described some work in progress that focuses on the intellectual and personal histories of textiles and clothing scholars as a potential corrective for building a sense of historical foundation. This work can help us to understand the interrelatedness as well as the diversity among our standpoints.

Discussion revolved around the point that it is textiles and clothing as an area of study itself that is devalued, not simply the fact that the field is predominately female. This devaluation can be linked to an odd mixture of associations: mundane, commonplace, frivolous, and vocational. Relative to our subject matter and its knowledge base, we clearly need to move beyond the perception by some that theory development is something “others do” and “we apply.”

Participants also discussed the need to articulate the innovations that have historically emerged from our programs on our respective campuses. The politics of the academy do not necessarily support the notion perpetuated through female socialization that one will be rewarded for doing a good job. We need to celebrate and communicate our strengths, while also becoming better equipped to address the political realities we face on our own campuses and in intellectual life as a whole.
CRITICAL LINKAGES II
DIVERSITY IN OUR SUBJECT MATTER:
WHAT AND HOW WE KNOW

Co-Chairs:
Dorothy Behling, Bowling Green State University, OH 43403
Sandra S. Hutton, Colorado State University, Ft. Collins, CO 80523
Panelists:
Joanne B. Eicher, University of Minnesota, St. Paul, MN 55108
Nelma Fettermann, University of Manitoba, Winnipeg, Manitoba
Valerie Giddings, Virginia Tech, Blacksburg, VA 24061
Yoon-Hee Kwon, Northern Illinois University, DeKalb, IL 60115
Hilda Buckley Lakner, University of Illinois, Urbana, IL 61801
Carol Salusso, Montana State University, Bozeman, MT 59717

This session addressed issues of intellectual diversity and the relationships between the parts and the whole of our subject matter, focusing on the following questions: What are the fundamental assumptions and questions that comprise the "core" of our study? How, when, and why do we link with one another? How can we foster such linkages while also acknowledging and celebrating our disciplinary diversity? What are the distinctions between multidisciplinary and interdisciplinary strategies, and the implications thereof? Is the distinction between basic or pure and applied science useful or problematic? What is or should be the nature of our linkages with outside disciplines?

Yoon-Hee Kwon noted that textiles, apparel, and merchandising programs (unlike retailing and marketing programs in business schools) focus on (a) product knowledge, (b) quality of life, and (c) the design, production, merchandising, and use of textile-related products, which comprise over 80-90% of products in department stores. Hilda Buckley Lakner discussed the concept of textiles and apparel as an interdisciplinary (as opposed to multidisciplinary), applied science with some "pure" dimensions (i.e., the material natures of products, the processes by which products are used, and why). She questioned whether we make the concepts and theories we borrow from other disciplines unique. Why do we have the applied science of "textiles and clothing" but not other applied sciences such as "corn and soybeans" or "camels and donkeys"?

Joanne Eicher discussed the roots of our knowledge base in the physical sciences at the beginning of the century, shifting and expanding by mid-century into the social sciences with queries about why we used the textiles we used and dressed the way we did. Sociology comprised the base for such analyses more than did anthropology, and art history and history were peripheral, more often than not, to our disciplinary training. She noted that our bonds as a group of scholars largely rest on our interest in the artifacts (the specific textile and apparel items), their use, and meaning. We integrate the perspectives of diverse disciplines and often find ourselves on the periphery of these disciplines, which allows us some liberties but also provides certain constraints. Internally, we need to avoid viewing the social/cultural analysis of dress and merchandising as dichotomous. In a similar vein, Dorothy Behling noted the very deep roots of our field in consumer studies and characterized consumers as more than a target for new products.

Nelma Fettermann presented evidence of cocitation analysis as a technique for understanding the linkages within our subject matter area. She illustrated how mapping the connections among scholars through their citations can be effective in describing the intellectual structure of our area of study.

Valerie Giddings focused on strategies for assessing student outcomes as an opportunity for us to strengthen our connectedness, to address what we want our students to know, and why.

Carol Salusso noted that we need to have more opportunities for informal brainstorming. She discussed the role of electronic communications in fostering linkages within and across subdisciplines, creating a sense of critical mass and overcoming feelings of isolation and fragmentation.

Discussion revolved around how "what we know and how we know it" is more salient than how we classify or label our knowledge base. For example, why is fashion considered to be a substantive area of study in sociology, but an "applied" area in textiles and apparel? Why do we focus more on the "sciences" than the "arts"? Our blending of the arts and sciences was noted as a unique attribute.
Nancy Cassill presented an overview for the session, aimed at assessing current merchandising research in relation to the development of a merchandising metatheory. She identified the following goals for the session: (i) to encourage individuals to reflect on personal research contributions, (ii) to empower individuals to assess and determine critical voids in merchandising research, and (iii) to reflect on individual contributions to merchandising metatheory.

Joan Laughlin defined metatheory and its role in the research process, noting that a metatheory or meta-perspective influences what we study and how we study it. A metatheory serves as a filter or overarching perspective and defines what one brings to inquiry in terms of a theoretical attitude and orienting strategy. We construct metatheories from systematic, independent research and the building blocks of substantive and unit theories. In this connection, we need to ask ourselves: What do we know? And, how do we know it? Completing the research cycle is critical to the development of theory and metatheory. Often, research stops short of linking findings with an existing or emerging theoretical base.

Grace Kunz proposed a model of merchandising in a quick-response environment. The elements of merchandising include line planning, presentation and development; these elements comprise an interactive system that can serve as a base for research.

Laura Jolly described current research efforts, based on a categorization of apparel merchandising articles in CTRJ. She noted that the vast majority of research has focused on consumers, with few connections to merchandising per se. Isolated research findings need to be organized and synthesized, and merchandising scholars need to identify the surpluses and shortages in research.

Rita Kean engaged the audience in an exercise emphasizing the need for clarifying research plans. She challenged participants to consider what they would say if their Chancellor, Provost or President queried them in a spontaneous circumstance: "What is your research project? If there are leftover research funds, what research question would you address? Why is this research question important? Why should it be funded?"

Jean Hamilton urged participants to consider merchandising as an economic activity within a cultural system; hence, it is always a social process. For this reason, we must study and understand the organizational culture of firms, along with the structure of their value systems (for example, the sense of stewardship found in the culture of some rural retail firms). She proposed that we assess theoretical development in merchandising using sociologist George Ritzer's model of metatheory, which delineates four quadrants formed by the intersection of two continua: objective-subjective and micro-macro.

Discussion revolved around the advantages of theory development as a group effort, as compared to an individual effort. Future strategies for fostering the development of merchandising metatheory were explored.
This session focused on cultural diversity as a unifying theme in both the intranational and international contexts. Participants addressed strategies for incorporating cultural diversity into our curricula, our theories/philosophies, and our research and creative works. They focused on the importance of understanding diversity in the context of our own "backyards" as well as geographic locations that are more distant from our everyday experiences.

Drawing on her own collaborative research experiences, Jill Oakes emphasized the importance of respecting and understanding local knowledge in the communities or cultures we study. She noted that researchers need to avoid approaching community-based studies as the "expert." Gina Eubanks shared experiences from her own campus relative to intellectual and social exchanges with individuals from other cultures. She stressed the importance of contemplating cultural diversity by means of awareness, knowledge, infusion, interaction, and respect.

Citing the work of Cornel West (Director of Afro-American Studies at Princeton University and author of Prophetic Thought in Postmodern Times, Common Courage Press, 1993), Susan Kaiser focused on the need to move beyond the debate that dichotomizes eurocentrism and multiculturalism. She noted that all too often, the idea of diversity signals an appreciation for diverse textile and clothing traditions outside of the boundaries of our own nations. We also need to be attuned to differences in cultural values or social meanings that are not visible, in both intranational and international contexts.

Patricia Mulready addressed the importance of international population and development issues, including potential liaison arrangements with the United Nations as an avenue for forging new linkages with the Pacific Rim/Asia and Eastern European nations. Kaye Crippen provided examples of her experience of being immersed in the Asian culture of Singapore, highlighting issues of respect and openness in interpreting value and meaning systems. Pauline Sullivan discussed cross-cultural work in progress that links the study of cultural patterns with consumer behavior, and described how she brings issues of cultural diversity into the classroom. Similarly, Ann Paulins focused on strategies for integrating cultural and intercultural issues and perspectives into clothing and textiles curricula.

Eva Ywei discussed the interplay between traditional and western dress in Taiwan, in what she described as a kind of cultural identity crisis. She noted the ambivalence about traditional dress, although ethnic-inspired dress tends to be preferred in design contests.

Cherry Searle considered diversity in the context of the classroom, focusing on: (1) students who are first in their families to attend college, (2) re-entry students (nontraditional ages), and (3) gay male and lesbian students. Nadine Hackler focused on diversity in the context of the changing audiences served by Cooperative Extension specialists.

Discussion revolved around the need to understand cultural diversity in relation to an active support for the right of differences to exist in value and meaning systems. Also reinforced was the importance of respecting local knowledge, in whatever cultural context we study. Additionally, we need to move beyond addressing anecdotal details about specific cultures toward analyzing the inherent integrity in any cultural system. Finally, we need to immerse ourselves in the cultural systems we study and experience, focusing on the concepts of respect and patience. There are no "quick fixes."
Across the various stimulating Critical Linkages II sessions throughout the conference, a number of thematic commonalities emerged. These commonalities revolved around a nexus of our identities as scholars and professionals, our relationships with stakeholders, and what and how we know. Clearly, participants in the sessions saw linkages among how we relate to one another, those we study and serve, and other disciplines. The sessions dealt with diversity and critical linkages in a variety of contexts, yet the following themes emerged:

**Communication**

Language and vocabulary surfaced as key factors if not challenges in our interactions with one another, with industry representatives, consumers, students, and individuals in disciplines outside of our own. How can and should we balance learning the vocabularies of others with addressing our own need to convey what and how we know? How can we make our ideas and knowledge accessible to those we serve? Language can be a challenge in an international association; we discussed strategies for making our publications as user-friendly as possible for members in a variety of locations around the world.

Related to the need to communicate effectively is respecting one another’s disciplinary and cultural differences. Also discussed was the need for fostering self-respect, both individually and collectively. Participants regarded self-respect as a critical ingredient in communicating and interacting effectively with stakeholders.

**Inclusion: Patience and Process**

Many of the concerns expressed in the sessions are not new ones. Forging linkages among industry, consumer and governmental groups, for example, has been a challenge throughout our association’s history. Participants in many of the sessions emphasized the importance of process and inclusion, both of which require time and patience, but which lead to the best results as we aim to emphasize and celebrate our diversity. A common phrase that surfaced from the discussion was “there is no quick fix.” Bridging the interests of diverse stakeholders and connecting the parts of our whole require time and energy. Patience is a virtue, but this does mean we should “rest on our laurels.” We need to create and recreate processes that are inclusive and interactive, in order to achieve ongoing goals in the contexts of social and institutional change.

The same principle surfaced in the discussions on cultural diversity. That is, it takes time, energy and patience to immerse oneself in another culture and to learn to interpret and appreciate its meaning and value systems. Patience, in this sense, is not passive, but rather refers to an ongoing action orientation that allows us to be inclusive and interdependent. In other words, we have to work on these critical linkages on a continuing basis.

**Action Orientation**

In many sessions, members spoke of the need to identify tangible goals or actions, frequently in the form of identifying the “next steps.” Often phrases such as the following surfaced in the discussions: “go for it,” “just do it,” and “go out on a limb.” This theme of an action orientation applied to issues of methodological and pedagogical creativity, relations with stakeholders, theoretical development, and politics within the academy. Linking this theme with the previous theme of processes of inclusion, participants recognized the importance of fostering and maintaining a passionate sense of process—that is, moving forward collectively, critically, and creatively.

**Linkages and Identity**

Another common concern was the need to link with stakeholders and other disciplines, but to avoid losing our sense of identity and uniqueness in the process. In other words, there was some concern about a tendency toward other-directedness. Given our interdisciplinarity and integrative nature, we can generally bend in a number of directions, and this is a positive attribute. But participants also recognized the importance of maintaining our central strengths and connections with each other. Strategies for strengthening these core interdependencies were discussed along with the need to develop action steps for clarifying and communicating our purpose(s) and mission(s) to other disciplines and stakeholders, as well as to ourselves.
On behalf of Kmart Corporation, I am proud to be with you this morning to talk about vendor partnerships.

I would like to thank the West Virginia University faculty for inviting me to speak today. As some of you may know, Kmart has very strong ties to West Virginia University. Our chairman, Joe Antonini -- a native of West Virginia -- is a graduate of the University.

We also have endowed a chair in retailing at the School of Business and bring our top assistant managers to campus each year for an intensive management training program.

Before we talk about partnerships, I would like to provide some background on Kmart Corporation.

Kmart Corporation is in the midst of one of the biggest modernization and refurbishment projects ever launched by any retailer in the world.

By 1995, all of our 2,400 Kmart stores nationwide will proudly display the bright red Kmart logo. Modernized and new Kmart stores offer more merchandise... more attractive presentation and bold displays... more of the latest brands and on-trend merchandise -- plus the best low prices and friendlies service anywhere.

Our quality, prices and selection attract the shopper who frequents most -- today's "busy budget-conscious consumer" -- often a mom who's juggling a career and a household.

As a consumer, she is very interested in getting the most for her shopping dollars. She wants quality... she doesn't want to cut corners on style, design or fabrications... she wants convenience and a pleasant, rewarding shopping experience.

Vendor partnerships play an important part in Kmart's strategy to satisfy our customers. Through vendor partnerships, we can offer high quality, stylish merchandise at the right price.

The retail environment is full of partnership opportunities. As a result, vendor partnerships have never been more important than they are today.

Today's partnership between vendors and retailers must be a serious element in the business plan, well defined and clearly communicated.

In order for the commitment to work, 5 critical concepts must be in focus.

First: Positioning the organization to understand the "customer driven" process...
Second: Top to top executive support...
Third: Cross functional teams...
Fourth: Cross functional team leadership...
Fifth: Something that's all too easy to say, yet not so easy to put in place...trust.

Kmart's partnership program is called "Partners in Merchandise Flow". The program was given a specific name because we feel it is a unique program to Kmart.

To get a true partnership program up and running, the organization must be poised to understand what is really meant by "customer driven."

Who sets the tone for a retailer's partnership? It must start at the top. The C.E.O. must clarify the vision so that management can make it happen.

This isn't as easy as it may sound. There must be clear communications and a network of intelligent training.

Kmart works with 7000 different vendors. More than 2000 of these provide home and family fashion items for our stores.

The kma fashion division shares two common critical goals with our vendors: Increased cost effectiveness... and quicker response to our mutual customers.

Whoever said there's strength in numbers must have been thinking about retailing. Indeed, Kmart is stronger when our vendors are our partners.

Kmart has the information our vendors need. An with our sophisticated retail technology, we can give them that information easier, faster and more accurately than ever before.

In order for the information to be used effectively, a cross functional team must be established. The team consists of representatives from Kmart and each of our vendor partners.

The team then is charged to make change happen. Change may involve streamlining systems, eliminating non value-adding costs and installing reliable processes.

Such a team requires trust. Trust between top leaders. Trust among the cross functional team members. And trust throughout the organizations.

Kmart must know our vendor, and our vendor must know us.

For example, a recent partnership with Proctor and Gamble helped Kmart increase sales and our in-stock position of diapers.

Kmart and Pcript H identified that we were not restocking our shelves quickly enough with
A team was developed with a specific mission -- make diaper sales simple.

Kmart's operation, sies and buying departments worked with P & G representatives and determined that the sales data Kmart was providing was being interpreted incorrectly.

Together, we came up with a strategy to solve the problem...and I am proud to share our results with you. Diaper sales increased by 5 percent and our in-stock position rose to 97 percent.

The explanation is simple. We gave our customers the merchandise they were looking for...and they responded by buying more of it.

From Kmart's perspective, "Partnering" is the strategy for THE '90s and beyond.

As a part of the largest free enterprise system in the world, America's shoppers enjoy the liberty to change their minds at will and demand that stores have the right products on their shelves.

Today's shopper expects value-oriented selection, quality and service convenience. Time usage is a top-priority.

At Kmart, we understand that partnerships are key to making that happen. Customers expect a strong, effective bond between retailers and vendors.

The best quality...the best price...available when the consumer needs and wants the merchandise, -- That's a mission Kmart shares with our vendor/partners in the merchandise flow process.

The process we've developed is truly win/win...our supplier partners have strongly embraced it...Kmart firmly supports it...and best of all, it helps all of us better serve our customers.

Five key principles guide our partnership program.

First -- The consolidation of supplier and retailer efforts. More and more, operations are centralized for greater economies of scale.

Second -- Both retailers and vendors share the need to satisfy consumer expectations of quality, value and having products on hand -- all the time -- in our stores.

Third -- The recognition that strong partnerships provide distinct competitive advantages -- this is especially true because by sharing information technology we save time. And that is a key advantage in and of itself.

For example, by forming a strategic alliance committee, Kmart and Sara Lee were recently able to double the number of fashion orders which meet Kmart's arrival deadlines.

Fourth -- Both Kmart and our vendors have a better understanding of our customer. This allows us to develop more targeted, store specific programs.

Fifth -- The recognition that a significant amount of money was being invested by our suppliers for distribution processes.

By working together, we can save money on both sides of the system.

Partnership's which save mondy have been a regular occurrence in Kmart's enhanced quality assurance department...

The department is actively involved in the up front technical design and approval of new products being considered for sale in our stores.

We have two laboratories dedicated specifically to textile and fashion testing. Our technicians make sure that vendor submitted fabrics hold up to care instructions, normal wear and tear...and that they fit the way they should.

Sometimes we identify products that don't meet our standards...

Recently, a pillow manufacturer was having problems with coloring on their product. The print was rubbing off because of the paste which was used in the production process.

Our technicians worked very closely with the vendor -- who did not have a quality assurance staff -- to recommend new production procedures.

If Kmart had not had this up front partnership process in place the order would have been rejected at our distribution center, costing us and the vendor substantial amounts of money.

Recognizing the overall benefits of partnerships, Kmart is committed to building relationships based on trust with all of our suppliers.

Our program is based on open lines of communication. Kmart and our suppliers talk regularly about issues such as:

- new product introduction;
- how to reduce "out of stocks";
- how we can better share inventory and sales information through point of sales technology;
- merchandise selection and presentation;
- customized in-store promotions;
- and category management.

The process is designed to be efficient and timely.

Through our "Partners in Merchandise Flow" program, we are ensuring up front communication and planning...together, with our vendors, we are doing a better job of delivering merchandise to our customers.

We've created a true, world-class quick response environment.

Kmart is very proud of the progress we and our strategic partners continue to make.
Before I leave today, I would like to leave you with one final example of how vendor partnerships create efficiency and make Kmart a better place to shop.

In a recent meeting with one of our vendor partners we discovered that the manufacturer was making underwear and other accessory items at a factory in Puerto Rico... shipping it to our distribution center in Florida... where it was then shipped back to our stores in Puerto Rico for sale. They were doing it this way, because we had asked them to ship all product to the distribution center -- we had not asked them where it was produced.

Obviously it did not make much sense to pay extra shipping charges and tariffs when we could deliver the products right to our Puerto Rico store and save considerable expense.

This situation made us realize that if this was happening with one vendor, it probably was happening with others too.

Now we are surveying all vendors -- hardlines and softlines -- to find out if they have Puerto Rico manufacturing facilities.

I am confident that our success will be replicated with other partners -- and the consumer will be the winner as prices are lower and shelves are fuller.

So as you can see, strategic partnerships are revolutionizing the world of retailing -- and with some of the results I have presented today ... I believe you can see why!

Thank you for inviting me to be with you today. I would be happy to respond to question.
A CHANGING SOFT GOODS INDUSTRY: A LOOK AT TODAY AND TOMORROW

Mike Fraix, Director of Manufacturing and Educational Services
Joe Off, Managing Director
Textile Clothing Technology Corporation

Thank you, Traci, and to all of you for the opportunity to present and renew acquaintances. We especially thank you for taking some of your play time to be here.

Joe: Traditional apparel manufacturing techniques are being challenged in the light of new technological innovations. We're going to shre with you some manufacturing history, and also look into the future where visions are being turned into reality.

Mike: We will show you a transition that is occurring in manufacturing today and how the industry that once lagged behind every other industrial sector is now leading the way.

Joe: In recent years, the apparel industry has been involved in many initiatives aimed at increasing competitiveness: QR, JIT, Apparel on Demand, Market Responsive Systems, Demand Activated Manufacturing are just a few attempts that have been tried but have not met the need. It wasn't until the 21st Century Manufacturing Enterprise Strategy paper was written by the Iacocca Institute at Lehigh University for the Mantech Project that a complete concept that could truly drive apparel was available. With this paper came the word agility and what we believe is a very close fit for the apparel industry and the concept for a major effort by our organization.

Mike: The key word in this is Agile or Agility. Agility, the state or quality of being agile; nimbleness; briskness. Agile, Able to move in a quick and easy fashion; active. Mentally alert. The apparel and textile definition of agility as it applies to our business enterprise is: Being able to make information driven decisions at the last possible moment, in time, prior to the need to execute the decisions by a flexible, empowered workforce.

We seldom make bad decisions; only decisions with incomplete information. And at times, we are asked to begin the execution before we have sufficient information.

There are three major drivers that form the foundation of agile manufacturing:

- First, an information network must be set up to meet the needs of the increased demands of the production cycle. Information must not be proprietary but be shared by all of the companies and systems that can benefit.

- Second, we must have flexible technology. This means that the manufacturing system must be able to meet changes in the customer's requirements and the product must be reconfigurable and upgradable to satisfy the customer over the life of the product.

- Third, we must have a knowledgeable, skilled, flexible, empowered workforce. This assumes continuously trained employees at all levels.

These three elements: information network, flexible technology, and knowledgeable workforce form the basis for agile manufacturing. It is our conclusion that agility is inevitable. And if you look at the world around you, you will see that it will happen whether you want it or not, in our industry and all others.

Joe: Today, we are going to show you how the industry that once lagged behind -- is uniquely positioned to lead the way for agility in the United States.

In order to make this clear, we are going to go back in time and then return by way of a time continuum that will demonstrate how agility is a continuous, ongoing technological process.

Video

Computer initialize time continuum.

Computer: Yes Sir, Initializing time continuum countdown, five, four, three, two, one, start.

We see some flashes of light and the first time continuum graphic pops up, there are lights and flashing buttons on the screen and the computer starts off by saying:

The historical events leading up to the creation of agile manufacturing. First starting in the year 7000 B.C. Location: Asia Minor.

Video comes full screen from that point.

The early developments beyond basic weapons for food are pottery and cloth. By drying clay in the sun, utensils could be created to hold food and water. The first cloth is woven by hand and the first fashion trends occur.

Moving forward three thousand five hundred years to the year 3500 BC, Location: Mesopotamia.

The video starts zooming from each point as he reads faster and faster.

The potter's wheel and wheeled vehicles appear. This marks the beginning of transportation.

The year 260 BC, Location: Greece; Archimedes develops mathematical descriptions of the lever and other simple machines.
The year 1041 AD. Location: China: Chinese inventor, Pi Sheng, develops movable type. This marks the beginning of mass communication.

The year 1310. Location: Europe: Mechanical clocks driven by weights begin to appear.

The year 1698. Location: England: Thomas Savery invents the first practical steam engine.

The year 1733. Location: England: John Kay invents the flying shuttle loom, marking the start of the industrial revolution.

1769 Sir Richard Arkwright patents the water frame, a spinning machine.

1793 Eli Whitney invents the cotton gin.

1822 The earliest form of the photograph is produced.

1825 The first steam powered locomotive. This marks the beginning of the first rapid long distance travel.

1837 The first telegraph. This marks the beginning of long distance, instant communication.

1846 The invention of the lock-stitch sewing machine by Elias Howe.

1867 The first typewriter. 1876 The telephone.

1888 The first roll film camera. 1893 The diesel engine. 1903 The airplane. 1908 The model t.


Joe: I agree mass customize and agile will be the norm. Now, let's look at an agile enterprise that was demonstrated by 18 partners at the 1993 Bobbin show. In the next few minutes, we will show technology that this agile enterprise used to produce customized products from POS data in under four hours. This was a first, because it was the first time that these partners had been electronically connected and worked together cooperatively to deliver unique products.

Mike: Hold it, Computer!!


Joe: Stop video

Mike: Thank you that will be enough for now.

Wow!! Look what is happening. It's the 1960's and --- Technological progress is growing exponentially.

The convergence of transportation, communication, and technology has gotten us to this point.

Let's take a look at where apparel is at this point in time: Consumers had to choose what was available. Retailers had to make six month commitments. Manufacturer 68 week cycle. Large batches - orders were processed in bulk (long lead times - sewing 6 to 8 weeks, short cycle operations, individual incentives - had no authority to make change, push, inventory)

There are some inherent drawbacks to traditional apparel manufacturing: quality, flexibility, risk. You know, despite these drawbacks, the apparel industry is a very interesting place to work.

It has always been subject to changes in consumer tastes and whims. No other business has this short of a product demand life-span. Think of yourself as a consumer. What do you want?

Apparel truly is exciting and now is one of the most exciting times in our industry. But it is an industry that not many people recognize how important it is to the economy of this country. Did you know?

- 2nd largest entity ($202 billion)
- separation of textile and apparel ($149 billion)
- imports vs domestic
- national trade deficit
- million employees - ethnics, foreign languages, re-employment
- 21,000 apparel manufacturers. 180%
- US map plant locations
- retail pricing 10/27%

So where is all this going? Now let's spend some time thinking about the future. (Talk about walking into a store and selecting the kinds of cuffs and collars or colors for a shirt. -- Whole shirt, collars, cuffs, pockets, shirt with striped collar and cuffs, mass customization) We have been making a lot of the same thing. (Talk about mass production to mass customization. We want our systems to be indifferent to batch size or production quantity.)

Joe: It all starts with a consumer and a product. In this case, two distinctively different pairs of shorts are available in several sizes with the consumer's initials in one of nine colors embroidered on the left leg.

Order information, consisting of customer name, address, size, pattern, initials, and their colors are entered into the POS.

The consumer review and approves the information as to correctness prior to its downloading to the nearest manufacturer to the consumer with the capacity to deliver the product in hours.

In this picture, you see a new device that was introduced during this demonstration. It is a radio frequency tag, or RF tag, the precursor to the future and a replacement for the bar code.

This credit card size tag is also available in smaller sizes and will soon be available in a grain of wheat size that will be partitioned with read, write, and read only memory.

This new technology will carry the customer information, provide a garment fingerprint that identifies a unique garment for a unique customer, and will serve as a counterfeiting countermeasure. This RF tag will serve as a security device that can be disarmed by the retailer after the sale. This tag will become an information carrier for the dry cleaner that will also carry content of fabric, buttons, trim, etc. to assure that the proper cleaning process is used. Also at the dry cleaner, it will be your identifier, that will act as a receipt for your order retrieval.

Further, this tag once embedded in a
garment will be an environmental catalog, that will
tell the reclamation center how to reprocess all the
materials such as trim, thread, buttons, etc. that are
in the garments. Further, to control inventory it will
no longer be necessary to open a box. All this will
be needed is to run a wand on the outside and the
contents will be read and identified.
What you have seen is just the beginning of the
order taking and control process - now let's move
to manufacturing and follow the garment through
the process.

The customer's information is now available
to drive the manufacturing process. The garment can
be now cut using this information, but it will be done
in a different way than in the past. First,
instead of cutting large lots of 20, 30, 40 plys,
single ply will be cut. Instead of using a small,
manual cutter, or low speed mechanical CNC
cutter, an ultra high speed 100 inch per second
plus laser cutter will be used. Not only is the
cutting process going to change, but also the
paradigm of fabric utilization. In the past, pre-printed
fabrics were used. Today, only white fabric will be
cut, because printing will take place after cutting.
From cutting, the parts are sent to the printing
department, where engineered patterns are printed
on the garment.

No longer will we have patterns that don't
match our garments, but with this process, you will
be able to have a complete design that will not be
interrupted by seams. This complete design will
drive fashion and push the consumer's desire for
uniqueness even further. This added flexibility and
broader choice is driven by new technology that
allows the production of silk screens in minutes
instead of hours and days.

When we talk about customer service, we talk
about size, color and design, etc. In this case, we
even go further. Once a customer has picked a
design, it's enlarged or reduced to fit exactly on the
size of garment she or she has chosen, and is the
uniqueness of the new printing processes.

The silk screen printing you are looking at is
really an interim process, because within another
18 months to 2 years, we will have the ability to
download designs directly to the high tech digital
printer that will obsole the silk screening, and
make specific designs available on demand without
the need for the preparation of silk screens. In
summary, what we are talking about is
communications tied to cutters, printing system,
design stations, distribution centers and
transportation, all working together in real time to
give the customer the service and the garment that
they want at the moment -- and -- thus drive the
premise that agility is inevitable.

Mike, the order has been taken, cut and
printed. Now it's up to you to put them together
and deliver them quickly, before the customer
changes his or her mind.

Mike: Yes, I'm going to show that. But first, it is
important to recognize some of the changes in the
way we manage the manufacturing process. You
have heard about teams...
by any other means. The training taught mechanics how to completely repair sewing machines. And it taught operators proper use of their machines.

A video computer network was developed late in 1993 and released to the public in 1994. This system could accurately transmit live video and data over standard phone lines which allowed many stores to be networked. Bi-directional audio and video communication between designer and customer first became available.

A national customer database was formed where vital data about individual customer buying habits and measurements was stored. This allowed many different kinds of products to be created based on actual data.

Joe: Thank you, Computer. This afternoon we have talked about where we are at today, and what we see happening in the next few years. But to truly move forward, we must have a vision. In fact, the Bible says it very clearly -- "Where there is no vision, the people perish." (Proverbs 29:14) -- and we as an organization must keep the future vision alive for our industry. This vision jumps to year 2025 at the plant of the future.

Describe Plant of the Future
Describe New Kind of Factory

This plant uses latest environmentally safe batch processing plant and is similar to the one by Toyo Today in Japan. In fact, all reactors are mounted on robotic transporters that move from station to station.

The fibers from the reactors are: micro tubes, 3-D weaving or knitting, garments all white, made to customer order.

This plant produces a new kind of fabric that simulates woven fabric. There is no sewing in this garment. If this was woven, there would be some sewing to insert pockets, fastener that replaces zipper. There will be no more side, seat, or inseams. Would use new radiatin activated dies you can see that each garment coming out is different and is what the customer ordered. The garment is designed for customer gratification. Go to cleaners for new pattern.

For shipping, the garment is: vacuum packed with no special care because - memory fiber is used and minutes after exposure to air, it will regain its original shape, again assuring customer gratification.

We hope that you have enjoyed this trip into the future. Mike and snapper both want you to know that they are working very hard every day to assure that this major technological step forward will happen.

Now -- let's jump back to 1993 and tour another plant that is operating in Georgia -- NOW.

This facility is a fully automated lights out zipper plant -- the raw materials: ethylene glycol, terephthalic acid, zinc ingots, spring wire come in bulk form.

The ethylene glycol and terephthalic acid are run through this chemical plant's reactors where they are transformed into polyester.

The zinc is fabricated into sliders and painted.

The spring wire is formed into slider stops for use inside the zipper.

The polyester is drawn into fibers, then yarns and also extruded into coils of zipper teeth.

The yarns, the zipper teeth, are then run through a final weaving and assembly process that produces a finished, dyed zipper ready to go to the marketplace.

The similarities of this plant and of tomorrow are evident and according to our communicator from the future -- the path is clear and technology will continue to grow exponentially. This example of technology will encourage the leap of faith that will make the plant of tomorrow a reality.

Mike: Joe, I think you're right -- we must have vision.

It's the only way to keep an industry moving forward on the same path. A path that combines information network and flexible technology driven by knowledgeable, workforce down a path that is leading us all in the direction of agile manufacturing.

Change is always going to occur, and the companies that worry and fight change won't make it in the 21st Century. The companies that will expect change and built in methods for implementing it.

Our industry is uniquely positioned and is preparing to make shift the paradigms necessary for the 21st Century and agile manufacturing.

As we have show you, Agile is Inevitable.

Joe: And Apparel will Lead the Way.

Say thank you and goodbye, Computer.—
Type of Workshop

A merchandise planning workshop consisting of a demonstration and hands-on experience with ARTHUR. ARTHUR is a commercially developed PC-based retail merchandise planning software package that is currently used in retail and manufacturing industries.

Benefits of ARTHUR

Use of ARTHUR as a teaching tool enables faculty who teach merchandise planning to focus less on manual task and more on analysis of planning results. Students trained on ARTHUR are better prepared to meet demands of technological based careers in retailing.

Contents of Workshop

1. Overview of ARTHUR, merchandise planning system
2. Hardware requirements for ARTHUR
3. Discussion of classroom adaptation and application of ARTHUR in a merchandising curriculum
4. The planning process
5. Product planning with ARTHUR
6. Hands-on experience.
7. Evaluation of workshop

Overview. ARTHUR is the most widely used merchandise planning system in the world. Currently over 350 North American retailers and manufacturer-based companies are using ARTHUR including J. Crew, Britches of Georgetown, Millers Outpost, Bergdorf’s, Linens and Things, Hills Department Stores, Montgomery Wards, Wohl Shoe, Kay Bee Toys, and Pier 1 Imports. The ARTHUR merchandising planning system allows retailers with multi-store organizations and central buying offices to create assortment plans unique to each store’s location to ensure a product mix that represents the right quantity, right price and right time.

Hardware requirements. For individual work stations, ARTHUR requires a minimum 386SX processor, 20MHZ or higher clock speed; 4-6 MB RAM; 40-100 MB hard drive; 3.5" floppy drive; VGA color monitor; printer (serial or parallel). Optional features include a file manager (XTGOLD) and expanded memory manager (e.g., QEMM). Workstations may be linked by a LAN. File server requirements are 486SX 33MHZ processor; 10-16 MB RAM with a 200-320 MB hard drive.

Classroom adaptation. The University of Delaware’s fashion merchandising program acquired ARTHUR Merchandise planning software from Comshare Retail Division in Wilmington, DE. The software acquisition represents the first placement of the ARTHUR Merchandising Planning System in a university setting.

ARTHUR merchandise planning was integrated into an advanced fashion merchandising course in Fall, 1993. ARTHUR has both product planning and store location planning capabilities. For classroom application, only product planning is used. The course is taught in a computer lab consisting of 26 486DX 33MHZ computers.

Students work with three types of planning variables—reference, base and derived. Reference variables are historical data (last year’s sales,
last year’s reductions etc.) which is the starting point for product planning. Base variables are the variables that are planned by increasing or decreasing last year’s (LY) data. From the base variables, ARTHUR derives other variables that are calculated with user-defined formulas. The top down and bottom up planning process includes planning sales, inventory units and dollars, markdowns, and receipts.

**Course Structure.** The course is organized as a product planning course. It is divided into two parts. Part one relates to teaching students the six month planning process. Sales, inventory planning and evaluation, reduction planning, planning purchases at retail and cost and IMU are covered. Calculations and formulas are emphasized. Students develop six-month plans on a Lotus spreadsheet. Use of a Lotus spreadsheet has an advantage in that skill with Lotus is a pre-requisite for many jobs in retailing. First students are taught how to use Lotus. Next they are taught how to develop an interactive spreadsheet where changes on one part of the spreadsheet produces corresponding changes on another part of the spreadsheet. In order to build an interactive spreadsheet, students must learn and understand formulas for the various components of a plan such as calculating this year (TY) sales increase or decrease, monthly distribution of season’s planned sales, TY total reductions etc. After plans are developed, students learn how to create Lotus graphs for visual representation of the plans.

The second part of the course relates to ARTHUR. Students learn how ARTHUR is structured and how to use the Product Plan-

**The planning process.** Planning with ARTHUR is done in levels. The levels, which reflect the way the store or division is organized, is called a hierarchy. The hierarchy is organized in a parent/child relationship where the company is the parent and the division is the child; the department is the child of the division; the sub-classes are the children of the department etc. Example of a hierarchy follows.

```
  Company
   /   \
  Division  \
       /   \
      Dept.
           /   \
       Sub-class  Sub-class
           /     \
         Class  Class
```

Students select a product to plan, develop a hierarchy and provide names for the various levels. This information is input into ARTHUR. Historical or reference data are required for product planning with ARTHUR. The professor provides all students with the same LY sales figure for the class level of the hierarchy. Reference data can be imported into ARTHUR from a LOTUS file or it can be typed directly into ARTHUR. Students type in LY sales data for each of the four classes in their product plan. ARTHUR calculates upward and produces LY sales data for the
remaining levels of the hierarchy.

Students then plan with ARTHUR. Using their selected product, students decided on increases/decreases for the various levels of the hierarchy. The basis for students' increase or decrease decisions is a trend report that is developed from different media sources. The percentages of increase or decrease are input into ARTHUR as the initial step in product planning. Additional variables are planned either in percentages or dollar amounts. At each stage in the planning process, students complete reaction sheets to indicate their understanding of the calculations that are performed in ARTHUR. After plans are completed, emphasis is on the analysis and interpretation of results.

Planning with ARTHUR. This section covers only those features most relevant to classroom applications of ARTHUR. The five most common menu functions that are used in product planning are: Calculate, Screen, Data, Report and Views. There are multiple levels to menu selections.

"Calculate" is used whenever figures are input into a plan. "Calculate" registers the figures in the plan. When the figures are first typed in, they are yellow. Once they are calculated they are light grey.

"Screen" function has selections that determine how the screen appears when planning. There are five menu selections under screen function. "Select Variables" is used to select the planning variables. Variables may be selected by typing in their codes or by selecting them directly from the screen. "Variable Format" is used to determine whether values are displayed in regular numerical format, percentages or both. "Position Variable" is used to position variables on the screen. This function determines whether a variable is positioned first, second, etc. in a planning table. ARTHUR assigns codes to each level of the hierarchy. For example the division level’s code is DIV01. The division also is given a name by the planner e.g. sportswear. "Product Titles" is used to determine whether product codes or product titles are displayed in the plan’s tables. "Number Presentation" is used to select the way numbers are displayed on the screen. They may be displayed in standard numerical values with or without decimal places (e.g. $150,000) or non-standard (e.g. 150M or 150K). "Data" has a selection that allows the plan to be saved.

"Views" are used to select and use a current view of a plan. There are two time views--SEASON and MONTH. The other views such as SALES AND REDUCTIONS, and STOCK are non-time views.

"Report" function has a selection that is used to print a plan.

There are two planning modes that are available in a time view of product planning--fixed and floating. A fixed planning mode allows season's totals for levels in the hierarchy to be maintained when increasing or decreasing monthly totals. In this mode, numerical changes are spread among the six months. In a floating mode, numerical changes are applied to the total and monthly totals are unaffected.

A "lock" feature in ARTHUR permits locking of totals or monthly values. In such case, the locked values are unaffected and numerical changes are spread.
up, down or across the hierarchy depending on what values are locked.

In product planning ARTHUR allows a reactionary variable to be selected. The reactionary variable can be either receipts/purchases or inventory. A color code distinguishes the reactionary variable. With a selected reactionary variable, input can be manipulated and either receipts or inventory will change (react) to the input.

**Evaluation.** A written evaluation of the workshop was completed by participants. Information on the planning process, integrating ARTHUR into the curriculum and demonstration of planning with ARTHUR were rated as the most valuable aspects of the workshop. The least valuable aspect was the participants hands-on session. The physical arrangement of the room was rated as good however, the resolution of the large video monitors was listed as poor by both workshop participants and organizers.

Most participants expressed interest in acquiring ARTHUR for their institutions. The current version of ARTHUR is being rewritten for a windows-based environment. Workshop organizers agreed to convey participant acquisition and training information on the new version of ARTHUR when it becomes available.
The presentation began with a look at how the fashion face has changed over the last three decades. A series of drawing demonstrations followed which instructed participants in drawing the fashion face, hands, and feet. Participants then worked on drawing full-view, profile, and 3/4 view faces. Mr. Stipelman worked individually with each student.
STRATEGIC MARKETING OF HIGH PRICE, HIGH QUALITY,  
FASHION PRODUCTS:  
A DUPONT CASE STUDY

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The purpose of this case study was to examine past strategic marketing decisions implemented for DuPont's "Corfam" (a manufactured material for shoe uppers) and "Qiana" (a silk-like nylon), and to compare those strategies to the current marketing strategy used for Micromattique TM (a polyester microdenier fiber). "Corfam," "Qiana," and TM Micromattique were chosen for this study because all three products were introduced by DuPont as high price, high quality, fashion products. Historical data on how DuPont marketed "Corfam" and "Qiana" could prove to be beneficial in guiding the current strategy for Micromattique. TM Utilizing the marketing strategies of "Corfam" and "Qiana" to illustrate where patterns of success and/or misfortune occurred would be helpful in providing evidence as to successful techniques of marketing high price, high quality, fashion products and in preventing strategic misfortunes from reoccurring unnecessarily.

In addition to the marketing principles, Porter's (1980) framework, Forces Driving Industry Competition, helps define how five competitive forces can be utilized to determine company strengths and weaknesses. This study illustrates the usefulness of Porter's framework in providing direction for analyzing the strategic positioning of a company. TM

In-depth interviews, on-site in Wilmington and NYC and by telephone, were conducted with 24 individuals involved in the marketing of either "Corfam," "Qiana," or TM Micromattique. Company documents were utilized from the DuPont library. As the researcher transcribed the interviews, themes developed and the themes were arranged in a logical order for both the data and the marketing principles. After careful analysis of the data that represented each theme, specific categories were developed to represent the data. Based on several types of evidence, respondent comments were rechecked and validated through comparison.

Three research questions were analyzed and results indicated: (1) Why was DuPont relatively unsuccessful in convincing retailers and consumers of the quality of "Corfam" and "Qiana?" Results were determined based on attributes tested, product limitations, and competition from substitute products; TM (2) What factors made the comparison of Micromattique with "Corfam" and "Qiana" parallel or unparallel? Results indicated parallel factors included price, supply/demand, sales force, switching costs, and brand name identity, unparallel factors included the initial launch, market position, distribution, promotion, market research, management size and turnover, substitute products, and buyer/supplier TM relationships; (3) How does the Micromattique marketing strategy differ from that of "Corfam" or "Qiana?" Results indicated the marketing strategies differed in relation to product, place, price, promotion, position, management and international issues.


ENTREPRENEURIAL TYPOLOGY FOR MANUFACTURERS OF WOMEN'S AND CHILDREN'S APPAREL AND ACCESSORIES AND ASSESSMENT OF SUCCESS CHARACTERISTICS OF ENTREPRENEURS

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The textile and apparel industry has been a significant part of the Texas economy for the last century. Increasing the value-added contribution of the industry has long been an important goal because Texas is a major producer of cotton and mohair.

The purpose of this study was three-fold: (1) to verify a proposed typology of apparel company owner and business characteristics, (2) to test the proposed typology, and (3) to investigate the relative success of owners and their firms. Texas manufacturers of apparel and accessory items served as the sample. The Dillman method for mail and telephone surveys was used. A total of 200 usable questionnaires were received and a response rate of 47.2% was calculated.

The statistical analysis for the typology included a factor analysis of the following scales: competition strategies (alpha = .76), reasons for business ownership (alpha = .78), management activities (alpha = .84), negotiating (alpha = .60), and strategic postures (alpha = .75). The variable with the highest eigenvalue from each factor was used in the cluster analysis. The first clustering, used to verify the proposed typology, omitted a quarter of the respondents. These respondents were added for a second clustering used to test the stability of the analysis.

The cluster analysis identified three equally successful types of firms that closely matched three of the six types proposed in the study. Cluster 1 owners (n = 69) were entrepreneurial risk-takers who made better and designer fashion products. They often introduced new, innovative products and were moderately successful negotiators. Cluster 2 owners (n = 110) were conservative craftspeople who had developed their business from a hobby. They produced accessories and moderate priced skirts and blouses. These owners had less skill in negotiating and were less likely to advertise. Cluster 3 owners (n = 9) were managers of larger firms who produced basic outerwear in their own factories and used sales representatives. These owners delegated many business functions such as production. They had good negotiating skills and found mentoring important.

Successful entrepreneurs had better negotiating skills. They believed in advertising, offering superior products and predicting industry trends. They worked long hours and used a variety of production and marketing methods. Successful entrepreneurs were moderate risk-takers and had previous supervisory experience. Male and female entrepreneurs were similar in attitudes but differed in personal and business demographics.
A STUDY OF RELATIONSHIP BETWEEN
STRATEGIC TYPE AND THE USAGE LEVEL
OF QR TECHNOLOGIES

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Environmental forces (e.g., threat of imports,
bargaining power of buyers) have increased the
difficulties in the apparel business. To manage
these forces, Quick Response (QR) has been
used. QR is a new business strategy to optimize
the flow of information and merchandise between
channel members to maximize consumer
satisfaction (VICS, 1989). Environmental
management theory relates strategic type to
business policy and selection of technologies
(Miles & Snow, 1978).

The purpose of this study was to examine the
association between strategic type and usage level
of QR technologies. Strategic type is classified as
four profiles (i.e., prospector, analyzer, reactor,
defender) (Miles & Snow, 1978). The Miles and
Snow typology (1978) shows the interrelation of
strategic type, firm structure, and operational
process variables. QR technologies (e.g., CAD,
EDI) were identified from industry reports and
academic studies. The seventeen most frequently
cited technologies were used. A random sample
of 306 apparel manufacturers without locational
limitation were selected from a purchased list.
The sample was stratified by firm size and product
category. A mail questionnaire was pilot tested for
content validity and instrument reliability and
revised prior to surveying plant managers.
Adjusted response rate was 47.0% (n=103).

For data analysis, nonparametric statistics
(i.e., Kruskal-Wallis test, Wilcoxon Scores by rank
sum) were used. Strategic type was found to be
associated with the usage level of QR
technologies. Prospector had a higher usage level
of QR technologies than other strategic types.
This result was expected, because the prospectors
pioneer in product development and market
demand. QR enables prospectors to pursue their
missions and address environmental forces.
Informed decisions are critical for improved
market channel utilization and service to the final
consumer.

strategy, structure, and process. NY:
McGraw-Hill.

and benefits to retailers of implementing.
NY: Arthur Andersen.
EXAMINING SUCCESSFUL CAREER DRESSING THROUGH A CLOTHING AND HUMAN BEHAVIOR CLASS PROJECT

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Objectives: Clothing has an influential role in forming impressions and the importance of personal appearance for women in the workplace has been recognized. While students comprehend the subject matter, they often have difficulty in realizing the implications of the knowledge. Therefore, this activity was designed to allow undergraduate students to (a) determine appropriate clothing for professional women, (b) recognize the linkages between educational objectives and application, (c) make oral presentations, (d) develop interviewing and research skills, (e) evaluate performances, and (f) accomplish objectives and complete projects with co-workers.

Documentation of Need: Women in organizational roles must portray an image and give an impression that is reliable, serious, and decisive. These characteristics are often perceived in appearance and perceived credibility is a factor in job performance. Therefore, a project that allows students to evaluate the importance of appropriate dress for women currently possessing, as well as aspiring to, management positions is valid.

Project/Material Design: Students were divided into groups and assigned components of the project to complete. Group A conducted a literature review to provide background and determine styles currently deemed appropriate for successful executive women. Group B interviewed executives to determine the dress perceived to be appropriate for female executives' job success. Group C conducted store research to determine availability and prices of suitable clothing. Based on findings, the entire class prepared and conducted presentations for classes on campus. Finally, the students completed evaluations and a written report.

Effectiveness of Activity: Students applied multiple methods of information gathering to solve a common problem that required the entire class to work together for success. Students enjoyed a project that provided practical information and an opportunity to give presentations to fellow students.

Body Cathexis, Garment Fit Satisfaction and Uniform Preferences of University Women Basketball Players

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Women's basketball is the most popular women's national sport, offered by 96.2% of universities (Aburdene & Naisbitt, 1992). Designing basketball uniforms for female athletes challenges soft goods manufacturers. Data were collected from 503 female collegiate basketball players concerning body cathexis, body form, garment fit satisfaction, uniform design preferences and demographic characteristics. Of the three areas of the body (upper, lower and total), players indicated they were most dissatisfied with the parts of the lower body. Evaluation of their bodies were higher in uniform compared to unclothed. Satisfaction with the body paralleled satisfaction and dissatisfaction with the body; the lower body area creates the greatest garment fit problems. There were significant differences for uniform fit satisfaction by four body forms \((F(3,461) = 5.76, p = .007)\). Fit satisfaction is the highest with the ectomorph body form; dissatisfaction increases as the body increases in size. Uniform preferences for the jersey were a deep v-neckline, sleeveless, hip length with straight hemline and side vents. For the shorts, a baggy type with side v-vents at the hem, 1 1/2 or 2 inch wide waistband and elastic drawstring waistband were preferred.

SELECTION OF FOOTWEAR TO IMPROVE AGRICULTURAL SAFETY

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Agricultural work is generally considered to be relatively hazardous in terms of both illnesses and injuries. Research that has focused specifically on the citrus industry, such as the recent study by Vaupel (1992), indicates that slips and falls are especially common here. Many of these accidents involve falls from ladders. Poor slip resistance of footwear contributes to this problem. Although a number of studies have been done on footwear and pedestrian walkways and stairs, little research has taken place in the agricultural workplace and no standard procedures have been developed for this type of research.

The present study was designed to test footwear currently available for agricultural workers to determine the slip potential of various sole types under simulated ladder-climbing conditions. The objective was to determine those soles with the highest coefficient of friction across a range of conditions experienced by agricultural workers when harvesting citrus. Video tapes of workers in the field were used to develop laboratory protocols. An initial experiment involved having subjects step onto a Kistler force plate from an aluminum fruit ladder to determine appropriate weights with which to load footwear in a second experiment. The second experiment tested four types of shoe soles under two weight conditions (0 and 25 pounds), three sole-to-ladder-rung angles (0, 45 and 90), and two moisture conditions (wet and dry).

A four-way ANOVA on the coefficient of friction data indicated that all four variables had a significant effect on slippage values. LSD analysis of the means indicated that the natural rubber crepe sole with a nondirectional pattern had a significantly higher coefficient of friction than the three different types of neoprene soles. On the other hand, this type of sole showed more signs of wear than the other three, suggesting that the sole types should be reassessed at the end of a wear period.


COMPUTER GENERATED STIMULI: AN ALTERNATIVE TO PHOTOGRAPHIC STIMULI IN PERSON PERCEPTION RESEARCH

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The purpose of this research was to develop computer generated stimuli for a person perception research study. Female models representing the cultural categories of "old age", "large size", and "Afro-American ethnicity" were portrayed. Initially, pictures were selected from magazines which best seemed to represent the cultural categories under study and reliability was determined. The photographs of the models were manipulated via Macintosh computer in order to control for dress and background and so that each of the women pictured would be shown advertising the same product. Photographs of the advertised product (a pair of gold earrings) were taken at various angles, then scanned on to the photograph of each model at an angle appropriate to the position of the model in the original picture. The designer made color adjustments and manipulations in the Macintosh version of Adobe Photoshop. Each background was changed to the same color and a black sweater was painted on to each model. The appropriate angles of the scanned earrings were then sized and placed on each model. Color highlights were added to the earrings to match the skin tones of the model and shadows were placed around her ear to make the earrings look like they were photographed there. The files were placed on an optical disk and output to slides on an Agfa film recorder. Use of the computer to generate stimulus materials for person perception research studies has several advantages over the use of photographic stimulus materials. The researcher has greater control of the development of the material therefore its quality and changes can be made easily.
THE ROLE OF DRESS IN SOCIAL PERCEPTION

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The purpose is to illustrate the role of dress in social perception by demonstrating how existing research fits within a conceptual framework developed by Livesley and Bromley (1973). Livesley and Bromley (1973) propose that social perception occurs in four stages: 1) cue selection during which the perceiver selects the information used as the basis for forming an impression, 2) interpretative inference during which the perceiver construes information selected to infer general traits of the observed, 3) extended inference during which the perceiver draws associations concerning additional qualities the other person might be expected to possess as a function of inferred traits, and 4) anticipatory set, during which the characteristics assigned to the other person are integrated to form a basis for consistent responses. Researchers have not typically studied cue selection. Characteristics of cues shown to influence selection are salience, vividness, and novelty. Individual differences in attentional style and the context within which the cue is perceived are related to cue selection. Most research has focused on the interpretative inference stage of perception with respect to clothing, and questions arise concerning the pursuit of this type of research. Researchers focusing on extended inferences have demonstrated that individuals expand their inferences to include other people with whom an individual is associated with. Few researchers have examined the effect of dress on actual behaviors (anticipatory set). Livesley, W. J., & Bromley, D. B. (1973). Person perception in childhood and adolescence. New York: John Wiley & Sons.

THE ETHICAL DILEMMA IN FASHION RETAILING

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Concern over decaying ethical standards has prompted many to take action to combat the problems that result. Of prime concern to retailers is the problem of theft which contributes to high shrinkage rates for their organizations. This study investigated the use of integrity tests by leading department and apparel specialty stores in the U.S. and compared integrity test scores and the level of moral reasoning of a group of potential retail employees in order to better understand the construct measured by the integrity test.

Data regarding the use of integrity tests were solicited from 188 retailers, with 116 (61.70%) usable responses to the researcher-designed questionnaire. Integrity test scores from the Reid Report (RR) and moral maturity scores from the Defining Issues Test (DIT) were collected from a sample of 40 potential retail employees.

Integrity tests were used as preemployment screening tools by 35.34% of the retailers surveyed. Overt integrity tests were used by 83.72% of these retailers. Most retailers administered the tests after the first interview and required the applicant to score above or below a cutoff score or gave the score some consideration along with other factors such as educational background, work experience, or references. The tests were most often used to screen for store-level managerial, nonmanagerial, and security/loss prevention positions. Shrinkage figures were not significantly different for the organizations that used integrity tests and those that did not. Company philosophies regarding the use of integrity tests varied widely, with the largest percentage of respondents agreeing that truly honest individuals may not scores well on an integrity test. No significant differences or relationships were found between the RR and DIT scores of the group of potential retail employees.
THE INTERNSHIP:
A STRATEGIC LINK BETWEEN UNIVERSITIES AND INDUSTRY

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Due to economic conditions and textile imports, it is imperative that universities create partnerships with industry to meet the challenges of today’s business world. This innovative teaching method enhances student competitiveness in the job market while linking universities with industry.

The four-step learning experience builds on sequential course work and culminates in a structured internship. Step one includes industry enrichment experiences that link concepts of market research to development of a product to retail. Step two includes completion of a marketing portfolio.

Step three, the structured internship, includes completion of an internship manual, consisting of eight projects requiring business, marketing, merchandising, and competitive analyses. The final step is an oral/visual presentation which is presented to faculty, industry, and undergraduates.

This method provides a) the student with a realistic business experience which makes the student more competitive in the job search; b) linkages between universities and businesses, and c) an opportunity to strengthen the existing internship program. Success of this method is exemplified by high marks given by industry and the employment statistics of graduating students.

EXPLORING THE ISSUES:
A FRESHMEN COURSE IN APPAREL MARKETING

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Today, academic programs in higher education, including Clothing and Textiles, must deal with issues that have previously been thought to be institutional concerns. Our programs, which are predominately female, must understand that educating women means more than just admitting and graduating them in a set curriculum. Education must help women to attain their full potential.

Our programs can be instrumental in helping students gain self esteem, to broaden students’ perspectives, to stimulate creativity, to foster mentoring opportunities with seniors, and to help develop leadership skills. We need not only to prepare students academically, but to help them emerge from college feeling strong, independent, self assured, and well prepared to take on whatever future roles they may choose.

Accordingly, as a result of a curriculum evaluation and in an attempt to address many of the above issues, our entire Apparel Marketing faculty worked collaboratively to develop a new freshmen course. It is a mandatory one credit, P/F, for first semester freshmen only. Each Apparel Marketing faculty member is responsible for a two-week segment, and all papers are divided among all faculty to review.

The course was designed with two main goals in mind: to familiarize students with the facilities and services of the university community; and to raise students’ awareness of the variety of general issues and resources related to the major, the field and the university. Past topics have been varied, including: sexism in advertising; professionalism and gender bias in the workplace; and students and their role in higher education.

The course provides an opportunity for faculty to become acquainted with students early in their college careers and for freshmen to interact with faculty in an informal setting. Requirements of the course include readings, participation in class discussion, several short papers reporting on assigned visits to various functions and support services on and off-campus, and private discussion of the papers with individual faculty.

There have been many benefits from the course. With the high freshman drop-out rate, it has served to ground the freshmen both in the major and in a large state university.

*Alpha Listing
ENVIRONMENTAL FACTORS AND THE VIABILITY OF RURAL RETAILING

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As part of a five year investigation, researchers are assessing rural retailing at six micro-economic environments in a southeastern state. The sites can be compared and contrasted according to separation from or nearness to a large town, an interstate, a factory outlet mall, or tourist attraction. Of interest are the interactions between three sets of factors: environmental, merchant-controlled, and consumer-related.

The research asks: If the vitality of small town life depends to a large extent on the vitality of rural retailing, what changes are necessary for the survival of rural retailing? What retail mix will position the business district in the minds of the consumer as a desirable shopping destination?

The following findings are based on qualitative content analysis of forty-two phone interviews conducted with policy makers and community leaders across the six sites.

Interviews indicate shifts in the retail mix in county seats from retail to office space, at tourist destinations to multiple small shops with locally produced merchandise or products related to local recreational activities. Eating options and ambiance are essential to the mix. All sites identified potential growth from some constellation of tourism, recreation, or retirees with little or any consideration of retail possibilities associated with these options.

Specific attitudes limiting positive change were identified as follows: "a small town mind set" and the wish to "keep things as they are," "a negative view of [the] town" by residents, "a very closed community" that does not readily accept new people, or a "racially polarized" town.

Previous studies suggest that it is essential for nonmetropolitan market areas to pursue a position of strategic innovation. Thinking in terms of identifying a unique strategy that differentiates a business or community from competitors may lead to the repositioning of some stores and to a better definition of the retail mix for communities.

THE EFFECTIVENESS OF AN ADVERTISEMENT: AN EXPERIENTIAL LEARNING ACTIVITY

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Objectives: Merchandising educators must acquaint students with all operations involved in the retailing industry. In doing so, learning activities which are designed to provide the student with a realistic experience should be utilized in order to promote higher levels of cognitive thinking. This group activity is a component of a fashion promotion course and encourages senior-level merchandising students to (a) participate in market research, (b) analyze trends in customer response to an advertisement, (c) evaluate the effectiveness of an advertisement, and (d) provide a store manager with analyses and recommendations.

Project/Material Design: The manager of a national chain store was contacted by the instructor in regard to allowing students to work directly with the store in the evaluation of a specific advertisement. After appropriate instruction related to planning, implementing, and evaluating an advertising campaign was provided, senior-level merchandising students were divided into groups to complete the project. Each group was required to evaluate the same specific newspaper advertisement by measuring the performance of the advertisement in comparison to the short-run promotional objectives established by the store manager, specifically, the response to the specific advertisement in relation to time. Initially, each student group was required to acquire general information about the retail organization by conducting library research and obtaining an annual report from the company. Next, student groups were to assess the advertisement on both objective and subjective bases by surveying store customers over a four-day time span. Students were provided with a brief survey questionnaire prepared by the instructor and basically, customers were asked if current shopping activity was in response to the advertisement being analyzed. After the survey period, each group analyzed survey results, in frequencies and percentages, in relation to amount of time expired since the publication of the advertisement. Finally, the store manager was presented with results and recommendations.

Effectiveness of the Activity: Students concluded that the advertisement response was immediate and short term, the largest customer response occurred on the day the advertisement appeared, and the largest response on each day occurred immediately following the opening of the store for the day.
DEVELOPING A STUDY ABROAD PROGRAM IN THE PEOPLE’S REPUBLIC OF CHINA

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While we can glean a basic knowledge of customs and behaviors by reading and hearing about them, to actually experience something is to bring it to life - giving it form and shape within our own perceptions. Therefore, with the increasing importance of world trade in the clothing and textiles industry we need to incorporate international experiential learning into the curriculum because experience can be the best teacher. For these reasons the University of Hawaii has developed a study abroad program in the Asian-Pacific region.

This program was designed to give the student the opportunity to 1) experience Chinese history, customs, and culture; 2) develop an understanding and appreciation of the textiles and apparel industry in China; 3) acquire knowledge that will enable him/her to understand China’s impact on the international textile and apparel industry; and 4) improve critical thinking skills by comparing and evaluating both academic and field experiences.

The actual program was developed by both faculty and administrators in our college. Through contacts with officials at the South China Agricultural University (SCAU) and in the Guangdong Province, the college was able to reach a cooperative agreement for the exchange of faculty, students, and research. Funding for the implementation of this program was obtained from the USDA Challenge Grant program. The grant provided for participant scholarships and administrative and other costs, including travel to Hawaii by Chinese officials. Once the schedule was agreed upon, SCAU, through their Center for International Agriculture Training, made and confirmed all the necessary arrangements.

Participants observed apparel and carpet production in Chinese factories and experienced the workings of the retail industry in Hong Kong. To reinforce this experiential learning, participants were required to keep an academic journal, providing a bridge between the knowledge that the learner brings to the learning experience and the knowledge that the learner gains from the learning experience. This journal is an excellent tool for reflective learning. Other learning tools used included regularly scheduled recap sessions, one-on-one and group meetings with Chinese students, a series of papers, and group presentations.

Although establishing and building on contacts in China takes time, it is worth the effort. The Chinese officials work very hard to set up and implement the schedule, even traveling to the sites the group will visit to insure there are no unpleasant surprises. But since they can and will make changes based on the "realities" of any given situation, the group must be flexible enough to accommodate disruptions in the schedule.

CREATING LINKAGES: LATIN AMERICAN STUDENTS AND INTERNATIONAL TRADE

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Seven Latin American students and the International Apparel Mart combined efforts to survey Latin American buyers who attended the Spring 1992 Mega Market. Objectives were to create linkages among bilingual students with international trade professionals, introduce them to the market research process, and to determine the apparel needs of Latin American buyers. The students, representing the U.S. and four Latin American countries, were involved in all phases of the market survey. Variables included clothing values, apparel worn by Hispanic consumers at special events, apparel quality cues, satisfaction with Mega Market and the selection of available apparel lines, and demographics. The instrument was translated into Spanish by the students, faculty and Apparel Mart representative. Students distributed and collected 33 surveys from buyers who attended the Hispanic Orientation Session.

The majority of the buyers represented department or specialty stores located in large Mexican cities. The buyers ranked clothing values as follows: aesthetic, political, utilitarian, and social. Buyers were very satisfied with the selection of sportswear, career apparel and apparel for holidays, and weddings. They were less satisfied with apparel for baptisms, graduation, and debutante parties, and quinceañeros. In terms of quality they were more satisfied with the fabrication, color, style, brands and prestige of the apparel than the fit and price. The buyers were more satisfied with the organization, facilities and hospitality of Mega Market than the Hispanic Orientation Session.

Students developed contacts with Apparel Mart staff or vendors that resulted in part-time positions or internships. The project increased their awareness of the unique career opportunities available to them in an increasingly international industry.
EFFECT OF IMAGE AND CUSTOMER CHARACTERISTICS ON APPAREL RETAIL STORE PATRONAGE

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Why consumer selects one type of stores over another is of critical importance to market segmentation. Image congruence theory indicated that consumer chooses store and product which have the image congruent with his/her self image. The changing values and profile of consumer and highly competitive and dynamic current retail environment warrant a reexamination of the theory and how it applies to store patronage of apparel retail customers. Therefore, this study investigated 1) the association between perceived self images and store and product images and 2) determinant variables and relative importance of the variables which predict store patronage of seven (7) retail store types.

Data were collected from 400 randomly selected households in two medium sized non-urban towns (47.8% return rate). Instrument contained questions regarding store patronage, self-image, store and product attributes, and lifestyle and demographic variables. All variables were rated on 5-point Likert scale except self-images which were rated on 7-point Bipolar scales. Principal component of factor analysis on store and product attributes and life style variables yielded five, four, and seven factors respectively.

Kendall's correlation result indicated that while cautious and down-to-earth subjects chose value (quality/price), conventional and uncertain subjects seemed to value product and store images and services. Stepwise multiple regression of store patronage revealed a wide variation of predictor variables among seven store types and none of the variable categories dominated as predictor of all store types patronage.

The configuration of predictor variables which indicated the type of customers each store type attract will continue to evolve as consumers and market situations change. These findings have significant implications to retail managers for the development of store image and target market.

COMPARATIVE ANALYSIS OF TEXTILE FIBER CONSUMPTION
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The main purpose of this study was to examine the changes in fiber consumption in four regions of the world (the US, the other developed countries, Republic of Korea, and the Less Developed Countries). Four major fibers—cotton, wool, (regenerated) cellulosics, and non-cellulosics—were identified for the study. The market shares were based on domestic consumption which included mill consumption and the balance of foreign trade. Domestic consumption for the major regions were obtained by summing the domestic consumption of the countries in each region. Annual data from 1979 to 1986 were collected from the World Apparel Fibre Consumption Survey published by the Food and Agriculture Organization of the United Nations.

The Markov process was used for the study. The basic concept of the Markov process is the transition probabilities, the probabilities moving from one fiber to another in next time period. The transition probabilities were estimated using the minimum absolute deviations method.

The results indicated that the fiber consumption patterns in Korea are similar to those in the US in several ways. In contrast to the similarities between Korea and the US, the fiber consumption patterns in Korea differed from those in LDC suggesting that economic and social conditions underlying textile fiber consumption in Korea may no longer be close to the conditions common in LDC. The differences between the US and the other developed countries seem to indicate the importance of tastes and preferences in interfiber competition.
THE TEXTILES COTTAGE INDUSTRY IN THE SIERRA OF ECUADOR:
AN ANALYSIS OF PRODUCTS, PRODUCTION TECHNIQUES, AND MARKETING APPLICATIONS

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The purpose of this study was to investigate the textiles cottage industry in the sierra region of Ecuador, identifying the primary textiles articles produced, specialized production techniques and marketing strategies used.

The vast majority of the sierra is rural, with farming and textiles handicraft production dominating. The textiles produced by the Ecuadorians of the sierra reflect ethnic identity through symbols used and intricacy of design. Each village is known for producing a specialized textile product.

The market system in Ecuador consists of open markets in major cities and small villages. The town square serves as the market center. Selling also takes place along street sidewalks. Market administrators collect fees from the artisans.

Other marketing strategies include selling to handicraft stores and selling through cooperatives. Cooperatives assist the craftsmen in improving skills as well as making the articles available to the public both inside and outside the country.

The importance of the cottage industry to the sierra can be seen as family members work at their specialized tasks in an effort to create a textile product of fine quality that will bring them enough income to survive. Through this study the significance of this industry to the indigenous population becomes clearly evident.

U.S. IMPORTERS OF MEXICAN TEXTILE HANDCRAFTS: SELECTING PRODUCERS AND PRODUCTS

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Handcrafted textiles produced to fill local needs for clothing and household items have been replaced by mass produced items. Importers offer an opportunity for handicraft producers. In Teotitlan del Valle, Mexico, textile handicraft producers have capitalized on export markets. Previous research focused on the producers' perceptions of importers (Popelka, Fanslow & Littrell, 1992). However, this research did not include the perspectives of importers residing in the U.S.

The study identified importer-buyer behaviors and the criteria U.S. importers used to select handicraft producers and their handicraft products. Sheth's (1973, 1981) model of industrial buying behavior was used as the framework for this study.

A purposive sample of U.S. importers was used for this study. In-depth interviews were conducted in 1990 and 1991. Fifteen U.S. importers were interviewed. Import companies were based in TX (n=3), CO (n=3), NM (n=4), AZ (n=1), and CA (n=4). Data were analyzed using content analysis and qualitative methods. Categories were developed using pattern-matching logic (Yin, 1984).

Findings support similarities between importers' buying behaviors and industrial buying behaviors identified by Sheth. Importers were categorized into two groups based on methods used to acquire textile handicrafts and into three groups based on the criteria for the selection of textiles. The two categories of merchandise acquisition were (1) Buyers of Goods from Existing Supplies and (2) Buyers of Goods Ordered and Made to Specification. Buyers from existing supplies were characterized by previous problems associated with delayed deliveries and products that did not meet their design and quality expectations. Buyers that ordered goods, placed orders and had producers ship or deliver the textiles to their U.S. facility. The three categories of importers based on criteria used to select textiles were Group 1: Buyers of Mass Produced Handicrafts; Group 2: Buyers of Varied Patterns and Colors in Moderate Priced Handicrafts; and Group 3: Buyers of Unique or Collector Quality Handicrafts. Some textile acquisition methods were associated with some textile selection criteria.

Findings support the examples developed in previous research which strengthens the existing base of information used by craft producers seeking new markets.


PREDICTED EFFECTS OF APPAREL IMPORTS INTO THE US IN THE EIGHTIES AND BEYOND

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From 1980 forward, the U.S. government pursued policy of decreasing trade restrictions even though virtually all trading partners of the U.S. did not practice free trade, which has placed domestic U.S. industries at a competitive disadvantage. More comprehensive trade agreements or improved enforcement of existing trade agreements have been called for repeatedly by U.S. textile and apparel interests, whose argument has consistently been that fair trade, not necessarily free trade, should be the trade policy goal.

The primary purpose of this study was to estimate the impact of apparel imports upon employment, production, labor and other resources in the U.S. apparel manufacturing industry and to evaluate the effect of import restrictions upon apparel consumers and retailers. Toward this end, objectives of the research were to formulate models and to estimate parameters for U.S. demand for apparel imports, U.S. production of apparel, and resource or input adjustment functions for the U.S. apparel manufacturing industry. The estimated parameters of the models were elasticities which measured the responsiveness of apparel imports and the other response variables to the explanatory variables such as prices, income, capital cost, wages, and employment and other apparel industry inputs.

Statistical estimation was primarily by Ordinary Least Squares (OLS) and Generalized Least Squares (GLS) utilizing the Statistical Analysis System (SAS) on a main frame system. Some Two-Stage Least Squares (2SLS) and Three-Stage Least Squares (3SLS) were used to estimate the simultaneous equations for apparel inputs.

Preliminary results of models suggest that the impact of apparel imports in the 1990s will be less than prior decades. Estimated elasticities suggest that a 20 percent decrease in apparel import prices relative to U.S. apparel prices would result in a four percent increase in apparel imports which would decrease US apparel production about three-tenths of one percent at the cost of about 500 U.S. apparel jobs. Expansion and refinement of the model is underway to provide enhanced future results. Policy implications of this study take on more relevance in light of the ascension of NAFTA, the decline of the MFA, and the pervasively global apparel industry.

CONSUMER ATTITUDES TOWARD FUR GARMENTS

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The fur industry generates a substantial amount of trade, serves as the main employer of hundreds of skilled workers, and satisfies the needs of millions of consumers on an international level. The domestic industry continues to be a major force in the global marketing of fur garments even though the industry has been confronted with several challenges that threaten its vitality including the growth of animal rights organizations. The effects of the battle between the fur industry and the animal rights organizations on consumer attitudes toward fur garments has received little attention. The purpose of this study was to investigate consumer attitudes towards fur apparel.

A questionnaire was developed by the researchers based on the attitude measurement literature. Two measurement scales, the semantic differential and Likert, were used to ensure a better representation of consumer attitudes toward the use of furs for garments. Attitudinal statements about fur products were based on statements made by the fur industry, anti-fur groups and other fur-related literature. The questionnaire was evaluated for validity by four professionals.

The mall intercept method was used for the administration of the survey. A total of 250 questionnaires were completed by randomly selected shoppers at a mall in the Midwest. Subjects included males (44%) and females (56%) over the age of 18.

Data were analyzed using factor analysis and the chi-square test of independence. Results of the factor analysis indicated that at least two dimensions underlie consumer attitudes toward fur for apparel--morality and fashionability. These two dimensions were used to analyze associations between consumer attitudes towards fur garments and demographic variables.

Results indicated the subjects interviewed considered fur garments to be fashionable, but were neutral or uncertain on the morality factor. The chi-square indicated a significant association of the fashionability dimension with exposure to anti-fur ads, age, and membership in anti-fur groups. The morality dimension was significantly associated with fur coat ownership and membership in anti-fur organizations.

Consumer attitudes toward fur garments are multidimensional and may be impacted by external information sources including membership in and advertisements of pro- and anti-fur organizations. These findings have important implications for fur retailers and manufacturers as well as fur organizations as they try to assess how to most effectively influence consumer attitudes toward fur garments.
USE OF WESTERN WEAR: MALE CONSUMERS

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The western wear market lacks research relating to attitudes, involvement, and use of western wear. This study investigated male consumer's western wear involvement and use.

The sample was adult males (n=402) attending a livestock show. The instrument included involvement measures, a usage scale, demographic and psychographic questions. Respondent's involvement with four clothing items and "western wear" in general was measured by using the Personal Involvement Inventory (PII) (Zaichkowsky, 1984). Also, use of 10 western wear items was measured.

A mall-intercept personal survey method was used in the exhibit area; only 7% declined.

Most respondents were married (61.3%) with a mean age of 38.8 years, and had resided in a rural location. Occupations included "working cowboy" (19.4%), ranching/farming (42.3%), and other (38.3%). Involvement with western boots, hat, shirt, and belt was determined. Based on a median split, males scored Low Involvement (M=432, Mdn.=451) with the four western clothing items. In addition, low "western wear" involvement was evidenced (M=70, Mdn.=71). The western wear use mean indicated Seldom Usage, however, jeans, cowboy boots, and western belt were worn frequently (20 times/month) by most. Over 50% gave fit and comfort as reasons to dress in western wear.

Analyses included two-way ANOVAs and MANOVA. Results indicated (1) effect of residency on the involvement score depended on subject age, with a greater difference for the 30-40 age group; (2) western wear use level on the involvement score depended on who selected the clothing, with frequent users having a wider range of involvement scores; (3) percentage of lifetime yrs. worn/age of male) the subject had worn western wear was influenced by importance assigned to western wear quality cues and use level; and (4) residency, western wear use, connection with livestock, participation in western activities, and occupation influenced reasons to dress in western wear.

This study delineates the male market in regard to western wear. A majority of involvement scores approached the median score revealing respondents were not as uninvolved as indicated. Retailers must be aware of all factors capable of influencing consumer involvement level.


CLOTHING BUYING PRACTICES OF AFRICAN AMERICAN AND WHITE MIDDLE-INCOME WOMEN

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By the year 2000, minorities will represent approximately 33 percent of the United States' population. The African American population in the U.S. is expected to increase to 44 million by the end of the century. Minority consumers will have greater impact on the U.S. marketplace than ever before.

Within the last decade, a few studies have investigated social class differences in apparel behavior and store selection of African Americans. Earlier observations on clothing-buying practices of African Americans were established on the researchers' restricted observations that were obtained while comparing purchasing behavior of White and African American females. These studies primarily investigated low-income consumers.

The purpose of this study was to determine if differences exist in the clothing purchasing practices between African American and White women in the primary market.

Self-administered questionnaires covering eighteen clothing buying practices were distributed to 250 African American and White women residing in three metropolitan areas.

Chi-square analysis of data showed that African American and White middle-income women differed significantly in three buying practices: (1) method used to acquire the majority of clothing; (2) the percentage of personal items purchased in primary stores; and (3) buying pattern for a dress costing more than $50.00.

This study revealed that differences in buying practices exist among African American women compared to White women. A replication of this study would be beneficial to retailers and researchers of consumer behavior by using other racial groups.

CONSISTENCY OF PERSONAL COLOR ANALYSTS

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Personal color analysis became big business in the 1980s with the publication of Color Me Beautiful by Jackson. The book promoted the concept that women could be divided into one of four seasons based on their personal coloring. Then if they wore colors appropriate to their season they would be more attractive and feel better about themselves. People promoting themselves as color analysts opened shops across the United States and women spent considerable amounts of money to have their colors done. In theory all analysts who operate in the same color system should recommend the same colors for an individual. Yet, no studies were identified where a controlled study had been completed. Therefore, the purpose of this study was to compare the consistency of advice given by different analysts operating within the Four Seasons color system. The specific objectives were to compare the consistency of analysts in assigning the same seasonal category, (2) in recommending the same major hue categories, and (3) in recommending the same value and intensity of a hue.

Two clients, with differences in hair, eye, and/or skin coloring, went to two different, randomly selected, color analysts. Each analyst classified each client into a seasonal category and supplied her with a swatch kit of colors appropriate for her. All swatches within a kit were grouped into one of 10 hues based on the Munsell Student Chart or 3 neutrals by three independent raters with a background in clothing. The recommendations of every analyst who recommended the hues yellow, green, purple, and black were compared with every other analyst who recommended these hues to determine if the swatches matched in value and intensity. When one analyst chose one more swatches within a hue than another, the extra was considered a no match.

Results revealed that Client 1 was classified within the same season by 70% of the analysts and Client 2 by 60%. Only 5 of the 13 hues were consistently recommended by 90% or more of the analysts. Comparing the matches in value and intensity of the four hues across all analysts, the percent agreement ranged from 11.1% to 14.56% for Client 1 and 17.06% to 29.73% for Client 2 except for the hue black, which yielded an 86.67% agreement. When only those analysts who placed a client within a same seasonal category were compared the percentage of matches rose for all hues except one. The percent agreement was still low ranging from 13.95% to 28.57% for Client 1 and from 18.98% to 34.44% for Client 2. Overall the results indicated that the 10 analysts were not consistent in the recommendations given and therefore consumers might be cautioned about expending money to be color analyzed.
TOWARDS A THEORY OF CONSUMER SATISFACTION AND CONSUMER DISSATISFACTION WITH CLOTHING

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Since the 1970s, colleagues have indicated the need for theoretical development in the field of clothing and textiles. However, allusions to this need have become more prevalent in recent years. Since research in the area of consumer satisfaction and consumer dissatisfaction (CS & CD) with clothing has been accumulating for more than 35 years, a large body of knowledge is available for assessment and synthesis. The purposes of the study were (1) to critically analyze the knowledge about CS & CD with clothing; and (2) to assess its status with respect to theoretical development.

The following procedure was employed: (1) establishment of criteria for the development of theory; (2) collection of research reports and other literature on CS & CD with clothing; (3) analysis, categorization, and evaluation of the reports in terms of the criteria established in step (1); (4) examination of the general CS & CD literature to allow elaboration of theory development in general; and (5) report of findings, noting differences between “what is” and “what ought to be,” with implications for more stringent development of a theory of CS & CD with clothing.

Major findings indicated that researchers have studied CS & CD with clothing in relation to quite a variety of constructs, including numerous socioeconomic, psychological, and social-psychological constructs. In most cases, however, the nature of the relationships examined is correlational, not causal. This means that we cannot build theoretical explanations of how different variables are directly or indirectly affecting the CS & CD with clothing. Instead of theoretical propositions, the outcomes of the research often are specific empirical generalizations from which a few abstractions can be made.

In conclusion, research on CS & CD with clothing does not seem to be undertaken with theory development in mind. Although research has continued for many years, lack of clear definitions and measurement, lack of knowledge about the process of theory construction, and lack of causal explanations of the relationships indicates that we as theory developers are still “in the concrete.” Nevertheless, the potential exists for a model of CS & CD with clothing. The model we have developed will be shared with you in an upcoming article.

COSTUME, CULTURE, TRENDS 2000
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Today, Western garment design and adornment are greatly influenced by diverse cultural groups. We see the interpretation of African, Oriental, Hispanic cultures, and subcultures, such as youth and organized groups, in clothing design for all age groups.

Course development was designed to bring about synthesis by working through the process of reading, exploring, analyzing, evaluating and applying information from a diversity of majors. This course was developed to provide a foundation of resources and discussion to increase awareness and knowledge of different cultures and subcultures from historical, contemporary and future perspectives. Sociological and psychological aspects of clothing and appearance norms are logical avenues in which different groups can be studied and better understood. Dress and adornment relate to exploration of cultural heritage and lifestyle, both positive and negative.

Assignments included projects to promote interaction, research and presentation skills among students, 1.) a personal cultural heritage, 2.) a discussion of earliest clothing recollections for self and others, 3.) research in pairs to present a culture or subculture to class, 4.) individual presentation of a contemporary garment to analyze for multi-cultural influences, 5.) group presentation of a "created culture" incorporating norms, appearance, lifestyle, positive and negative elements that affect all cultures, 6.) forecasting for 2093, futuring for appearance and issues in society and apparel, 7.) group slide show featuring slides coordinated to music related to hair, garment, appearance and social interaction, and 9.) weekly resource sharing of information that would increase knowledge and awareness of another culture or subculture.
ADDING A MULTICULTURAL COMPONENT
TO HISTORIC TEXTILES:
NATIVE AMERICAN FOCUS

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In addition to being faced with tight budgets and enrollment management concerns, colleges and universities across the United States have been dealing with the issue of cultural diversity—both inside and outside the classroom. My goal was to bring a diverse component into an historic textiles course, particularly focusing on the contributions Native Americans have made in the past. In addition, I wanted to investigate the status of weaving on the reservation, at present.

In order to meet these goals, I chose to conduct field research on the Navajo Indian reservation in northeast Arizona. Interviews were conducted with selected contemporary weavers.

While the number of people interviewed was limited, it appeared the following conclusions could be made: 1) Weaving is alive and well on the reservation. 2) It continues to be a skill done primarily by women of all ages. 3) Most Navajo women learn the skill of weaving from their mothers. 4) For those women employed part-time or full-time outside the home, weaving serves as an income supplement. For the older generation who do not work outside the home, weaving serves as a very necessary part of survival. 5) It is not uncommon and seems acceptable for contemporary weavers to combine the use of natural and commercially dyed wool yarn together in the same piece.

The hands-on experiences of the field research were then incorporated into the classroom. Students learned that Navajo weaving is not a dying textile tradition.

STRAIGHTENING THE SPINE,
1840S-1910S

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Physicians and the public sought various remedies for real or perceived scoliosis between the 1840s and 1910s. At this time, people considered spinal curvature to be a problem afflicting up to one-fourth of children and youth. Medical disagreed about whether girls primarily or equal numbers of boys and girls had curved spines.

Physicians debated underlying causes of scoliosis: heredity vs. environment, including other diseases, accidents, tightly laced corsets, rigid seating at school, or insufficient exercise. Medical who blamed weak muscles for scoliosis recommended exercise for specific muscles or for the whole body. Doctors who perceived weak bones as causal chose bracing, stretching, or bed rest; sometimes also surgery, diet, or electrotherapy. A few doctors prescribed different treatments depending on the duration of the curve.

Prescription braces borrowed shapes from fashionable corsets, though medical versions were made of plaster of paris, wood or paper strips, perforated aluminum or leather, or woven wire. Such braces were usually put on by a medic or technician; were custom-fitted; cost $10 to $50; were uncomfortable and unhygienic; and pushed on the curves to flatten them. Commercial braces or corsets consisted of cloth, webbing, elastic, metal strips, and leather. These came in standard sizes; were often unisex; cost $1 to $25; resembled suspenders for males and skirt supporters or corsets for females.

Commercial braces almost vanished from advertising in popular publications and pharmaceutical catalogs about 1916, as clothing increasingly wore bras; as clothing became too fitted and thin to conceal braces; and as other ailments drew attention from scoliosis. (Reference list by request)
"MAKING DO": THE GREAT DEPRESSION, 1929–1940

Jane Funderburk

This research examines the effect of lowered clothing purchases upon rural people and how it affected family members. Expense records of rural families, collected by state cooperative extension services, were examined and compared. The clothing programs of the Maryland Cooperative Extension Service and clothing articles in the Maryland Farmer were reviewed for information.

These sources established three general stages. 1. Put off major clothing purchases. 2. Make and remake clothing and only purchase necessities. 3. Learn to be better consumers.

Family members had varying clothing needs. Men and boys were affected the least because masculine styles were stagnant and their garments were made of sturdy fabrics. The largest amount was spent for women's clothing. They required a diversified wardrobe and more undergarments. The light fabrics they wore required frequent replacement.

Adolescent girls were the most affected by clothing deprivation. Advertising and peer pressure encouraged them to keep up with new styles. But, girls often had to bear the stigma of wearing home-made or remade clothing. They preferred wearing the popular ready-to-wear fashions. A girl's appearance and the status of her future husband were strongly related. Many rural girls and boys left school because they lacked adequate clothing or shoes.

ENGINEERED DESIGN FOR AN UPSCALE MARKET

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Since 1987, Fashion Design students enrolled in Textile Design have created marketable designs for the apparel industry. While most of the textile design assignments have required the development of continuously repeating patterns, a recent assignment in engineered design required the development of a design to fit a single unit of specified dimension.

Fall, 1991, students participated in a field trip to the Hermès store and its adjoining gallery, "Le Crayon Gallery" in Vienna, Virginia. This led to an expressed interest in scarf design (engineered design) for an upscale market and specifically theme design, as depicted in the Hermès scarfs collections.

Fall semester, 1992, students were assigned a project to design a 36" square scarf for an upscale market, adhering to a theme of arms and armor which related to an exhibition on art, arms, and armor at The Smithsonian Institution. Project specifications required them to: 1) Participate in a field trip to the Hermès store and "Le Crayon Gallery" to learn the history and philosophy of Hermès and the process of design for this market. 2) Participate in a field trip to the "Imperial Austria: Treasures of Art, Arms, and Armor from the State of Styria" Exhibition at The Smithsonian. 3) Research scarf designs at the Fendi, Gucci, Louis Vuitton, and Tiffany stores. 4) Design a 36" square scarf based on research. 5) Paint several color combinations. 6) Paint 1/4 of the scarf design with gouache paint and outline the rest of the design with a black felt marker.

The composite project resulted in a typed, illustrated report and a presentation board depicting the final rendering of the scarf design. Students gave oral presentations of their research prior to initiating the design process and gave final presentations of their completed projects.

Two tools were used to evaluate the project. First, projects were formally evaluated by the instructor. Second, students anonymously evaluated each other's projects. In addition, spring semester, all design projects were juried by the faculty and the best examples displayed at the Barry Gallery on campus. In all of the evaluations, the projects were rated from good to excellent.

As a follow up, fall semester 1993, students enrolled in Textile Design will analyze the reports and scarf designs produced by the previous year's class and will complete a similar project.
Cupchik (1983) saw attentional mobility, the ability to perceive relationships between and move between three dimensional physical objects and two dimensional sensory qualities, as a vital skill for creative individuals. Cupchik believed that artistic training modifies and enhances the perceptual processes of everyday life to facilitate attentional mobility. Thus, two skills facilitating creative production are keen perception of visual qualities of the object and effective representation of visual qualities in the desired medium. The attentional mobility skill of visually analyzing characteristics of top selling, quality, or fashionable textiles and apparel products is vital to our students. Apparel designers, product developers, and product advertisers also need the skill of representing qualities of the textile and apparel object.

I have developed a project for use in a computer-aided-design course that fosters attentional mobility skills, while also training the students to operate the CAD (Modacad) system. To help students feel more comfortable with their computer and visual analysis skills, students completed a project which familiarized them with the basic operations of the system through replication of simple visual images on the screen using "tools" of the system. For the attentional mobility project students visually analyzed 8 fabrics (three dimensional physical objects) and then represented them on the screen using the CAD system as the medium. I chose the fabric samples so that visual qualities such as organic and geometric printed shapes, ordered and random placement of these shapes, all-over textural patterns, mixed textural patterns, transparency, light reflection and shadowing, and micro-layout (minute variations produced by the fabrication) of woven and knit fabrics were included.

Evaluation of the student's work was based upon the closeness of the visual images created to the actual three dimensional fabrics. Students were effective at analyzing the visual qualities and representing these qualities using the CAD system. Anonymous student evaluations showed that students found this project to be enjoyable, challenging, and even fun, because it engaged perceptual and cognitive processes. A few students mentioned that this project provided confidence that they were proficient using the system and had a valuable skill to offer the apparel industry. A few students also remarked that the project gave them confidence to be creative in producing new visual images of fabrics for the following project where they had to create story boards of a line of garments with fabric surface designs of their own creation. One student, who went on to intern with an apparel company using the same CAD system, said that her employer was very impressed with her proficiency on using the system. The student stated that the attentional mobility project was most helpful in carrying out her duties in the internship position.

TRAPUNTO WEARABLE ART:  
DIMENSIONAL CHANGES IN COTTON,  
LINEN AND SILK

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Trapunto quilting consists of two layers of fabric: a top fabric and a thin layer of  
backing sewn together by stitches  
that create the design motif.  
The design motif is then stuffed  
with a fluffy filling or yarn  
according to one of three  
trapunto variations: stuffed,  
linear, and a combination of  
stuffed and linear.

The purpose of this study was to develop a method for  
determining the dimensional changes in warp and weft  
attributed to trapunto quilting so that accurate ease allowances  
can be made. Objectives were: 1) to measure changes in warp and weft  
lengths of three different fabrics, cotton, linen and silk,  
before and after quilting; 2) to compare differences in  
dimensional change among fabric types and among types of trapunto  
quilting and 3) to recommend a  
method for pretesting quilted pieces to assure good fit and to  
eliminate fabric waste.

Eight-inch squares of face  
and backing fabrics were cut and  
marked into two-inch square grids  
using thread basting. A design motif was transferred and the  
piece was back stitched and quilted using the desired  
technique. After quilting, the  
fabric was measured and compared  
to the original. The differences  
in warp and weft changes were  
calculated to predict the warp  
and weft ease allowance needed  
for final pattern pieces.

Nine wearable art pieces  
using trapunto were created with  
no need for additional fitting  
adjustments. The method is  
recommended.

UTILIZATION OF THE COMPUTER  
FOR TESTING IN A TEXTILE LECTURE CLASS

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One concern in a beginning textiles course is how to test frequently enough  
yet not take up too much class time. A solution I have used for the past three  
years is to do all testing for the lecture portion of an undergraduate textiles class  
via computer.

The students are given frequent quizzes during the semester plus a comprehensive exam at the end. All tests are scheduled outside of the regular class time in a dedicated computer lab for testing. Each student is assigned a unique sign-on number and they specify their password. To take tests they must present a picture ID. Students are given about a four day time frame within which they must complete each test, however, they may go anytime within that time frame.

A software program, called tlogic, developed at the Un. of Akron, is used. This program utilizes a Phoenix Authoring System and operates only on a mainframe. Questions must be multiple choice or true/false and can only have one multiple choice. A bank of questions are written for each objective for each unit. Then the instructor programs how many questions from each objective are to be generated by the computer. Both questions and choices are randomly selected and displayed.

Different policies and procedures can be set up by different instructors. For example, one instructor may allow only one test, while another may allow two tests. If two tests are allowed one may accept the higher of the two scores while another may take an average of the two. I allow two tests and take the average of the two unless the second is lower, in which case I accept the first score.

The biggest advantage given by the students is flexibility. They can take a test when they are at their best be it the morning, afternoon, or evening. Also, if they have another test on a given day, they can take the test the next day by rearranging the dates specified for that test. A second advantage is students have a second chance to improve their grade, and hopefully their learning. Other advantages are: it frees up class time and students become less fearful of computers.

The major disadvantage which some students give is that the instructor is not available to answer questions. For some the computer can be intimidating. This usually decreases after they have completed a couple of tests. For me, as the instructor, the biggest negative was the initial time it took to set up the data bank of questions, but once done, only nominal work has been needed.

Overall this procedure has been very effective and I will continue to use it. In fact, I can not imagine going back to in-class tests in this course.
COTTON, WOOL, AND MOHAIR BLENDS: DESIGN, DEVELOPMENT, AND EVALUATION

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Six fabrics, each with a cotton warp and wool/mohair blend filling were produced under simulated textile manufacturing conditions. The fabrics were experimentally developed to utilize the inherently positive features of each of the three fibers.

The fabrics were evaluated for breaking strength, tear resistance, dimensional stability, pilling resistance, and durable press appearance. Results were compared to an industry performance standard and significant differences due to fiber blend, fabrication, care method, and number of launderings were determined by three-way ANOVAs.

When compared to industry standards, the favorable characteristics of the fabrics were warp breaking strength and tear resistance, filling dimensional stability, and resistance to pilling. The undesirable characteristics included low filling breaking strength and tear resistance, excessive warp shrinkage, and low durable press appearance ratings. Significant three-way interactions were found in warp breaking strength, pilling resistance, and durable press appearance.

With improved dimensional stability in the warp direction and greater filling breaking strength and tear resistance, the experimental fabrics could be developed to offer the consumer an acceptable fabric blend.

INEFFECTIVENESS OF HOME DYE-SETTING TREATMENTS TO REPEATED AUTOMATIC LAUNDERING

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There are numerous claims by the public that home dye-setting treatments are effective in reducing fading and bleeding of newly purchased fabrics. Although previous research (Crews, 1989) indicates that home dye-setting treatments do not work and are a waste of consumer's time, energy, and money, many consumers remain adamant that treatments are effective. Because previous studies used an accelerated washing test in a Launder-Ometer, some questions remained:

Was an accelerated washing method a fair way to evaluate home dye-setting treatments? Could treatments reduce fading and color loss, as some consumers maintained, if repeated launderings in an automatic washer were used to evaluate their effectiveness?

This study evaluated direct-dyed cotton fabric treated with a variety of home dye-setting treatments, then laundered in an automatic home washing machine.

Three home treatments were evaluated for their effectiveness in setting direct dyes in new cotton fabrics: a salt treatment; a salt and vinegar treatment; and a salt, vinegar, and alum treatment. Five direct dyes in a range of reds and blues were selected for evaluation.

Dyed and treated specimens were subjected to three automatic launderings according to procedures described in AATCC Test Method 135. Color change and staining evaluations were made instrumentally after one and three launderings to determine whether or not treatments were effective in reducing color loss and bleeding. Instrumental color evaluations were made using a LabScan II Spectrocolorimeter according to AATCC Test Method 153-1985.

As found in previous studies, dye-setting treatments evaluated in this study did not significantly reduce color loss or staining in the treated cotton fabrics dyed with direct dyes. Results showed conclusively that home dye-setting treatments are ineffective and, therefore, a waste of the consumer's time, energy, and money.

EVALUATION OF SILK MAWATA USING SCANNING ELECTRON MICROSCOPY
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The scanning electron microscope has been used to examine the morphology of fibers (Hearle, 1975; Bresee & Goodyear, 1986). Characterization and analysis of fiber fracture has been performed using the fiber fracture classification system developed by Hearle (1975) and expanded by Bresee & Goodyear (1986).

The purpose of this research project was to assess the fiber morphology of an antique silk mawata using scanning electron microscopy (SEM). The physical condition of the silk mawata was important to a weaver who wished to use it to create a replica of a 1940's Japanese kimono. The weaver did not wish to use the silk mawata if it was so deteriorated that it would inhibit the spinning and weaving processes.

The mawata was cleaned and prepared following the procedure described by Bresee and Goodyear (1986). Fibers were fractured under a constant load using a CRE tensile testing machine according to ANSI-ASTM D1682-64 procedures. The unbroken fiber ends were embedded vertically in carbon paste SEM specimen holders and evaporatively coated with a 60-40 palladium alloy. Forty photomicrographs were taken of fractured fiber ends.

The fracture patterns found in this study were characterized as: 40% ductile fracture (Type 2 fracture); 30% surface flaw fracture (Type 7); 20% cohesion fracture (Type 5 fracture); and 10% combination fracture (a fracture pattern identified by Bresee and Goodyear, 1986). No brittle fracture patterns were identified and any indications of severe chemical and/or physical aging which would have inhibited the spinning and weaving of the fibers were not found. The fracture patterns of the antique silk mawata revealed that, although it has been stored in an attic for over 50 years, the physical condition was relatively good. Thus, the weaver plans to weave the mawata into a fabric for a kimono.


PHYSIOLOGICAL RESPONSES TO EXPERIMENTAL INSULATION AND FOREARM IMMERSION IN COLD WATER

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In the event of accidental immersion in cold water, the chances for survival diminish with greater decreases in water temperature, increased exposure time, and lack of protective clothing. Through the development of better insulative material and high performance barrier textiles, greater protection can be provided for those who are at risk of possible cold water immersions (i.e. pilots, sailors, ocean oil rig workers). In this investigation, the thermal response to forearm cold water immersion was determined as influenced by the use of an experimental carbon insulation and commercial gloves.

Ten males and ten females (mean age = 23) participated in the study. Four glove conditions were chosen: no glove, Nomex® flight glove, experimental insulation glove, and a Thinsulate® glove. Three testing sessions consisted of a 6-minute pre-trial period for determination of baseline steady state values 15-minute forearm immersion in -1°C (28°F) water, and a 15-minute recovery. Two core temperature measurements (rectal and tympanic) and ten skin sites (i.e. palms, fingertips, back of hand, forearm, forehead, chest) were taken with thermocouple probes. Subjects gave ratings of discomfort at five minute intervals.

Physical properties of the carbonaceous experimental batting were .41 inches thick, 2.4 oz/sq. yd., with an R-value of 1.58. The Thinsulate batting was .25 inches thick, 5.4 oz/sq. yd., with an R-value of 1.09.

Differences between the ratings of discomfort were determined by a 4 X 3 repeated measures ANOVA. Differences in the temperatures during immersion were determined by a 4 X 15 X 2 way repeated measures ANOVA.

Data analysis revealed that the Nomex flight glove was not significantly different from the no glove condition (mean skin temperature = 6°C). Skin temperatures during the experimental insulation treatment were significantly higher than those in the Thinsulate condition (mean skin temperature = 25.07 vs. 20.77). Males reported greater discomfort during immersion than the females overall. Thinsulate was perceived to provide only slightly greater thermal comfort than the experimental insulation. The experimental insulation product is lighter in weight and thinner than Thinsulate and may provide the opportunity to produce better survival gloves without impeding performance.
PRODUCT REDESIGN BASED ON ANALYSIS OF TEXTILE PRODUCT FAILURE

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Returned products that exhibit wear to the point that the user deems the product unusable should lead the manufacturer to consider redesigning the product. This research project was conducted to study the pattern of failure of an athletic ankle brace. Concern for improving the brace's design was initiated when the manufacturer received a small, but significant number of returns due to excessive and untimely wear of an elastic strip in the heel area. Determining the cause of the "heel failure" was the goal of the study. Possible causes for failure were: inherent weakness of the selected elastic fabric, incorrect shaping of pieces, and incorrect manufacture of the brace to meet stresses of wear.

Failed braces returned to the manufacturer were first evaluated. Physical evidence of wear was systematically noted and information was solicited from the company to assess cause of wear. A wear test was designed to evaluate proposed variations in materials and manufacturing processes. A selection of materials was tested in the laboratory to determine performance characteristics. Prototype braces were developed with substitute materials and alternative manufacturing processes. Subjects wore one control brace and one prototype brace. Subjects wore the braces for exercise periods tracking mileage with pedometers. Braces were evaluated periodically for wear, comparing wear of control braces and prototype braces. After evaluation of materials and manufacturing processes, suggestions for change were made to the manufacturer.

Initial changes in manufacturing processes and materials have significantly improved the rate of return of braces for the manufacturer. Phase two of the study will evaluate the shaping of the pattern pieces of the brace to improve wear of the brace and comfort and performance of the athlete.

THE RELATIONSHIP BETWEEN LAUNDERING CYCLES AND ANTIBACTERIAL ACTIVITY OF ANTIBACTERIAL-FINISHED COTTON FABRICS

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In textile areas, antibacterial finishing is mainly applied to socks, insoles and underwear. These materials require frequent washing. Therefore, the laundering durability is an important evaluation of the quality of the antibacterial finishing. The assessment of antibacterial property of textile is complex and time consuming. Furthermore, the evaluations of laundering durability demand repeated operations of such a large amount of work. To simplify the determination of laundering durability of antibacterial finishing is of practical importance.

This research used AATCC Test Method 90-1982 (American Association of Textile Chemists and Colorists, 1988) to determine the antibacterial activity of a cotton woven fabric finished with 2,4,4'-trichloro-2'-hydroxy-diphenyl ether (HD244) or D244-dimethyl dihydroxyethylene urea in the same bath. AATCC Test Method 90-1982 uses the size of the clear zone (i.e., the area without bacterial growth) to indicate the antibacterial activity of the finished fabric. Gram-negative and Gram-positive bacteria, Escherichia coli (E. coli) and staphylococcus aureus, respectively, were used to test the antibacterial effect of the finished fabrics. Our research found that the laundering cycles of the finished fabrics have a good linear relationship with the logarithm of the size of the clear zone as expressed by equation (1).

\[ \ln W = \alpha + \beta N \]
\[ W = Ae^{\beta N} \]  

or

where \( W \) = width of clear zone, \( N \) = laundering cycles, \( \alpha \) and \( \beta \) are constants from the linear regression which depend on the properties of the bacteria, antibacterial finish, fabric and other chemicals on the fabric; and \( A = e^\alpha \). Equation (1) shows that the antibacterial activity declines with the increase of laundering cycles exponentially.

The establishment of such a relationship allows us to use fewer laundering and test times to obtain the laundering durability of an antibacterial-finished fabric. It also is helpful for the determination of the amount of antibacterial agents required for a textile product with an expected laundering durability. Since AATCC Test Method 90-1982 is only suitable for the antibacterial agents which, when applied to fabrics, are readily diffusible through agar, those which are not easily diffusible (Vigo & Benjaminson, 1981) cannot be evaluated by this method.
LINKING APPAREL DESIGN AND
MERCHANDISING PROGRAMS WITH INDUSTRY

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Partnerships with apparel manufacturers benefit programs preparing students for careers in apparel design and merchandising and also benefit manufacturers seeking assistance with specific business problems. A recent collaboration in our department linked a manufacturer with both the apparel design and merchandising programs.

A small manufacturer of athletic shorts initiated contact based on the department's visibility and reputation. Discussion by faculty and campus visits by company personnel evolved into proposals for joint projects.

Meetings with key personnel and a plant tour increased faculty understanding of market challenges this manufacturer faced. In curriculum meetings, faculty considered program mechanisms for accomplishing project objectives.

The general manager met with the faculty group on campus to refine ideas. Faculty members identified courses that could involve students in projects. The manager clarified kinds of support the company could offer. The meeting yielded a plan for several projects and one faculty member named as group coordinator. Individual faculty consulted or visited company personnel as needed for particular projects.

Students participated in company-sponsored competitions through course assignments throughout the 1992-93 academic year. For each contest, company personnel came to campus for orientation meetings, judging, and award presentations. Students in a fashion drawing class and a merchandising graphics class composed entries for a logo design competition. In a direct marketing class, student teams produced layouts for a direct response catalog contest. A mass market apparel design class developed designs for a new product line. Company personnel were enthusiastic about students' projects and will implement many ideas.

MORE CAD CREATIVITY?
YES, IN CURRICULUM DEVELOPMENT

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The presenters have developed a unique method of integrating Computer Aided Design (CAD) into the Fashion curriculum at Centenary College. This innovative program allows students with no prior knowledge or experience with CAD, and possibly with limited exposure to computers in general, to develop an appreciation and working knowledge of various applications of CAD in the Fashion industry. Use of CAD is concurrent with the theory and practicum courses.

CAD is initiated in a freshman level course. Upon completion of the first year, students select a program concentration (Retailing, Merchandising, or Clothing, Textiles and Design). As they pursue their studies, training in CAD is tailored to their program area.

Courses targeted for required CAD integration are:
- *Freshman* Fundamentals of Design
- *Sophomore* Visual Merchandising, Flat Pattern
- *Junior* Techniques in Apparel Development
- *Senior* Advanced Design

Courses targeted for optional CAD applications are:
- Advanced Visual Merchandising
- Fashion Coordination and Promotion
- Fashion Sketching
- Leadership Seminar
- Retailing
- Small Business Practicum
- Textile Design

Application is also encouraged for students involved in the Fashion Group, a student organization, and in the annual fashion show.

This innovative concept of CAD integration began with the 1991 freshman class and will proceed gradually over four years. The freshman course identified with a CAD component is Fundamentals of Design. Students are required to use CAD to complete six assignments using line, color, and design. All sophomore Merchandising and Retailing students prepare a logo design to be scaled and plotted onto shopping bags and/or gift boxes.

An ongoing assessment of the program has provided direction for improvements and adaptation. We found students have difficulty applying CAD without prior exposure to computers and the AutoCAD software package. A new one-credit course has been developed to provide students with basic knowledge of CAD. This course has recently been implemented and will be included in the evaluation of CAD in the Centenary College Fashion curriculum.
AN EXAMINATION OF
THE EFFECTIVENESS OF
COMPUTER ASSISTED
JOB SEARCH PREPARATION

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As a result of increased competition in today's job market, the job search process has continued to be of great importance. With this in mind, college students should consider ways to obtain assistance with writing resumes and job search letters, networking, interviewing, interview closing and debriefing, and negotiating. The purpose of this study was to investigate and evaluate the effectiveness of a computer assisted job search preparation program based on students' perceptions.

The sample consisted of junior, senior, and graduate level college students receiving instruction in professional skills development or internship preparation at a large, public university in the West. Five diverse subject matter areas within a college that contains clothing and textiles were represented.

Pre- and post-experience questionnaires were used to explore the effectiveness of computer assisted job search preparation. A total of 154 students filled out the pre-experience questionnaire. Forty-one of those students completed the entire study, and 35 of the pre- and post-experience questionnaires could be paired for comparison. Data were analyzed using t-tests, analyses of variance (ANOVA), and Chi-square analyses.

The general finding was that the job search preparation software was effective in building job search preparation skills or competencies. Significant findings were apparent in all four job search preparation skills or competency categories: personal assessment, written communication, verbal communication, and follow-up and negotiation. Subjects' job search background, computer experience, and demographic characteristics did not influence the level of satisfaction with, or evaluation of, the program. Overall, respondents were satisfied with the software program. Consequently, further investigation of the effectiveness and potential application of computer assisted job search preparation programs is necessary.

VIDEO CONFERENCE: DELIVERY OF EDUCATION TO SEWING ENTREPRENEURS

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Satellite and video technology made it possible to deliver the expertise of successful business owners, professional advisors, and educators to existing and potential entrepreneurs in locales throughout the country.

Additional benefits were: live two-way communication between participants and experts, quick dissemination of information on diverse topics, energetic and stimulating format, expert collaboration, multiple sites, and convenience for participants.

National promotion of the video conference resulted in forty-six out of state contacts from fifteen states. One hundred and forty-one resource packets containing supporting materials were compiled and distributed.

Evaluation forms were sent to sites in Alabama and other states. Site facilitators and participants rated the format, content, and reference materials. Site facilitators rated the quality of the satellite transmission.

The rate of return on the evaluation form was low with 12% of the Alabama sites and two out-of-state sites responding. Respondents, all female, rated the program favorably with regard to the topics chosen, presenters, technical delivery, and educational value. Based on a 5 point scale, respondents gave a 3.8 overall rating to each of the three major segments of the program.

Implications of the evaluation are: (a) satellite technology is an effective medium for delivery of information to sewing entrepreneurs in a conference format, (b) evaluation is problematic, thus a strategy to improve the response rate is needed, (c) follow-up is necessary to determine whether the information obtained was used in decision-making and business practice.

This was the second satellite video conference supported by the Department of Consumer Affairs at Auburn University, the Alabama Cooperative Extension Service, and the United States Department of Agriculture-Extension Service.
STRATEGIES FOR USING VOLUNTEERS TO TEACH LIFE SKILL CLOTHING CURRICULUM FOR PRETEENS

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In the North Carolina Cooperative Extension Service, youth life skills clothing curriculum is taught by volunteers with agents serving as resource persons. To focus on the needs of the new volunteers who are currently being recruited to teach the youth clothing curriculum, a one-day agent in-service training session was presented to 48 agents to introduce a new volunteer-led, agent-managed life skills curriculum for preteens.

The training session emphasized characteristics of the new volunteer, and ways to provide more volunteer involvement in program planning, delivery and evaluation. A volunteer satisfaction scale, and a volunteer recognition package were presented. Training also focused on what volunteers should know in teaching preteens of diverse socio-economic environments and cultures including the physical, cognitive, social and emotional development of the preteen. A comprehensive new clothing construction curriculum package was introduced. Exercises were conducted to help agents identify the type of support and resources that volunteers need in order to be successful teachers of preteens.

Five months after the in-service training and introduction of curriculum, agents in 20 counties reported the successful recruitment and training of 64 volunteers who taught 265 preteens in one or more clothing activity settings. Supervising agents responding to a survey reported that volunteer feedback on the new curriculum package was unanimously positive.

A METHOD OF FACILITATING CLASSROOM PARTICIPATION: INSIGHTFUL COMMENTS
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Active participation of students in course lectures is encouraged to achieve purposeful learning (Shafer, 1985). Amount and quality of participation shows students' interest, ability to communicate, and willingness to reflect understanding of course material. However, instructors often encounter one or more of the following problems when they encourage classroom participation: ineffective management of participation, inability to lead the discussion, and wariness of students to participate.

An assignment entitled, "Insightful Comments," was developed as a method of addressing these problems. The objectives of the assignment were: a) to encourage students to participate in class discussions; b) to enable students to identify and utilize written sources of theories; and c) to facilitate the integration of theory into student's thought and problem-solving processes. This assignment required each student to become a contributor to the classroom environment and the instructor to act as a catalyst and facilitator.

This writing assignment has been utilized two semesters and has been completed by 80 students. Overall, the majority of students evaluated the writing assignment as: (1) a great way to get students involved in meaningful, well thought out class discussion; (2) a method of examining different theories and theorists and the styles of research and analyses; (3) an alternate mode of obtaining new ideas and of learning; (4) a method of encouraging students to become familiar with a variety of written sources; and (5) a technique to build student confidence to participate in class. The assignment works well in a teaching environment in which structured lecture outlines are given to students—this amount of structure is necessary for students to be well prepared for each class.

In a conventional curriculum, the role of an instructor as a dictator of content has been discouraged (Bevis & Murray, 1990). This assignment was written to reduce the authoritarianism associated with instructors who use a conventional lecture format to convey material.


FUN AND FANTASY DRESS: COMMUNICATING THE INTIMATE AND SECRET SELF
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The purpose of this research study was to test Eicher's (1981) theoretical framework concerning the communication of the intimate and secret self among individuals who dress in costume. Eicher's conceptual framework, which addresses communication of the self through dress, delineates three social categories: reality, fun and fantasy. In the framework, dressing for reality reflects the aspect of the social structure that addresses occupation, age, and gender—and reveals the public self. Dressing for fun is communicated through dress to close friends and relatives during times of relaxation—and reveals the intimate self. Dressing for fantasy reflects the communication of fantasies—and reveals the secret self. Few studies have targeted men's dress or the areas of fun and fantasy dress. To expand research in these areas, the study was focused on dressing for fun and fantasy, and, because of several hypothesized gender differences in Eicher's explanation of the framework, a second focus of the study was gender considerations within the communication of the intimate and secret self.

The research questions were: Does fantasizing about dress differ depending on an individual's gender? Does dressing for fun or fantasy differ depending on an individual's gender, age, or income? Do significant distinctions exist between men and women regarding their perception of social permission to dress for fantasy? A questionnaire was developed and administered to a sample of 210 individuals—one hundred twelve males and ninety-eight females—who dress in costume. The data were analyzed to determine the effects of the variables: gender, age, and income. Analysis of variance, correlational analysis and chi-square tests were used to analyze the data.

A significant association in fantasizing about dress according to gender was found. Dressing for fantasy was found to increase to age forty as income increases, remain constant between age 40 and 50 regardless of income changes, and decrease after age 50 as income increases. A respondent's perception of social permission to dress for fantasy was not significant.

As a result of the findings, an expansion of Eicher's framework was proposed. The proposed framework would build on Eicher's to allow for a broader range of experiences when dressed in costume.


EATING DISORDERED BEHAVIOR AMONG FASHION STUDENTS: IMPLICATIONS FOR CURricula
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Fashion students are exposed to a slender image of women in America and have added exposure in the classroom. Researchers generally agree that cultural pressures and activities emphasizing appearance and weight may influence disordered eating among young women.

Food diary analyses of fashion students at a Midwestern university indicate inadequate nutrient intake which may signify preoccupation with weight characteristic of disordered eating. This study investigates potential differences in the prevalence of disordered eating behaviors between fashion majors and controls.

Fashion majors (108) and controls (101) completed an Eating Disorder Inventory-2 (1) and demographic questionnaire. Groups were similar in demographics and average scores on the EDI-2 scales. Fourteen percent of all students scored at or above the 94th percentile on the Drive for Thinness scale and scored higher on eight other scales. When categorized by Body Mass Index (BMI = wt./ht.²)(2) high BMI fashion majors scored significantly higher on four EDI-2 scales than high BMI controls.

Thoughtful curriculum development may show the flaw in attempting to copy an "ideal" figure and the harmful attitudes and behaviors that may result. As future image makers, fashion students have the opportunity to insist on the promotion of diversity in fashion resulting in a more realistic cultural image.


THE INFLUENCE OF AGING ON BODY CATHEXIS OF OLDER WOMEN

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The physical body changes progressively during the aging process. Little research has been done concerning older women's body satisfaction as physical changes progress, therefore, the purpose of this study was to determine if aging influences body satisfaction or body cathexis.

The sample of 99 women was divided into two groups with Group I including women age 55 to 64 and Group II including women age 65 and over. Data were collected using a modified Secord and Jourard (1953) Body Cathexis Scale. Upper body cathexis, lower body cathexis, and overall body cathexis were calculated using t-tests.

Significant differences were found between the two groups for upper body cathexis and overall body cathexis. T-tests indicated that Group II (those 65 and over) had significantly lower body cathexis for the upper portion of the body (p<.01) and overall body cathexis (p<.05) than the younger group. Results indicate that body cathexis differences exist between groups of older women and that aging may be an influencing factor.


ILLUSORY CORRELATION AND STEREOTYPE OF CLOTHING BEHAVIORS

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The "Illusory correlation (Chapman, 1967)" is the cognitive bias of a correlation between group membership and behavior type where no correlation in the stimulus. This effect in person perception is related with the initial formation of social stereotypes. The purpose of this research was to investigate the relationship between an illusory correlation and the stereotype of clothing behaviors.

Subjects read through a cardset, these cardsets were composed of clothing behavioral statements that had been rated as modest or immodest by pilot test. In these cardsets, the number of group A cards were greater than the number of group B cards. But the proportion between modest and immodest behavioral statements was equal. Thus, there was no relationship between group membership and modesty of clothing behaviors. After subjects had read a cardset, they were given the dependent measures which consisted of behavior attributions, trait rating and frequency estimates.

In the analysis of these data, phi coefficients were calculated from each subject's 2x2 table. These values were converted to Fisher's Z scores. T-tests were used to test the significance of converted phi values.

In the results of this investigations, the subjects had perceived the relation between group membership and modesty of clothing behaviors. This finding indicates the illusory correlation is related with the stereotype of clothing behaviors.

Reference:
SHOPPING-AS-ENTERTAINMENT AT SPECIALTY RETAIL STORES: INCREASING STUDENT AWARENESS

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The purpose of this multi-disciplinary project was to develop experiential learning experiences for students to increase their awareness of the shopping-as-entertainment trend. The experiences were designed to provide students with on-site observation of professionally designed stores catering to leisure shoppers. Objectives of the field study were to: 1) familiarize merchandising and store planning students with quality store design and custom display fixtures in a themed leisure-shopping environment, 2) provide opportunities for interaction of students with leisure store managers and sales staff, 3) provide opportunities for interaction between merchandising and store planning students, 4) observe leisure shopping activities of consumers, 5) discuss and evaluate the effectiveness of stores visited, 6) utilize information gathered on-site to develop plans for a retail specialty store of the store planning student's own design. A newly opened Disney Store in a local mall was used in this project.

The shopping-as-entertainment trend is projected to increase as retailers and store designers strive to satisfy consumer demands. The experience of multi-disciplinary, structured visits to specialty stores can add to students' understanding of the "real-world" and better prepare them for their future careers in retailing or store planning.

INTERPRETING LIFESTYLE MERCHANDISING THROUGH A TREND BOARD: AN UPDATE

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In retailing the use of trend boards is an established method of communicating trends. Also, trend boards have typically been assigned to Merchandising classes. This exercise takes trend boards a step further and requires the student to define and profile lifestyle patterns of a market segment in the presentation of trends. The student first selects an area of apparel (i.e. sportswear) Then the student identifies a market segment and a profile of the consumer including gender, age range and lifestyle patterns (values toward education, family, income, careers, leisure activities, religion, self-concept, risk taking, fashion, the arts, etc.) The student then researches upcoming trends by completing a survey of all fashion resources. Using a visual trend board format the student then presents 3-5 upcoming trends suitable to the consumer's lifestyle. A written report or fashion forecast folio accompanies the trend board. This has been a successful assignment and will continue to be used in the Merchandising II class.

In addition, the trend board exercise provides an excellent opportunity to build a liaison with a retail company. Since trend boards are seasonal, retailers are usually willing to share past boards, materials and techniques with faculty and students. During this exercise a field trip is arranged to Kmart International Headquarters in Troy, MI so students can observe the development and use of professional trend boards.
INVESTIGATING CAREER EXPECTATIONS OF FEMALE MERCHANDISING STUDENTS: IMPLICATIONS FOR CURRICULA DEVELOPMENT

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Despite popular portrayals of women's upward job mobility, few women actually advance to upper-level positions. Managers who have well-defined career expectations are more successful than managers without well-defined career goals. Therefore, an understanding of female student career expectations as a component influencing career advancement can provide the opportunity for improved curriculum development.

Purpose: The purpose was to examine the relationship between person-centered variables and career expectation variables of upper-division female students majoring in merchandising.

Methodology: Subjects consisted of 392 female, upper-division, undergraduate students majoring in merchandising. A questionnaire solicited career expectations consisting of desired position, organizational type, and annual income immediately following graduation and selected person-centered data. It was hypothesized that career expectations would vary according to person-centered variables. Chi-square analyses were utilized to demonstrate differences.

Results: Subjects were homogeneous in regard to gender, age, ethnicity, enrollment and graduation status, internships, overall GPA, employment experience, and employment status thus, no statistically significant relationships were found between students' position, organization, or salary expectations with respect to the person-centered variables. The majority indicated similar career expectations of managerial positions (72.2%) in specialty and department stores (79.6%) with a salary ranging from $10,000 to $20,000 (95.9%).

Conclusions: Results confirmed that individuals of the same gender with similar academic preparation and at the same career stage appear to have similar career directions. Thus, educators should introduce a wider variety of organizational cultures and structures and provide realistic career previews through experiential techniques.
MERCHANDISING REVISITED: NEW DIRECTIONS FOR THEORY & RESEARCH

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The discipline of textile and clothing is constantly being reshaped by internal and external forces. The most obvious forces stem from the increasing focus on business application in merchandising program accompanied by an identity crisis within home economics (Paoletti, 1992). These developments represent significant challenges to the accepted paradigms within the field of merchandising.

A review of textbooks currently used in merchandising indicates that the most accepted concept of merchandising is the process of planning and managing the merchandise mix. This present paradigm is vulnerable to attack from several directions.

First, this comparatively rather narrow scope makes merchandising's business applications limited. The need for a broader business management background has been recognized in merchandising (Horn, 1984).

Secondly, the challenges of today's changing world have brought more significance to the strategic perspective. The strategic perspective holds the promise of enriching, expanding and increasing the relevance to the industry.

Finally, the emphasis on business application has made the textiles and clothing discipline less and less connected to other areas in home economics (Paoletti, 1992). The continuing affiliation of the discipline within home economics should be re-addressed.

Productive theory and research will enhance the competitive position of the discipline if it expands the traditional paradigm to incorporate more broad strategic perspective of business and a sensitivity for consumer and societal needs. Productivity will be further assured by building upon existing conceptual strength within textiles and clothing and focusing these strengths on the development of the mid-range (contingent) integrative theories.

Strengths of the discipline include the knowledge of the product category and consumer orientation. The contingent theories for merchandising can establish situational guidelines for managers, which preceding theorists proposing universal principles were unable to provide.

Reference


UTILIZATION OF GOVERNMENT DOCUMENTS TO INTERNATIONALIZE UNDERGRADUATE APPAREL MERCHANDISING CURRICULUM

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U.S. apparel and textile firms are becoming more actively involved in the international marketplace. As a result, additional emphasis is being placed on sensitizing apparel merchandising students to current international issues and trends.

Students in a senior level course were assigned a final research project designed to integrate and synthesize information from several courses. The objective of the project was to place students in a "real-life" scenario. Each student a) selected an apparel product, b) identified a foreign country, and c) made the decision whether to produce or market the product in the selected country. Students were to analyze controllable and uncontrollable variables pertinent to the scenario.

To facilitate in the process, students were instructed to use the Government Documents area in the library. Government documents are often an underutilized resource in academic libraries. Collections of federal government documents contain current information from a variety of federal agencies and are a valuable resource. A bibliography of select government documents and a guide to using a U.S. Department of Commerce compact disc system were distributed to students. Subject areas covered in government documents pertaining to the students' project included exporting & importing, tariffs & treaties, foreign economic trends, statistical data, public policy issues, and trade relations.

At the end of the semester, students prepared a written executive summary and presented information to the class. Students identified the link between project objectives and the use of government documents as a valuable addition to the completion of their assignment. Based on initial evaluations the assignment will be continued in the future and plans are underway to integrate the use of government documents as a resource in additional courses within the curriculum.
INSTRUCTIONAL PROJECT AT
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In Fall, 1992, the Guangdong Silk Company, a branch of one of China's largest vertically integrated textile producers/exporters, invited two university faculty members to work with a group of nineteen employees in its company headquarters in Guangzhou, China. Guangdong Silk hoped that as a result of an immersion course in textile/apparel marketing methods that its employees would be prepared to introduce the firm's own apparel to the US.

While understanding the company's desire to find a formula for successful penetration of the US market, the complexity of this undertaking for a state-controlled firm operating with limited ability to engage in routine marketing activities led the faculty-trainers to provide a broader, more descriptive introduction to US society and its fashion industry.

Goals were: 1. To introduce the group to the US retail/apparel industry; 2. To explain the social functions of dress in the US, including the use of dress to formulate and communicate individual identities, and then to relate these concepts to trend formation; 3. To examine and discuss the characteristics of successful US fashions; 4. To introduce the marketing concept, particularly as marketing is done in the fashion industry; and 5. To introduce the concept of teamwork as a strategy for solving problems, especially as a strategy for the fashion product design/development process.

A combination of instructional methods was found to be most effective. The first was traditional reading, lecture and discussion with accompanying vocabulary-building. The second was the use of US feature films as teaching tools. Working Girl was used repeatedly to illustrate socio-cultural and economic influences on dress. The most effective method was the group project. Teams were asked to develop a fashion product for a specific US direct marketing outlet using company-produced textiles and to present the project to company management. The teams used merchandising boards they produced with the guidance of its fashion designer-members.

Several months after the conclusion of the training, Guangdong Silk Co. sent ten of the original trainees for a year of further study at Drexel University; evidence, we feel, of the program's effectiveness.

IDENTIFICATION OF CONSUMER
APPAREL PROBLEMS: A
UNIVERSITY–INDUSTRY LINKAGE

Dr. Nancy Cassill, UNCG
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The International Fabricare Institute data base contains information about "problem garments," which are consumer apparel products that have failed during the drycleaning/laundering process. A collaborative effort between a university and IFI resulted in the development of a statistical model with results being shared with the industry.

The purposes of this study were to a) establish a collaborative effort between a university and IFI to analyze the IFI-FTC data base and b) identify cotton and cotton blend problems received by the IFI Analysis Lab 1991-1992.

Data analyses was conducted with manufacture problem records (total 3820 records). Statistics were used to identify cotton and cotton blend problems, which account for 30% of all IFI Analysis Lab garment problems.

Results indicated cotton and cotton blend problem characteristics differ—cotton problems are not homogenous. The greatest number of cotton problems occur with a) machine wash care label and a weak stripe and b) hand wash/dryclean care label and water soluble dye problems. Domestically produced private label dresses represented the greatest number of cotton blend problems.

Results were shared with industry, and assist with a proactive approach to increased apparel quality.
ATTITUDES TOWARD COMPUTER TECHNOLOGY: COMPARISON OF RETAIL BUYERS AND APPAREL MANUFACTURERS

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Computer technologies that have the potential to revolutionize apparel manufacturing and retailing are becoming increasingly available. Implementation of computer technologies requires not only significant monetary investments, but also necessitates sweeping changes in management and operations. Apparel manufacturers’ and retail buyers’ decisions are no longer being driven by price and quality alone, but also by services that advanced technologies can provide. In many cases, attitudes held by key personnel toward new technologies can enhance or hinder implementation. Continuous developments in new technologies within the apparel industry are transforming the way apparel products are manufactured and retailed, yet limited information is available regarding the impact of these technologies on the people implementing the systems.

This study was designed to investigate and compare manufacturers’ and buyers’ attitudes toward computer technology. Fifteen Likert-type attitude statements were developed by the researchers. A pilot test of the instrument resulted in minor changes. A total of 105 usable questionnaires were returned. T-test results indicated that buyers’ and manufacturers’ attitudes differed significantly on 5 of the 15 attitude statements. A discriminant analysis showed that the same five statements significantly discriminated buyers from manufacturers. Manufacturers’ responses were more positive than buyers’ responses on four statements.

Realistic, favorable attitudes toward computer technology can ease the transition into and add to the success of partnerships. Even though differences were found, overall responses of both buyers and manufacturers were positive.

Findings of positive attitudes toward computer technology indicate that both buyers and manufacturers recognize that computer technologies must be implemented. As the apparel industry moves into the 21st century, the need to embrace newer technologies will increase as the U.S. industry competes in a global marketplace.

EVALUATING ETHICS OF MARKETING PRACTICES: FACTOR ANALYSIS OF THE BUSINESS PRACTICE QUESTIONNAIRE

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In the past decade, the goals of research on individuals’ perceptions of ethical marketing practices have been (1) to analyze consumers’ evaluations of business practices to improve communications and (2) to analyze students’ evaluations of business practices to design curriculum that fosters critical thinking regarding ethical issues. A common measurement instrument is the Business Practice Questionnaire (BPQ) by Shuptrine (1979) that consists of 20 situations concerning marketing practices varying in degree of ethical questionability. The purpose of our research was to determine the conceptual validity of the BPQ vis-a-vis factor analysis and the internal consistency of the BPQ when using this instrument with students.

Subjects participating in the study were 191 male and female students ranging in age from 18 to 55; mean age of 21. Subjects represented a cross-section of majors and class standing.

A principal components extraction with varimax rotation indicated a seven-factor solution, accounting for 57% of the variance. Items loading .50 or greater on a single factor were retained; no items loaded .50 or greater on more than one factor. Factors included: Corporate Social Responsibility (4 items), Marketing Strategies (5 items), Individual Social Acceptance (3 items), Environmental Issues (3 items), Integrity Issues (2 items), Individual Choice (2 items), and Fairness to Customers (1 item). Internal consistency of the BPQ, estimated by Cronbach’s alpha, was .742.

Our investigation extends research focusing on the utility of the BPQ. Evaluations of the ethics of marketing practices appear to be multidimensional including perceptions of a company’s social responsibility, integrity, fairness to customers, provision for individual choice and social acceptance, and concern for the environment. Researchers investigating marketing ethics need be sensitive to the multi-dimensional perspective of the construct when using this instrument.

EFFECTS OF SITUATIONAL VARIABLES ON CLOTHING PURCHASE BEHAVIOR IN KOREA

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The purposes of the study were (1) to suggest the types of consumer situations related to clothing purchase process, (2) to investigate the conceptual framework of situational variables, (3) to find out the relationships between situational variables and consumer characteristics, and (4) to determine the effects of situational variables and consumer characteristics on clothing purchase process. A self-administered questionnaire was developed based on the focused group interview and the previous research. Samples of 534 housewives living in Korea were randomly selected by visiting door-to-door.

Results were that (1) three types of consumer situations affecting clothing purchase process were defined, such as intended usage situations, communication situations for information, and purchase situations. (2) The usage situation recognized by consumers were generally divided four types by two dimensions, such as the formality and rigidity of normative clothing style, and consumers responded differently to the communication situation and the purchase situation according to their intended usage situation. (3) The relationships between the situation variables and consumer characteristics were revealed that consumers with high clothing involvement or high self-monitoring traits were more affected by situational variables than consumers with low clothing involvement and low self-monitoring traits. (4) It was confirmed that common situational effects revealed in the process of clothing purchase as did in the consumer behavior of other consumer goods, and consumers were differently influenced by situational variables and the consumer characteristics on clothing purchase behavior according to their intended usage situation.

A STUDY OF THE CONSPICUOUS CONSUMPTION OF CLOTHING ACCORDING TO SOCIAL MOBILITY IN KOREA

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Since the 1960s, economic growth and industrialization have changed the buying behavior pattern in Korea. That is to say, the level of economic growth created the materials oriented tendency. And the traditional classes depending on social status was replaced by new classes depending on economic power. This raised social mobility and dynamic society was cultivated. Moreover, after the mid-1970s, conspicuous consumption appeared in the whole field of life, especially in fashion product shopping behavior.

T. Veblen (1912) used this word, conspicuous consumption to explain the tendency of buying expensive goods in order to show their wealth or social status. An relating Veblen’s concept to modern society, Kaiser (1985) said, at veblen’s period, conspicuous consumption places importance to high-level of leisure class such as ‘wool’ or ‘silk’, however, at present, ‘designer logos’ or ‘signature goods’ play its role. And we can find this phenomenon like Kaiser’s conspicuous consumption of clothing very easily in Korea.

In this study, I used questionnaires to investigate the difference in clothing consumption according to the social mobility into higher class as well as the degree of passion for upward shift. Besides, purchased clothing are many part by the item, according to brand, place of purchase, and the way of payment, and then relations with social mobility are analyzed.

In conclusion, we can see remarkable differences in conspicuous consumption of clothing according to the social upward shift and the passion for upward move. Social upward shift makes no difference in purchase of clothing but the desire for upward shift gives rise to conspicuous consumption of clothing. And the analysis of the purchased clothing during investigating periods (one month of April, 1992) certified these results.
EVALUATION OF CLOTHING QUALITY: A MULTICUE ASSESSMENT

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How consumers evaluate clothing quality continues to be an elusive concept. Studies that have only measured the effect of concrete attributes on consumers' perceptions or judgements of quality have resulted in mixed findings. Previous free-elicitation studies of how consumers evaluated quality indicated that the concept appears to be multidimensional and thus should be measured on factors other than concrete attributes. The purpose of this study was to assess how consumers evaluate clothing quality using a multicue survey.

The measurement instrument developed included not only concrete attributes related to clothing products, but also concepts that may reflect other dimensions that influence perceptions of clothing quality. The questionnaire incorporated statements to measure the use of intrinsic, extrinsic, performance, affective, and aesthetic cues in evaluating quality. Two techniques were developed to measure the cues used by consumers to evaluate clothing quality. The first was a card sort in which subjects were given cards printed with a cue that could be used to assess quality. The cards were ranked by the subjects based on the importance of each for evaluating quality. The other was a questionnaire that the subjects used to express agreement or disagreement of cue statements for assessing clothing quality on a five point Likert scale.

Sixty students enrolled in beginning textiles and basic clothing construction courses completed the questionnaire and card sort on the first day of class. The majority of the students were female (90%), single (88%), and between the ages of 18-24 (76%).

An item analysis revealed that 70% or more of the respondents agreed or strongly agreed that they used 18 of the cue statements to evaluate clothing quality. Of these statements, 28% were aesthetic cues, 33% were extrinsic, 17% performance, and 22% intrinsic.

Cues which are often used to evaluate the objective quality of clothing (seam width, stitch length, seam type, etc.) received neutral ratings for this group. This may be due to their lack of knowledge of the importance of construction cues to the overall quality of a garment. On the other hand, they strongly agreed that aesthetic cues, not normally measured in objective quality (fashionability, style good for my figure, etc.), were used to evaluate clothing quality. Additionally, extrinsic cues such as price and brand name, and store were used to determine quality.

These results indicate that consumers use cues other than intrinsic and extrinsic cues to evaluate clothing quality. Therefore, consumers' perceptions of clothing quality should be assessed with measurement techniques incorporating more than concrete attributes.

FEMALE TEEN SHOPPING PRACTICES

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People are often attracted to others according to the fashionability of their clothing. Thus, clothing is an important tool for enhancing social acceptance. Frequently, teens are especially insecure and swayed by commercial and peer influences. In 1991, according to Beth Scherer of Castner Knotts, female teens spent $55 billion on clothing, accessories, and cosmetics. An understanding of female teens' shopping practices is important for apparel and textile professionals and merchandisers.

This research surveyed female teens' shopping practices in a southern town with a population of approximately 20,000. Female teens (n=244) in the tenth, eleventh, and twelfth grades from a public, a private, and a county school were surveyed in the fall of 1992 to determine factors influencing their shopping practices. A majority of the subjects spent between $50-$100 per outfit on clothing. They used their parents' money for shopping because they did not have a part-time job. The majority of respondents stated that their peers had the greatest influence on their clothing choices. The majority also favored shopping with their mother or female friends.

Department stores were the preferred place to shop followed by outlet stores, specialty stores, and mail-order catalog. Over 62% of the teens surveyed were satisfied with their purchases; 36% stated that they were satisfied with their purchases half of the time; and 2% were never satisfied with what they bought. In order of descending influence sources of teen fashion information were magazines, peers, television, movies, fashion shows, and newspapers. Style was rated to be the most important characteristic affecting clothing decisions. The majority (55%) of the respondents called themselves fashion followers.

In summary, a variety of factors influence the shopping practices of the female teen. Respondents indicated that they shopped with their mother or a female friend and that their purchases were spontaneous. Parents funded the shopping trips, but peers had the greatest influence on clothing choices. Style was rated the most important characteristic affecting clothing choices. Magazines and peers were the most frequently-used sources for fashion information.
CONSUMER PREFERENCES FOR TIME SAVING CONVENIENCES WHILE APPAREL SHOPPING

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The purposes of this study were to: (1) determine consumers' perceptions of time pressure and its relationship to selected demographic characteristics; (2) determine if there is any difference between time pressured and non-time pressured consumers in selection of retail outlets in terms of time saving conveniences offered, (3) determine which time saving conveniences consumers use and desire when apparel shopping for themselves in retail outlets; and (4) identify the time saving conveniences currently offered by selected apparel retailers. Results are discussed below. (1) Single parent families showed a higher degree of time pressure than expected while dual parent families showed less time pressure than expected. As the number of years in current marital status increased, time pressure scores decreased. As the number of children living at home increased, mean time pressure scores increased. (2) More non-time pressured than time pressured respondents rated the following items as important factors in outlet selection: mirrors in the shopping area and reputation for fashion and quality. (3) Being able to order by mail approached significance with more time pressured than non-time pressured people reported having used this convenience. (4) The most frequently mentioned retail time saving services offered were free parking and accepted bank cards. In comparing desires of consumers for time saving conveniences to those offered, it was found retailers were meeting consumer needs in the areas of merchandise and store location, sales associate assistance, rest rooms, checkout, and return policy.

MEASURING FASHION INVOLVEMENT

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The purpose of the study was the development of a valid and reliable scale, that is not age specific, to measure consumer involvement with fashion goods. Criteria for the scale indicated it should contain more than three items, as alpha increases when more items are included, and it should be relatively short and easy to administer.

Thirty six items in Creekmore's Importance of Clothing Questionnaire (1971) were used for item generation and provided content validity. The item pool was administered to 175 women ranging in age from 18 to 65 who work for a large bank in the midwest, as well as to 78 undergraduate women at a midwestern university. A factor analysis with varimax rotation was done and rotated items which loaded onto one factor at .49 or higher were retained. A scree test was used as the factor extraction criterion (Devellis,1991). The scree test revealed one primary factor for both groups of female subjects.

Nine items loaded onto Factor I for working women subjects and showed a coefficient alpha of .90. College women differed from the working women on two items, which were eliminated. Reliability was tested using a Guttman Split Half (.85) and Spearman-Brown (.88).

The resulting eight item measure demonstrated reliability and validity and is appropriate for use with female subjects ages 18 to 65.


MINI-EXHIBIT PROJECTS IN
HISTORY OF TEXTILES

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Each student prepared a panel
development and accompanying leaflet,
explaining one type of historic or
traditional textile, selected from a
list of topics. Subjects represented
many parts of the world: rya rugs, kapa
cloth, Chinese carpets, Seminole
patchwork, plus 30 other textile arts.

Goals of the mini-exhibit were
to expand students’ knowledge beyond
the lecture content of the course; to
present accurate information in a
professional manner; to combine verbal
and visual material creatively; and to
enhance computer skills in formatting
text.

The instructor guided class
members in choosing sources, writing
concisely, arranging material for
clear communication of an idea, and
presenting a defined subject in a
visually appealing form.

Each student summarized poster
content orally in one of two sessions,
in which half of the class formed an
audience for the other half—the
presenters. Audience members received
copies of the leaflets that expanded
on the content of the posters.

Grades for the projects were
based on accuracy, impact, visual
appeal, choice and use of sources,
balance of information, and overall
professionalism. In future the
instructor will allot more time for
presentations; will give further
instruction of writing concisely;
and will arrange for small groups
to critique poster drafts.

AN INTERDISCIPLINARY ALLIANCE
BETWEEN THEATRE AND TEXTILES AND
CLOTHING

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An interdisciplinary alliance between
the Textiles, Clothing and Fashion Merchandising
program in the Division of Family
Resources, College of Agriculture and Forestry
and the Costume Design program in the
Division of Theatre, College of Creative Arts at
West Virginia University has led to a highly
interactive program. Objectives of this liaison
included the: 1) development of interdisciplinary
academic support, 2) coordination of
teaching assignments, 3) execution of faculty/
student exhibits, and 4) mentoring students
across disciplines. Instructors in both programs
worked together to coordinate the timing of
design and illustration projects within their
classes. These projects were organized with a
secondary objective in mind, the development
of material for display.

Original designs and illustrations were
executed for display in a gallery exhibition
entitled "Current Reflections," which focused
on the relationship between historic costume
and contemporary apparel design. Instructors
from the two programs developed the theme
and format for the exhibition and juried student
entries for inclusion. Faculty work also was
included. Students were involved in mounting
the exhibit and in the opening which included a
multimedia presentation. The exhibit was
mounted on campus and at the state capital
complex. Plans are underway for remounting
the exhibit elsewhere in the state and for
repeating the process for a second exhibition.
This interdisciplinary alliance has led to
mentoring of students in both programs. This
has enabled students to: 1) observe their
professors working on a project outside the
classroom; 2) understand the amount of effort
required to execute a major exhibit; and 3) work harder on class assignments. The current
exhibit was well received.
THE WOMAN'S EXCHANGE:
MARKETING APPAREL AND NEEDLECRAFTS
IN THE NINETEENTH CENTURY

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Marketing of apparel and needlecrafts is a challenging problem which demands continued creativity and research, even in the late twentieth century. Many schools and universities offer courses and some devote entire programs to the subject. However, craftpersons and entrepreneurs wishing to sell their various designs identify marketing as the most difficult aspect of their businesses today, just as it was 100 years ago.

During the Industrial Revolution in the United States working class women had few choices for earning income. Most women in that group either worked in sweatshops or as industrial homeworkers. Choices for earning money were also limited for women in the middle and upper middle classes but for different reasons, most influenced by societal pressures. These women lived by certain Victorian standards which did not look kindly upon women working at all, let alone in a factory. Still, many of these more privileged women would "fall upon hard times" due to the illness, death, or personal problems of a spouse. Saving face was of utmost importance and when financial problems arose very few women would admit they needed assistance. The fortunate woman who could teach music or tutor did not meet society's condemning eye but not many women possessed those talents. As a result, earning income had to be done surreptitiously. Most women of that period were skilled in some needlecraft or decorative arts. Aprons, dollies, baby clothes, mittens, and other assorted handmade items served as the only possible items they could produce for sale. Where to sell their handiwork became a major problem.

The Woman's Exchange, founded in New York City in the 1880s, provided the much needed outlet for women who had to earn money from their crafts. The Exchange accepted the products white maintaining anonymity for the women. As the popularity of the Exchange increased, it received more goods than it could possibly sell, many of them poorly designed and crafted items which no one would purchase. The Woman's Exchange was able to handle these challenges and developed into a organization which provided more than merely a shelf on which to display crafts. The Exchange became the model for similar operations and eventually expanded to cities throughout the United States.

The concept of the Woman's Exchange founded over 100 years ago is not unlike the current operation of consignment shops and exchanges in existence throughout the country today. Programs in textiles and apparel tend to ignore the concept of exchanges, yet it bears reminding that it is a concept with a long and successful history, one that students would find as relevant to society today as it was in 1880.

EMPLOYER DRESS CODES:
ASSET OR LEGAL LIABILITY

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After surveying 26 retailing companies that had recruited and employed graduates from the ESU fashion merchandising program during the past few years, and reviewing their documented dress codes for employees, a review of litigation was conducted to determine the legality of such regulations.

With research support for the existence of a dress code in the service/sales sector (Bowman & Hooper 1991, Galin & Benoliel 1990, Harris 1989), there are some legal considerations to include in the developmental process of these requirements.

Most challenges to employee dress codes have been filed under the umbrella of Title VII of the Civil Rights Act. Successful cases include elements of adverse impact, gender differential application and/or degradation.

Employers who want to regulate employee appearance should be aware of past legal decisions. The design and implementation of such plans should be done with extreme care. Courts generally confer that employers have the right to require that employees adhere to grooming and dress codes and appearance standards that conform to accepted community standards of appearance. Those rules must also be enforced in an evenhanded manner (Mapes-Riordan 1991).

Students entering their careers should be aware of the existence of such standards and should be capable of evaluating their rights and responsibilities as employees. As possible future employers, they must be prepared to effectively design and enforce appearance standards.


THE MEANING OF THE VEIL: PHYSICAL FORMS AND CATEGORIES OF ANALYSIS IN THE SOCIOCULTURAL CONTEXT

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Abstract

The use of the veil and its variations in the Middle East was examined in a review of literature in order to uncover its meaning within the deeper structure of the societies in which veiling is practiced and to determine the categories for analysis of its meaning and use. The literature revealed a variety of physical forms of the veil including some possible contemporary adaptations. It appears that in some cases shared meanings may exist among those using a variety of forms, but in other cases the meanings may not be shared among those using an identical or similar physical form of the veil.

Also revealed were analytical categories for explaining the meanings and functions of the veil. Veiling appears to be embedded in the more encompassing rubrics of religion, including maintenance of Islamic values and symbol of Islamic membership; maintenance of social order with regard to sexuality, gender and social negotiations; political factors, including acceptance or rejection of political ideologies, and economic factors.

The study revealed a necessity for considering individual identities of women, their expression in dress, and the meaning which the veil holds for them within the total sociocultural context rather than making generalizations based on any single analytical category for all women.

MANY QUESTIONS, NO ANSWERS: AN INSTRUCTIONAL MODEL INTEGRATING SUSTAINED EXERCISES IN CRITICAL THINKING AND COLOR ANALYSIS

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Guided by critical thinking strategies proposed by Paul (1989; 1990) and others, I restructured a unit on color theory to involve students in sustained exercises around a controversial issue: personal color analysis. The mechanics include an interactive lecture on color theory and terminology; assigned reading in popular sources on color analysis; small-group exercise and discussion activities which involve students in experiments with alternative methods for determining skin undertones and harmonious color choices; and short written essays in which students analyze problems arising from the exercises and recognize and deal with the inconsistencies they have uncovered. Many questions are raised, but the instructor offers no answers.

The group work gives students practice with essential thinking processes: observation, data collection, description, and comparison and contrast. The short essays provide practice in summarizing, raising questions, critiquing and evaluating. The activities lead students to discover that to communicate and exchange ideas they must utilize the language of color theory, and that answers to their questions on this subject must be based on their own critical thought. The exercises also provide a sustained period of color work during which students’ sensitivities to and awareness of the effects of color interactions are enhanced.

References
PORTFOLIO DEVELOPMENT: A PRACTICAL EXPERIENCE

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One of the ultimate goals of students majoring in apparel design is to develop a professional portfolio which will help them be successful in finding employment in the apparel industry.

The purpose of this project was to offer practical experience in developing a portfolio that would meet the criteria of a professional portfolio and could be used for interviewing. The project objectives, developed jointly by the instructor and a former designer of a major New York apparel manufacturing firm, were to (1) prepare a portfolio which included a portfolio case, lead page; design illustrations, both manual and computer generated; garment design specifications; photographs of designs; published materials on designs (optional); sketchbook; and letters of certificates or awards for design work; (2) prepare a resume; (3) participate in a mock interview in which the students presented their portfolio; and (4) participate in a critique of the portfolio with the instructor and designer.

Each student was required to meet with the instructor and designer for a conference at the beginning of the semester. During this conference the student's design work was critiqued. The students were given directions as to how they should begin to develop a portfolio and ways in which the portfolio could be strengthened. They were required to bring in the completed portfolio for evaluation and to participate in a mock interview at the end of the semester. The interview was taped to enable the instructor and designer to critique the student's performance. The portfolio was evaluated using an evaluation form developed by the instructor and designer. The student with the most professional portfolio and who had interviewed best was recognized for their outstanding performance.

The majority of the students agreed that the project objectives were met, was a valuable learning experience, and they had learned basic concepts that would apply in portfolio development and maintenance. The project will be continued in the future.

CHAMORRO-FILIPINO DESIGN INCORPORATED INTO A MEDIATED FASHION CURRICULUM AT THE UNIVERSITY OF GUAM: A MODEL FOR THE FUTURE

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A mediated design curriculum was developed to incorporate Chamorro-Filipino clothing traditions into a contemporary context of the professional field of apparel design. The fashion curriculum included the use of media tools to record and examine the processes of shared human experience. The purpose of this curriculum model was to make students aware that their Chamorro and Filipino ethnicity is a viable background for entry into the professional field of fashion design and merchandising.

The 1993 fashion forecast is variations of ethnic dress. Clothing designers in major fashion centers around the world are presenting very diverse global concepts in their current runway shows. The major objective of the course Fashion Design is to have students experience the role of the designer in the design, production, and distribution of apparel. In Fall 1992 the culminating activity for students was a fashion show presented to the community. The presentation of students' creative work was videotaped by the media center staff.

On Guam the traditional costume for Chamorro and Filipina women is the mestiza. Students researched local ethnic costumes and current fashion publications. Next they illustrated their creative ideas for updated variations of Guam’s mestiza. As they constructed their garments, students collaborated on the production of the fashion show. In an effort to combine fashion with tradition, the elderly or man'amko were invited to model their traditional mestiza.

During the semester, the creative and technical work of students was mediated by a media specialist. The intention was to provide both a study tool and an historical document in order to expose the process of design to a larger continuous audience, thus, increasing its credibility over time.

Student evaluations of the project were definitely positive. Faculty and students seemed to develop a camaraderie. The continuous implementation of this mediated design curriculum will foster individual student development through reliance on the validity of ethnicity and will assist in increasing the community's awareness of traditional costume and design.

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The Hmong, recent immigrants to Lansing, MI, brought with them a unique tradition of decorative textiles called paj ntaub. Paj ntaub produced in the local area in 1977-1979 was compared to that produced in 1981-1983, to determine if changes had occurred in design motifs, color choices, size of pieces, and ornamental construction techniques.

The 1981-83 sample of 35 pieces came from a collection purchased by the University Museum. The 17 base line textiles, 1977-1979, were collected from sponsors, instructors, and refugee resettlement agency representatives. Pieces were dated by comparing inventory lists from Refugee Services with arrival dates of the artists and with purchase dates. Pieces were eliminated from the study if they could not be dated, were not produced in the local area, or were produced as accessories.

Color measurements were made according to ASTM procedure D1729-82, using the Munsell Book of Color (1971) under standard lighting conditions. Average length and width of borders and center block were based on measurements made at three different places. The area of center block and borders was expressed as percent of total area. Analysis of variance, Chi-Square and the z test for proportions were used to test for statistical significance.

Fewer design motifs were used per piece in 1981-1983, but the differences were not statistically significant. Hue and value did not differ significantly; red hues and darker values were used in both samples. Differences in chroma saturation were statistically significantly with pieces from 1981-1983 containing more intense chroma. The average total area and the average number of borders per piece decreased significantly in 1981-1983. The area in borders as a percent of the total did not differ significantly in the two periods. Ornamental construction technique did not differ significantly, but there was a trend for greater use of embroidery and less reverse applique in the later period. The average number of ornamental construction techniques used to create the center design decreased significantly in the later period.

Changes in paj ntaub appear to have been based on marketing advice provided by Americans working with the Hmong, in order to appeal to the American market.

POSTER SESSIONS REVISITED: A STUDENT RESEARCH AND CREATIVE ACTIVITY CONVOCATION

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Objectives: Conducting research in clothing, textiles, and merchandising is essential for further development of the discipline. Preparing students to engage in research is one of the primary responsibilities of university educators. Research is a complex activity and shaping is necessary before students are able to behave in an independent manner. An important aspect of the developmental process is helping to ensure that reinforcers are available for students' research efforts.

Documentation of Need: The most potent research reinforcers are publications and presentations, however, obtaining these reinforcers requires varying degrees of skill and effort. The amount of time, effort, and skill required for preparing journal submissions can be overwhelming to students. Poster sessions offer a less demanding alternative and are considered to be an efficient for presenting student research.

Project/Material Design: A college-wide Student Research and Creative Activity Convocation was designed using a poster session format to encourage research activities among students. Research submitted for review was conducted in collaboration with faculty and included the title, author, and a 500-word abstract. Each submission was reviewed by three faculty members. Acceptance was based on the problem being investigated, adequacy of the methods and controls, nature of the results, and significance of the conclusions. After an abstract was accepted, the student prepared the poster for presentation with assistance from the faculty coauthor.

Effectiveness of Activity: Responses have been very favorable. Attendees want the program continued on a yearly basis and rate the convocation as "excellent" or "very good." Faculty and presenters indicate hearing only positive comments about the convocation. As a result of the confidence and experience gained from participating in the local convocation, students have had research accepted for presentation at conventions.
STUDIES OF TEXTILES
WITH THE ENVIRONMENTAL SCANNING
ELECTRON MICROSCOPE

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Scanning electron microscopes (SEM's) are important instruments for examining textile structures. The high vacuum and imaging process in SEM operation impose several important requirements for specimen preparation, such as, coating of non-conducting specimens with a thin layer of conductive material. The environmental scanning electron microscope (ESEM) was developed to overcome the disadvantages of the regular instruments. In ESEM the electron beam travels through a wide spectrum of vacuum environments, from $10^4$ to $10^7$ Torr in the gun chamber to 1 to 50 Torr in the specimen chamber. Any type of sample can be examined without coating and dynamic phenomena can be observed. Fibers are examined without coating and structural features are clearly evident.

A series of images were taken of polypropylene fabric injected with water directly in the specimen chamber. The polypropylene does not absorb the water drop, which remains on the surface of the fabric, and after 5 minutes the water evaporates. A similar phenomenon is observed for polyester fabric injected with water. However, when the same polyester fabric is treated with 10% NaOH for 1 hour at 60 C, and then examined under the ESEM with water injection, the drop of water on the fabric surface is not visible, indicating that the treated fabric absorbs water more readily.

Another series of micrographs were taken of cotton fabric at room temperature and at 60, 80, and 100 C, with and without injection of water. After heating to 60 C and water is injected at this temperature, the fibers appear smaller in both length and width. This change is more apparent as the temperature of the specimen is raised to 80 and then 100 C with additional water added. At 80 C, before injection of water, there is slight crimp development in some of the fibers. This crimp is more evident in the final stage, where the fibers in the yarn are significantly attenuated and more cramped, resulting in overall shrinkage in the yarns. The micrographs show the shrinkage of the fibers and the deleterious effect of higher temperatures.

PESTICIDE PENETRATION OF PROTECTIVE COVERALLS IN A FIELD TEST
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Agricultural workers who use chemicals on crops in the field have need for the optimum protection that clothing can afford. Use of alternative fabrics may offer choices to workers. Objectives of this study were: (1) field test coveralls of cotton/polyester (with and without fluorochemical finish) for barrier properties against cythion, an organophosphate, and (2) identify areas where penetration was greatest. This study was done in conjunction with Southern Regional Research Project S-208.

Coveralls were made of a 75/25% cotton/polyester blend poplin fabric which had been desized, scoured and bleached, with durable press finish; addition of fluorochemical finish was only difference. Garment design included front zipper; hook and loop closures at wrists, ankles, and neck; and stand up collar. Workers wore the coveralls as they performed spraying of cythion on cotton from an open cab tractor with boom type sprayer. Collector layer patches were secured on underneath side of the coveralls; three replications were performed. Following exposure the patches were removed and collector layer frozen for analysis by gas chromatography. Data were analyzed using Statistical Analysis System (SAS).

There were no significant differences in the barrier properties of fluorochemically finished and unfinished coveralls. These finishes are more water repellent than oil repellent. Therefore, the oil soluble cythion may have altered barrier properties of the fluorochemical finish. Differences detected in penetration in the garment suggest exposure was greatest in lower than upper portions of front and back. Total penetration on front was more than two times that on back. No pesticide spills were reported so differences in exposure and level of pesticide penetration may be partially attributed to convevance used during spraying and abrasion of the protective garment.

Efficiency of fluorochemical finish in enhancing barrier properties of woven fabrics may depend on the pesticide chemical. Coverall construction may be planned in such a way so as to give greater protection on the front than the back and at the lower portion of garment. Fabrics for protective garments may be tested in laboratory spray or spill situations to represent a worst case scenario. However, some useful information can be gained only through field testing.
PRODUCTION DISTORTION AS A FACTOR IN GARMENT SKEW

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Garment skew or twisted leg is a continuing problem in denim jeans. Previous research has focused on assessing degree of fabric skew in denim, frequency of garment skew in new jeans, and skew after care. Results were inconclusive regarding the relationship between care and garment skew. However, fabric skew and distortion during production are two critical factors. This study was undertaken to determine if skew is related to production distortion.

Barrel legs 90 cm in length were cut on grain from a single piece of 10 oz/yd² unwashed denim fabric (10% skew) and sewn using standard regular side seams and flat-fell inseams. One group was a control group (both seams matched at top, bottom, and knee). For groups two and three, side seams matched at the top, bottom, and knee and inseams matched at the top. The second group had the bottom mismatched by 1.3 cm. The third group had the bottom mismatched by 2.5 cm. To measure for garment skew, match the side seam and the inseam at the top of the leg, smooth to the bottom edge, and measure the distance separating the two seams at the bottom edge. Barrel leg skew was measured after production and after care cycles one, two, and three. Paired t-tests were run at a p = .05 significance level.

For the even legs, skew increased with the number of launderings, significant only between the new condition and cycle three. In all cases, the amount of garment skew was less than 1.3 cm. For both the 1.3 cm and the 2.5 cm mismatch legs, skew decreased with the number of launderings. Skew was significant only between the new condition and cycle one. For the 1.3 cm group, the original skew exceeded 2.5 cm and decreased to 1.7 cm after cycle one. For the 2.5 cm group, original skew exceeded 4.8 cm and decreased to 2.7 cm after cycle one.

Skew was usually in the same direction. As distortion increased, skew increased. With laundering, skew became more uniform. Other factors not yet identified influence garment skew and are significant in training of operators, inspectors, and quality control engineers to improve understanding of the relationships between construction and product quality. Further research is needed to understand these other factors.

APPAREL QUALITY THROUGH THE PERCEPTIONS OF APPAREL PRODUCTION MANAGERS AND OPERATORS: A DEFINITION
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This study was designed to capture in-depth knowledge about the meaning of garment quality from apparel production personnel. The objectives of the study were to 1) Identify, describe, and define the meaning of apparel quality through the perceptions, knowledge, and beliefs of senior managers, plant managers, supervisors, and operators in an apparel manufacturing firm, 2) Compare and contrast perceptions of apparel quality issues among and between senior managers, plant managers, supervisors, and operators in the firm, and 3) Contribute to the development of a behavioral theory of the apparel firm. A priori themes related to quality were identified in the literature, and provided a foundation for development of the instrument. They included concept, commitment, conflict, consistency, communication, and responsibility.

Because the purpose of this study was to develop a perceptual definition of quality among people who work in apparel production plants, naturalistic methods best facilitated the gathering and inquiry into a wide range of responses, with a behavioral theory of the firm as a theoretical basis. The study was conducted in a large tailored clothing firm whose management professed a commitment to improving quality. Within the firm, sampling was stratified by constituency. At the managerial levels, sampling was purposive, with line supervisors and operators randomly sampled within each of three plants. Semi-structured, open-ended interviews (n=47) were audio taped and transcribed. Other data collection techniques included visual inspection of garments, attendance at a visual quality audit, and observations of production and inspection activities. Emergent themes were inductively identified through content analysis and triangulation of interviews, field notes, and observations.

Results
Most of the verbal elements used to describe the quality concept were made in reference to a men's tailored suit coat, which was the primary product of the three apparel plants. A definition of quality was composed from the data. Ultimately, quality in a garment represented value. A garment earned value by acquiring three essential properties during its production. Structural integrity emerged from proper construction techniques and appropriate materials. Aesthetic presence emerged from structural integrity and provided sensual accordance through visual consistency and elements of tactile comfort. The power of appeal endowed the garment with value, and represented the convergence of structural integrity and aesthetic presence. This holistic definition was not explicitly established in the firm by the management.

The data demonstrate numerous inconsistencies in quality definition throughout the firm.
MANUFACTURERS OF WOMEN'S AND CHILDREN'S APPAREL: SUCCESS CHARACTERISTICS

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Apparel manufacturing firms, both large and small, thrive regardless of business strategies and owner characteristics. Yet, a high percentage of these firms become inactive yearly. A better understanding of the strategies and characteristics of firms that succeed will enable other firms to become more competitive in what is now a global industry. The purpose of this study was to investigate the success and less successful position of owners and their apparel manufacturing firms.

Manufacturers of women's and children's apparel and accessory items in selected U.S. Standard Industrial Classification codes served as the sample (N = 424). The questionnaire addressed demographic background and nature of the business. Scales were used to measure attitudes concerning reasons for business ownership, management activities, negotiating skills, risk-taking, and strategies for coping with competition. A pilot study was conducted prior to the distribution of the questionnaire. Two hundred usable questionnaires were returned and analyzed. The largest percentage of the respondents were female, married, 45 years old, born in the U.S., and college graduate. The majority of the businesses had sales of under $250,000, were considered by owners to be successful, had an increase in sales in the last year, and manufactured moderate or better priced merchandise.

Successful entrepreneurs were identified using a variable which combined a subjective evaluation of success and growth rate in sales. Significant results showed (1) successful scored uniformly higher than did less successful on negotiating strategies for suppliers, customers, sales representatives, and contractors; (2) successful used competitive advertising and service strategies more often than less successful; (3) successful were more likely to work over 40 hours per week than less successful; (4) successful favored tried and true products, made only minor changes in lines, responded to competitor's actions, had a preference for low-risk projects, chose to gradually adapt to the business environment, and preferred a "wait-and-see" posture, and (5) the logistic regression analysis of entrepreneur and business characteristics was able to classify 77.3% of the entrepreneurs with 85.3% of the successful entrepreneurs and 67.4% of the less successful entrepreneurs classified correctly. The latter finding was influenced by having supervisory experience in a work setting, ability to run the present firm from experience other than from owning a former business, and owning a company for reasons other than contributing to the company's success.


EVALUATING VISUAL RANKING ASSESSMENTS OF LAUNDRY DETERGENT EFFECTIVENESS

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Consumers expect a white textile product to retain its original color (i.e., - hue, chroma, and lightness values) throughout the product's life whether the product is soiled from normal wear or is stained from unexpected sources. Detergent products are monitored continually to meet these consumer expectations. Detergent manufacturers measure color change, and are especially interested in fabric whiteness where consumers prefer a bluish-white hue. Assessment of whiteness today appears to favor a combination of paired comparison sensory evaluation and color-difference instrument measurement. Over the last 30 years, subjective studies evaluating fabric whiteness have not justified the choice of the paired comparison method over other sensory evaluation approaches. If a sensory ranking approach were to replace the paired comparison method, the cost to manufacturers of product development and consumer preference testing could be reduced. Memory and fatigue limitations found in food sensory testing may not apply to visual ranking evaluations of textile products where panelists are allowed to interchange the individual specimens within a given series.

The researcher investigated the feasibility of a visual sensory ranking method to distinguish color changes within the 'near white' color space. Ranking accuracy was assessed by comparing panelists' observations to instrument measurements (Whiteness Index) on the same series of washed fabrics. The Whiteness Index readings were recorded from a Hunterlab Tristimulus Colorimeter.

Friedman's statistic established that the 15 panelists perceived differences (α=0.05) in the whiteness developed by 8 detergents on a common fabric source. Fisher's LSD multi-comparison distinguished the different perceived levels of whiteness. ANOVA analyses on the instrument readings found differences (α=0.05) in each detergent series tested. Duncan multiple range test grouped the detergent series into different levels of whiteness. Spearman's rank correlation coefficients (0.85-0.98) suggested a very high agreement in the assessments made by the two techniques. The multi-comparison tests for both methods gave similar detergent groupings, suggesting that visual rankings could detect similarities and differences in detergent effectiveness in a similar manner as expected by instrument measurements. Visual sensory ranking may be as useful as the paired comparison currently favored by detergent manufacturers, but more economical.
EFFECTS OF CHLORINE AND
CHLORINE-FREE POOL WATER ON
SWIMWEAR FABRICS: A COMPARISON

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The purpose of this study was to compare change in color and bursting strength of swimwear fabrics when exposed to chlorinated and chlorine-free swimming pool water formulations. Five contemporary swimwear fabrics were exposed to pool water formulations of 2, 5, and 10 ppm concentrations of chlorine and 25, 50, and 100 ppm of poly (hexamethylene biguanide hydrochloride.

Color readings were made before and after treatment and color change was determined by overall color change (delta E (CIELAB) values using a Hunterlab Tristimulus Colorimeter. Bursting strength measurements were made before and after treatment according to ASTM D 3786 - Standard Test Method for Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics, and recorded as percent change in bursting strength.

Analysis of variance indicated that for both color change and percent change in bursting strength, all fabrics, all water treatments, and the interactions were found to be significant beyond the 0.0001 alpha level. The Duncan’s Multiple Range Test revealed that the chlorine treatments produced significantly higher delta E values than any other treatments. The chlorine treatments produced higher changes in bursting strength but no one treatment was significantly different from all the others.

HIGH PERFORMANCE TEXTILES:
A SPACE FLIGHT EXPERIMENT

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With the reality of the Space Station, Americans will soon be living in space, on the moon, or Mars for long periods of time. Every facet of life here on Earth will have to be translated into space. Not only will we need research in aerodynamics and aerospace engineering, we will also need data in product development areas such as high performance textile materials.

The primary purpose of this research was to evaluate new textile materials that have potential space applications to determine the effects of exposure in space. Atomic oxygen often proves to be the single most damaging component of Low Earth Orbit (LEO). Other elements of space exposure, from ultra-violet radiation to extreme temperature changes, can cause severe degradation to many materials. The speed and degree to which degradation occurs will determine if the samples flown are appropriate candidates for further research.

Two materials were identified for the space flight experiment. Curlon®, a high performance carbonaceous fiber insulation, has high resistance to thermal conductivity and flame which make it a leading candidate for extreme environments, from Antarctica to the moon and Mars. Curlon’s light weight and moderate tensile strength make it a viable contender with other insulators such as Kevlar®/Nomex®, fiber glass, and Mylar®. Solar Alpha® is an endothermic, heat storage fiber which efficiently absorbs sunlight and helps retain body heat. Solar Alpha consists of a nylon sheath and a core containing zirconium carbide. Zirconium carbide is said to efficiently absorb radiation with a wavelength below 2 μm, comprising 98% of the energy from sunlight. Zirconium also reflects longer wavelengths and so retains the infrared radiation generated by the body, roughly 10 μm. Applications for Solar Alpha could include fighter, better insulating space suits for both future freefall space and planetary (Lunar and Martian) surface needs.

Two circular samples (1/2” in diameter) of each material were launched on STS46 on July 31, 1992 as part of a get-away special canister. The samples were mounted to metal disks with Hysol EA 9391 Epoxy. This epoxy has been used on the AXAF telescope and is flight qualified and thermally stable. The samples were exposed to space for 15 hours.

Optical inspection was conducted on control and experimental materials. Scanning electron microscopy was used. Significant degradation and pitting could be detected on both materials. Longer exposure times and suspension of materials to expose both sides are necessary. Further space flight experiments have been planned.
DEVELOPMENT, REVIEW AND MANAGEMENT OF TEXTILES AND CLOTHING CURRICULA ON AN ELECTRONIC DATABASE

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Is it possible to develop curricula and supporting educational materials more quickly and effectively by making them more accessible to reviewers in the curriculum development process?

Based on technological advances in the development of textbooks for classroom use and research conducted on electronic database systems within extension, a study was conducted to see if it was feasible to develop, distribute, and manage textiles and clothing curricular documents on an electronic database system.

The purpose was to increase the amount of clothing and textiles materials for youth that a designer could produce and to speed the review of materials by both professional and volunteer educators, while maintaining or improving the quality of the reviewer's input and the quality of the resulting materials.

Review, circulation, and other data were compiled to: 1) evaluate the development and review process for speed, accessibility, and the quality and quantity of materials developed, 2) access what extension agents and volunteers see as the curricular limitations of traditional and electronic methods, and 3) make appropriate recommendations for curriculum development and instructional strategies.

Current trends in curriculum development and electronic technology were studied through a content analysis of available materials. Actual curriculum materials were developed and comparisons made based on the above objectives.

The study found that the electronic method provided a desirable means for distributing and managing curriculum materials, decreased development time and effort by one-third (largely due to the ability to update documents quickly), and increased the number of reviewers nearly fifty percent or more over all other previous efforts using traditional methods. Costs were greatly reduced for the developer, but were slightly increased for the reviewer if the materials were printed in order to read them. Lack of graphic capability and formatting were problems, particularly for visual textiles and clothing subject matter. More study is needed to determine the value of electronic technology to develop textiles and clothing curricula of all types.

CURRICULUM STRATEGIES AND THE TEACHING OF CREATIVE FASHION AND TEXTILE DESIGN IN UNDERGRADUATE AND POSTGRADUATE COURSES IN ENGLAND.

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The creativity and innovation central to specialist design courses in the UK has an international reputation. Through a series of educational, economic and structural developments the traditional nature of these courses is changing.

Whereas undergraduate courses specialised in subjects such as fashion design, embroidery, knitwear, woven or printed textiles within a sequential unit or project structure, there is now a shift to incorporate a broader range of subjects.

Art and Design Faculties are moving towards a modular structure. Students will be able to define their own Fashion and Textiles Degree Course by selecting from modules including Management, Marketing, Languages, Business Studies or Computer Aided Design (CAD).

In UCE the BA Hons. Fashion and Textiles Course offers a whole range of fashion and textiles design subjects. Students undertake sequential units to develop strong creative and practical skills. Units are being adapted to include new subjects and more student choice whilst retaining a specialist approach to design. A feature of the course is the collaboration between students within the course and with other departments in the Institute.

At post graduate level, students propose a programme of study based on specific research. this may be in collaboration with industry. Most courses incorporate a taught element of research methodology, philosophy, cultural and social studies. There is emphasis on academic research and creative, experimental programmes of study.

In line with other Universities in the UK, UCE is developing Art and Design Courses to include new pathways for design and more transferable skills.

The broader framework of subjects associated with fashion and textiles design, will encourage more collaboration with industry and other Universities.
DEVELOPING LIFE-LONG SKILLS
THROUGH CREATIVE PROBLEM SOLVING TECHNIQUES
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A need for increased student problem solving abilities is indicated in surveys of industry managers, internship supervisors, and university alumni. An undergraduate lower-level core course entitled "Creative Problem Solving" was developed to prepare students with skill for confronting an assortment of problems. Students in the department are being trained mainly to contribute to the workforce as product designers or as managers. In order to succeed and be happy in today's work milieu it is necessary to learn to be more creative and constantly add challenge and excitement to the job.

In the traditional education system students are encouraged to think vertically. In order to solve problems effectively vertical thinking needs to be coupled with creative thinking or lateral thinking. The objectives of this course are to 1) provide students with an opportunity to participate in a learning environment that will enhance creative thinking and problem solving, 2) apply problem solving processes to specific problems in design and merchandising, 3) critique and evaluate proposed solutions, and 4) develop an appreciation for the value of variety of viewpoints in the creative solution of contemporary problems.

The course is taught by combining instruction, demonstration, and application of creative exercises and projects. A variety of hands on exercises require students to work individually while others are performed in groups. Examples of major projects include 1) Visual Depiction of Words, 2) Product Development-Creative Mask, 3) Management Case Studies, and 4) Synectic Exercises.

The course has an average of 40 students and has been taught every semester since Fall 1992. The course is evaluated through the formal written university student course evaluation process and oral student discussion in class. Student perceptions of the course are very positive. Application assignments and a stimulating reward system seem to be mentioned most frequently in their evaluations. Students are evaluated through performance on three exams, class assignments, and major projects. Students' level of creative productivity and performance on exams indicate that the teaching/learning strategies utilized in class are effective.

4-H FASHION BOARD—EXTENDING LEARNING
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The 4-H Fashion Board serves as an important educational support to the 4-H clothing program in Ohio. The concept of youth leadership and how the board functions may provide useful strategies for other programs.

Objectives for the group are to: 1) plan and carry out a program of work based on a theme; 2) assist with in-services, advisor and member training, and with the development of educational materials; and 3) enhance and extend board members' leadership and subject matter skills.

Ten of twelve members represent five extension districts; one member is the clothing achievement winner, and another is the national style revue winner of the previous year. Modeling sessions at state fashion revue and nominee application forms provide information for the selection process.

At the organizational meeting, key questions are used to guide discussion and participation. Questions include: 1) what are strengths and weaknesses of 4-H clothing programs; 2) what are the benefits of 4-H clothing to self and others; and 3) what are types of training or promotion needed. Brainstorming responses to these key questions effectively "break the ice" during this initial time together, and key goals emerge. Board members select a theme and decide on program strategies for the year. The board advisors also communicate program needs.

Examples of board activities include assisting with in-service training, advisor and member programs, and development of slide sets and video tapes. They conduct 4-H clothing promotional activities at malls, inner city boys' and girls' clubs, day camps, or at other special events. Board members also teach modeling, beginning construction, or project selection, in local settings. Members assist at the five days of State 4-H Fashion Revue. They illustrate judging criteria, help with practice for the revue, and assist participants with questions and procedures.

The program success is validated through formal and informal evaluations. For example, 51 individuals completed evaluations for the 1992 in-service sessions, 24 of which were volunteers and 27, professional staff. Self-ratings prior to the in-service and at the end of the in-service revealed that 80% of volunteers and 48% of professionals reported higher levels of understanding and knowledge. In all cases of those rating the same before and after, professionals and volunteers began with high ratings (very good or excellent) of knowledge of the "Seven Clues" in-service topic.

The involvement of youth in the educational process benefits not only other members and leaders, but also provides leadership and learning opportunities for board members. The board provides up-to-date visuals, effectively targets youth audiences, and generally supports and enhances the 4-H clothing program. Youth leadership, as represented by the 4-H Fashion Board, is a powerful tool and can be a valuable resource to programming.
CLOTHING AND TEXTILES: A NEW EXPERIENCE FOR THE NEXT GENERATION

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The social and psychological impacts of clothing and textiles are a prevailing undercurrent in many of the actions and in the development of young people. The 4-H clothing and textiles program provides an opportunity for young people to learn: improving their personal appearance; how to be good consumers; learn skills in selection, care and construction; learn about textiles; become aware of cultural diversity; and learn decision-making skills in relation to careers and job seeking. Objectives were to: 1) develop and pilot test experiential/life skills clothing and textiles curriculum; and 2) evaluate the curriculum, especially the design of the materials and the activities most appropriate for a diverse audience. Emphasis was on the development of self-esteem and a holistic approach to clothing and textiles. Areas of concentration included: Communication of Self Through Personal Appearance, Creativity, Care, Consumerism, Choices, Cutting Edge, Careers, and Culture. Process included: 1) a needs assessment of 4-H and Home Economics Agents, 4-H Clothing volunteer leaders, senior 4-H members enrolled in one of the 3 current clothing projects, 2) a review of 4-H clothing and Textiles publications from other states, 3) a review of literature *relating to ages 5-8, *experiential education, *life skills education, *self-esteem development, 4) a task force of 4-H agents, home economics Agents, County Extension Director, 4-H Program Assistant, 4-H clothing volunteer leader, Extension Clothing Specialist, and Extension 4-H Specialist. Process included meeting with Teen Focus group, reviewing literature, developing scope and sequence, writing materials, pilot testing, incorporating ideas from pilot testing, and training agents, program assistants, and volunteer leaders. Seven counties were involved in the pilot test reaching 161 boys and 155 girls -- a total of 316 children, ages 5-8. Of this number, 175 were white, 126 were black and 15 were hispanic. Of the 55 activities, 24 were used by the counties. Three activities were rated difficult for the 5 year olds and need to be simplified. All other activities were rated appropriate for the audience. Based on recommendations, some modifications of written materials will be done.

OCCUPATIONAL STEREOTYPES IN CARTOONS AND COMIC STRIPS

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A stereotype is a generalization about a group of people (McArthur, 1982). The purpose of this research was to investigate stereotypes associated with automobile salespeople as transmitted and perpetuated in cartoons/comic strips. It was predicted stereotypes would include dress and personal traits.

Method. Cartoons were chosen as the medium for analysis because they are cultural forces based on widespread assumptions with wide readership. Cartoons depicting automobile salespeople were collected from two newspapers from 1989-1992 (n =17; cartoonists = 10). Each of the comics was content analyzed for dress variables used to depict salespeople and for references to the personal trait of dishonesty.

Results. Automobile salespeople were depicted as overweight (n = 11, 65%) white (n = 17, 100%) men (n = 17, 100%) wearing a tie (n = 14, 82%) with a suit (n = 5, 30%) or sports jacket (n = 11, 65%) in a plaid or print fabric (n = 12, 70%). In 14 (82%) of the cartoons, there was reference to dishonesty, (e.g., to turning back the odometer, to lemons, or to lying).

Conclusions. Cartoonists used dress variables to create characters easily identifiable as automobile salespeople. Dress was tied to stereotypic personal traits such as dishonesty.

Implications. Comics mirror our culture and thus are a rich source of understanding stereotypes associated with diverse occupational groups with distinctive appearances.

GENDER DIFFERENCES ON OPTIMUM STIMULATION LEVEL (OSL) AND FASHION BEHAVIOR

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According to Optimum Stimulation theory (Zuckerman, 1971), each individual seeks optimal stimulation from the environment. The purpose of the study was to investigate gender differences on (1) fashion exploratory behavior, (2) Optimum Stimulation Level (OSL), and (3) the effects of subjects' OSL on their fashion behavior.

A convenience sample of 342 students (162 males, 180 females) filled out a questionnaire containing OSL measures (Arousal Seeking Tendency Scale by Mehrabian & Russell, 1974) and fashion behavior measures (Darden & Reynolds, 1972; Gutman & Mills, 1982). Principal component analysis of fashion behavior measures resulted in 2 factors: Fashion Innovativeness and Importance of Fashion. The principal component analysis of Arousal Seeking Tendency Scale resulted in 5 factors: arousal from Change, arousal from Risk, arousal from Unusual Stimuli, arousal from Sensuality, and arousal from New Environment.

To test the differences between males' and females' OSL and fashion behavior, multivariate analysis of variance was performed using gender as an independent variable and five dimensions of OSL and two dimensions of fashion behavior as dependent variables. Results of MANOVA revealed that there was a significant gender difference on one of the two dimensions of fashion behavior, Fashion Innovativeness, and on one of the three of these dimensions of OSL (arousals from Unusual Stimulus, Sensuality, and New Environment). The results of MANOVA using high and low scores of each of 5 OSL dimensions as independent variables and two dimensions of fashion behavior as dependent variables revealed that males' fashion behavior was significantly more affected by three dimensions of OSL (arousals from Change, Risk, Unusual Stimuli) than females' fashion behavior. These findings suggest the basic motivational differences between males' and females' fashion exploratory behavior.


ATTRIBUTIONS ABOUT AN INCIDENT OF ACQUAINTANCE RAPE BASED ON CLOTHING, SEX OF SUBJECT, AND RAPE MYTH ACCEPTANCE

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The purpose of this study was to test effects of victim's clothing, sex of subject, and rape myth acceptance on attributions about acquaintance rape. Subjects read a scenario depicting acquaintance rape between "Mike" and "Amy", viewed a photograph of "Amy" in a short, moderate, or long skirt, answered ten questions about the incident and about rape myths.

Results of MANOVA using clothing, sex of subject, and rape myth acceptance as independent variables and ten questions as dependent variables revealed main effects for sex of subject and for rape myth acceptance. ANOVA revealed that males, attributed more responsibility to Amy and less to Mike, rated Amy as behaving more suggestively, as wanting sex more, as leading Mike on more, and as less likely to mean no. Females were more likely to label the incident rape and rated Amy as deriving more emotional pain and less emotional pleasure. Subjects who scored high in rape myth acceptance, rated Amy more responsible for the incident, as behaving more suggestively, as wanting sex more, as leading Mike on more, as less likely to mean no, as deriving less emotional pain and more emotional pleasure, rated Mike less responsible and more justified in his behavior, and were less likely to label the incident rape. There were interactions between rape myth acceptance, sex of subject, and skirt length of victim for five of the questions.

Belief in rape myths, sex of subject, and interactions of these two variables with victim's clothing affected attributions about acquaintance rape. A belief in rape myths may affect coping behavior of victims and reporting of rape.
EXPLORING STEREOTYPES OF HOMOSEXUAL APPEARANCES

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The purpose of this study was twofold: first, to identify what aspects of appearance undergraduate males and females presume communicate male homosexuality and second, to test the relative effect of those aspects of appearance on inferences made by undergraduates concerning sexual orientation and gender role.

In part one, 61 undergraduates were asked to assume the role of a costumer for a television show and to create an image for two male characters, one straight and one gay. From the resulting images, photographic stimuli depicting a male model wearing one of four combinations of dress and posture were developed.

In part two, utilizing a between-subjects design, 327 college students (250 = female; 72 = males; information missing = 5) responded to one of the combinations by completing a gender role measure and indicating the sexual orientation of the model. Subjects were also asked to indicate the factor they believed most influenced their responses. The posture variable accounted for more variability in subjects inferences of sexual orientation than did the clothing. The posture variable also accounted for more variability in subjects inferences of gender role than did the clothing. More subjects indicated the model's body posture influenced their impression than did the model's clothing.

DEVELOPMENT OF QUICK RESPONSE BUSINESS SYSTEMS: A CASE STUDY OF TECHNOLOGY INTRODUCTION IN AN APPAREL FIRM

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This case study is the first part of a larger project designed to examine factors that affect the implementation of new technology in an apparel firm. The goal of this part of the research is to describe human behavior related to technology implementation and interpret these behaviors in terms of existing theory. Theoretical viewpoints that provide a framework for understanding human behavior related to technology implementation include the behavioral theory of the firm (Cyert & March, 1963), theories of management style, and adoption of innovations within the organization (Rogers, 1983).

An apparel manufacturing firm located in the midwest agreed to participate in the case study. The firm had recently acquired a computer aided design system to assist them in their business, but had experienced some difficulty in the implementation of the software within the organization. Semi-structured audio-taped interviews were conducted with employees from various levels who were involved with the technology. A variety of perspectives on the firm's experience with the implementation of the software was obtained. Interviews were transcribed and analyzed for consistent themes in attitudes and behaviors related to the implementation of the technology within the firm. Findings were interpreted using existing theory.

Factors that appeared to inhibit the successful implementation of the technology include 1) a top down management style consistent with Theory X management, 2) conflict between constituencies as described by the behavioral theory of the firm, 3) inadequate attention given to the redefining/restructuring phase of the process for adoption of innovations within the organization (Rogers, 1983), and 4) an inconsistency between the persons who served as innovators and the persons who served as implementors of the technology. Shortcomings in the training of the system operators appeared to be closely related to lack of communication among levels of management and operators. These findings suggest that the ideas put forth by theories of management style, the behavioral theory of the firm, and the process of adoption of innovations within the organization need to be considered when implementing apparel technology.

References


RELATIONSHIP BETWEEN ORGANIZATIONAL
CHARACTERISTICS AND THE USAGE LEVEL
OF QR TECHNOLOGIES

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Environmental changes (e.g. product change, import competition) have challenged the apparel industry to adopt new business strategies. QR is one of these strategies, but has been adopted by only 40% of apparel manufacturers. Adoption theory proposes variables determining the adoption of innovation (Rogers, 1983). For increased QR adoption, the variables related to QR adoption should be known.

The purpose of this study was to identify the usage of QR technologies and to examine associations between organizational characteristics and the usage level of QR technologies. Using the usage level of QR technologies as the dependent variable, the selected independent variables were: firm size (i.e., number of employees), organizational strategy (i.e., prospectors, analyzer, reactor, defender), product category (i.e., women, men, children, others), fashion change (i.e., highly fashionable, fashionable, basic, highly basic), and seasonal change (i.e., highly seasonal, seasonal, staple, highly staple). QR technologies were identified from industry sources and academic studies. The seventeen most frequently cited technologies were used. A random sample of 306 apparel manufacturers without locational limitation was selected from a purchases list. The sample was stratified by firm size and product category. A mail questionnaire was used to survey plant managers. Adjusted response rate was 47% (n=103).

For data analysis, descriptive statistics, Kruskal-Wallis test, and Wilcoxon Scores by rank sum were used. The most frequently used technologies were small lot orders, short cycle cut planning, and production planning with customers. The least used technologies were electronic reorder, shade sorting, and unit product system. Firm size, organizational strategy, and fashion change were associated with the usage level of QR technologies. The larger firms with many employees, prospectors, and firms with fashionable goods had higher usage level of QR technologies than other categories.

Apparel firms vary in their use of QR business strategy depending on their resources and product types. When a firm adopts QR to be competitive in the business environment, knowledge of QR and usage of QR technologies are critical to help strategic planning. Usage of QR technologies can be used to assist consultants in planning for promotional strategy of QR and to help manufacturers and retailers in planning for QR adoption.


MODELING RETAIL
FINANCIAL PERFORMANCE

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Marketing and response to the marketplace is vital for both the retailer and the apparel vendor. A domestic apparel company was researched to test the effectiveness of marketing mix services and product mix levels to the company's retail accounts. These factors were used to determine the effect on financial performance. Using an existing major department store account (68 stores), financial performance was calculated by dividing 1991 net sales of each store by the square footage the apparel company occupies in each store.

Analyses were conducted using forward stepwise regression, and the variables included marketing services, product mix levels, and retail account demographics, with 73% of sales variation accounted for in the final model. Inventory Control Manager, Product Testing, In-Store Shops, Promotions, Retail Marketers, Demographics, Product Mix, and Special Events were the variables that had the greatest effect on financial performance (listed in order of importance).

The marketing mix services and the product mix levels were reconfigured to enhance financial performance and "market responsiveness". Additionally, the statistical model can be used by academicians and industry management to reconfigure marketing services and product levels to strengthen financial performance on all levels.
DIFFERENTIATING
CONSUMER INNOVATIVE BEHAVIOR:
PURCHASE VERSUS USE

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Use innovativeness (UI) is usage behavior of a previously adopted product in an innovative fashion while purchase innovativeness (PI) refers to buying behavior relative to a new product. UI is a new concept that has not been broadly researched.

The objectives of this study are to apply UI to clothing fashion, to separate this behavior from PI, and to examine it as a viable concept in clothing consumer behavior. Specifically, this study examines: 1) what variables distinguish two innovative behaviors, PI and UI; and 2) how they differ.

Data were obtained from 322 female college students of a major southeastern university by questionnaire survey. The questionnaire was developed through a three-step pilot study. Based on the median scores of PI and UI, the respondents were divided into four innovative groups: high PI/UI group, high PI-low UI group, low PI-high UI group, and low PI-UI group. Discriminant analysis was used to examine if the four groups differed from one another and, if they differed, what was the nature of their differences.

Results showed that the four groups differed significantly from one another. The high PI/UI group was explained by the highest communicated experience, clothing interest, and fashion leadership, while the low PI/UI group was explained by the lowest tendency to these variables. The high PI-low UI group and the low PI-high UI group were separated better by spending on clothing. The low PI-high UI group had the lowest level of spending, while the high PI-low UI had the highest.

Results indicate that consumers with high UI are interested in products and are engaged in information activities as high PI consumers are. However, they do spend the lowest amount for clothes among consumer groups. UI consumers may not always buy a new product, but develop a new creative way of using an old product, and these consumers still exert personal influence on the diffusion process as PI consumers do. Therefore, PI and UI both should be considered as viable concepts in understanding consumer innovative behavior relative to the adoption and diffusion process.

FACTORs AFFECTING THE MAINTAINED
MARKUP PERCENTAGE OF
PRIVATE APPAREL BRANDS
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Private brands are strategically important to department stores because they allow the retailer an opportunity to provide consumers with a unique product at a value price. For the retailer the benefit is a product competitive advantage and usually higher margins.

The purpose of this study was to examine which merchandise requirements (MR) and which supplier accessibility factors (SA) affect the maintained markup percentage (MM%) of private apparel brands. The dependent variable, maintained markup percentage, was calculated from information provided by the retail buyer. The independent variables, MR and SA, were adapted from Sheth's (1981) theory. A self-administered survey was developed and surveys were sent to a national sample of department store women's sportswear buyers as identified in Sheldon's Retail Directory. A total of 120 useable surveys were returned with 63 surveys used in this analysis.

Factor analysis was performed on the 28 SA items and yielded four reliable factors: Competitive Structure, Relative Marketing Effort, Vendor Characteristics, and Corporate Image. Results from the ANCOVA indicated that two MR (type of merchandise sold and retailer size) and two SA factors (Relative Marketing Effort and Vendor Characteristics) explained a significant amount of the variability in MM% (p = 0.03). As the importance of supplier accessibility characteristics increased, MM% decreased. This suggests that in the short term, buyers are more interested in the provision of marketing activities such as packing (Relative Marketing Effort) and quality products and delivery (Vendor Characteristics) than in earning the highest possible MM%.

Results from this study provide information which can benefit retail buyers, especially buyers of small retail stores, by helping them gain a better understanding of the MR and SA factors which impact MM%. Vendor benefits include a better understanding of the factors which are important to retail buyers when selecting a vendor for their private brands.

The purpose of this descriptive study was to investigate consumers' attitudes regarding the use of electronic on-line in-home shopping methods for apparel information search or purchase. It was anticipated that potential explanations might be identified as to why the adoption rate for this method of shopping has not been as rapid as predicted by marketers, or why this method was not used to the extent that other in-home shopping methods were used. In order to investigate the adoption process of electronic shopping methods, the diffusion theory (Rogers, 1983) was used. This theory has been used in the past to study how an innovation diffuses throughout a social system over a period of time. Therefore, in this study, consumers' attitudes toward this shopping method were examined in connection with the elements of the diffusion theory.

Five focus group interviews were conducted in order to examine consumers' attitudes toward electronic shopping methods. The use of focus groups provided an opportunity for consumers to express their thoughts in an open process rather than conforming to preselected choices as in some survey research. Therefore, a realistic view of situations and experiences could be expressed.

The results of this study demonstrated that the diffusion theory may be used as a framework for determining potential explanations as to why electronic shopping has not been widely accepted. Participants were generally unaware of and lacked previous knowledge of electronic shopping methods and expressed the attitude that their behavior would need to be substantially adjusted in order to use this method. In addition, interaction with reference group members did not have an influence on participants' attitudes toward this shopping method. Participants also reported that this method (a) appeared to have only one relative advantage, (b) was not compatible with their lifestyles, and (c) was complex to use. In addition, they reported having no opportunity for (d) trial, or (e) observation of this method. Therefore, based upon these results, the rate of diffusion of the innovation, electronic shopping, may be expected to be slow.

CLOTHING PURCHASE DECISIONS AND
SOCIAL PARTICIPATION BY U.S. AND
U.K. REHABILITATION CLIENTS

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The primary purpose of this study was to examine the relationship between clothing and socialization. Rehabilitation clients from the United States (U.S.) and the United Kingdom (U.K.) were used to highlight this relationship. A total of 1730 questionnaires were sent to 18 randomly selected Vocational Rehabilitation agencies resulting in 625 returned instruments. The director of the clothing unit at the Western Wiltshire Disabled Living Center, St. Georges Hospital, Semington, Wiltshire, England, disseminated 200 questionnaires and received 99 completed instruments. Respondents were asked to rate eight clothing purchase decision variables (CPDV) on a scale from 1-to-8 and level of participation in 12 social activities on a scale from 1-to-5.

For both countries, the highest mean CPDV rated was physical comfort. ANOVA results suggested a cultural influence on four CPDV, including freedom of movement, price, fashion, and care. Cross-cultural differences between the mean ratings of these four CPDV were confirmed by Tukey’s studentized range test. A great variation in direction, scope, and intensity of the correlation coefficients between the CPDV and level of participation in 10 of the 12 social activities existed for both U.S. and U.K. clients. U.S. clients were more likely to participate in social activities if they placed more emphasis on fashion and less on ease of dressing. U.K. clients were more likely to be socially active if they were more interested in fashion, less concerned with ease of dressing, and wore clothing which allowed them to fit in with their group. Physical comfort, the key CPDV for both U.S. and U.K. clients, was negatively related to some social activities. Participation in social activities did appear to be related to clothing selection decisions.

DESIGN EVOLUTION OF THE HAWAIIAN HOLOKU

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In order to investigate the evolution of the Hawaiian holoku, primary and secondary sources were consulted for information as to the origin of the holoku. A content analysis of historic photos of women in holokus from 1800 to the present was completed to trace the evolution of specific design elements. Finally, using the University of Hawaii Western Costume Collection, garment analysis of twelve holokus was undertaken to examine the design and fabrication of twentieth century holokus.

The holoku, a Hawaiian adaptation of Western designs, has been worn in Hawaii since the 1820s. Originally a long sleeved, yoked, loose fitting floor length dress without a waistline, the holoku changed extremely slowly during the 19th century. It adopted a train and minor details in the 1870s. This original style, called "tutu" continues to be worn today.

However, in the late 19th century, due to the interaction of Hawaiian royalty with European courts, Western fashion began to have a significant impact on the holoku. The new style, which I refer to as the "fashion holoku" developed in the 1890s and is the dominant style today. The fashion holoku continually reflects changes in Western costume. The holoku is still a long waistless gown with a train that is worn primarily for formal occasions. Edwardian style details are common. Fashion holokus are now quite similar to other Western formal dress, but are less revealing. In spite of the strong traditional elements of this garment, the fashion holoku continues to evolve by the selective incorporation of mainland fashion elements.

With the ascendency of the fashion holoku, the tutu became a secondary style. In spite of the dominance of the ornate fashion holoku, the tutu continues to be worn to the present day, virtually unchanged for the past 120 years. While both holoku styles are ethnic fashion, the tutu holoku is an example of fossilized fashion.

This research tests the concept of cultural accommodation, a process with four progressive levels; selection, characterization, incorporation and transformation (Erekosima & Eicher 1981). This study substantiates Pannebecker's (1988) analysis that the concept is cross-culturally valid, but the level of characterization needs further analysis.

OUTSIDER TEXTILE ART:
MYRLEN'S COAT

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Creative expressions of individuals operating "outside" the conventions of mainstream society, such as the mentally disturbed, are known as outsider art. While outsider artists typically are untrained or minimally aware of the canons of "official" art or art history, astonishing similarities exist in the works they produce.

Driven by a compulsive tendency to fill every inch of space (the horror vacui), outsider artists typically use letters and words, often without their usual communicative function, to fill in spaces within the design. Use of whatever materials are at hand and endless repetition of style and motif also characterize outsider works.

A rare example of outsider art was created by a schizophrenic patient committed in the late 1940's to Lakeshore Hospital in Knoxville, Tennessee. Known as "Myrllen's Coat", the piece is both quite characteristic of typical outsider art and quite unusual in that it was executed as a textile design, rather than as a sketch, painting, or piece of sculpture.

Using a wire and threads unraveled from scavenged laundry scraps, "Myrllen" spent five years of her life embroidering this exceptionally beautiful and complex coat. Covered with millions of tiny stitches, vignettes, letters, words, and addresses, the coat clearly communicates the joys and sorrows of "Myrllen's" troubled existence.

The purpose of this research study was to document and analyze "Myrllen's Coat" to provide a basis of comparison of this work to other examples of outsider art and to other examples of outsider textile art. An ethnohistorical methodology was employed to gain information from a variety of sources and to place the work within its cultural context.

SPATIAL DIFFUSION OF READY-TO-WEAR, 1900-1949

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Traditional fashion diffusion research has focused on the diffusion of innovative apparel styles within a social system. In this field, there has been limited research focusing on the diffusion across social systems, or across time and space. This process of diffusion has been labelled spatial diffusion in geography. The purpose of this study was to document the directional pattern of spatial diffusion between two spatially separated cities in the U.S. as represented by local newspapers, the New York Times and the Columbus Dispatch. Illustrated advertisements of women's ready-to-wear garment lengths were chosen as the unit of analysis. It was hypothesized that there would be a time lag in the appearance of new garment lengths between the two newspapers during 1900-1949, with innovations appearing first in the New York Times. The methodology utilized the seriational technique, which indicated the point of introduction, period of popularity and the obsolescence of innovative ready-to-wear garment lengths. Findings suggest no time lag in operation during the period, indicating a mass market pattern of spatial fashion diffusion. This study expanded the fashion diffusion literature base by incorporating and integrating the spatial diffusion conceptual framework into traditional fashion diffusion theory. By utilizing the market and infrastructure perspective, which focuses on the supply side of diffusion or the retail availability, this research also addressed one issue identified by Rogers (1983) as being neglected by diffusion researchers: the individual blame bias. This bias can occur when individuals or social systems are blamed for not accepting an innovation, when means to obtain the innovation are not available.

ETOWAH TEXTILES AND THE COMPARATIVE PLANT FIBER COLLECTION: CLASSIFICATION, IDENTIFICATION, AND EXPLANATION

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Textiles recovered from the Etowah Mound site constitute one of the most significant groups of archaeological textiles found in eastern North America and have been the focus of ongoing research efforts to understand them as objects and as evidence of Mississippian decision-making. Plant fibers from 23 fragments from Burial 57, Etowah were compared to those of the Comparative Plant Fiber Collection and the results were examined with respect to collecting, manufacturing, and utilization behaviors associated with the textiles.

The Comparative Plant Fiber Collection was initiated with the goal of accumulating physical and chemical structural data that could be used in identifying and characterizing fibers from prehistoric native American textiles.

All of the Burial 57 fibers studied are comparable to the Category I fibers in the Collection. They are herbaceous dicotyledons that yield fine, long fiber bundles. Six were further identified as belonging to the genus Apocynum that includes dogbanes and Indian hemp. The results indicate that the Etowah used two different genera to produce more than one fabric of the same structure. It also is evident that the Etowah people knew which plants yielded the fine long fibers necessary for the fabrics as well as when and where to collect them. Accurate classification and identification of plant fibers are essential to the explanation of how textiles shape the physical and social worlds of the Etowah.

CATEGORIZATION OF FABRICS:
TACTILE AND VISUAL PERCEPTIONS

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From an applied perspective, human perceptual response to the textile component of dress is an important factor guiding judgments of comfort, warmth, fabric prickle (a sensation of many gentle skin pricks) and skin wetness. Such judgments have important practical implications for manufacturers of work clothing for agricultural workers and ranchers, exercise wear, incontinence products, underwear, and medical and cleanroom garments. While a considerable body of research exists which has investigated perceptions of fabric hand, few research studies have examined how people categorize fabrics.

Accordingly, the objective of this research was to investigate individuals' perceptual responses to a variety of fabric samples based on tactile or visual and tactile sensations. Student volunteers (N = 157) sorted 60 fabric samples into groups based on tactile-only (non-viewing) or visual and tactile (viewing) sensations. Non-viewers used specially built screens to touch the fabrics without seeing them. Data were analyzed using cluster analyses, one for the tactile-only sorting and one for the tactile and visual sorting. Results provide evidence of sensory interaction on categorization; e.g., non-viewers produced categories that were more homogeneous than were those produced by viewers. Viewers seemed to sort by probable end use, while non-viewers seemed to sort by fiber content and fabric structure. Thus non-viewers, as compared to the viewers, seemed to rely more on physical, and less on inferred, properties of fabrics. These results are consistent with other research which found that subjects categorize forms of dress according to structural and assumed contextual features.
In previous work, Rucker (1992) has suggested that expenditures of energy on taking care of one's clothing and other aspects of appearance are subject to a variety of interpretations, some more ambiguous than others. For example, Gaines (1990) pointed out that once effort has been expended in constructing the female image, that image becomes perceived as natural and is valued as such. It still requires effort, however, leaving less time for other activities. Another problem is that, up to a certain level, expenditure of energy on self is seen as a positive female attribute, but too much self care may imply a narcissism that precludes an appropriate level of care of others.

The current study was designed to provide empirical evidence on perceptions of the natural versus the artificial, expenditure of effort, and the ideal woman’s appearance. Fifty-four subjects were questioned about their views with respect to clothing, fragrance and hair color. Content analysis was used to extract themes from the verbatims.

One pervasive theme was that women should expend some effort on appearance but not too much; one might enhance one's appearance but not alter it. However the reasons for this view differed widely. For some, it was a case of retreat from old ideals of perfection--it should be acceptable to have some flaws. Others expressed concern about women flaunting themselves and still others, mostly male, expressed concern about use of products to create a false impression. Competing with these themes was another popular view that any amount of effort directed toward any aspect of appearance was good if a woman enjoyed doing it.


Socially constructed ideas about ideal bodies are linked to clothing and appearance. Attractiveness and thinness form the basis of the current American standard of ideal female beauty (Freedman, 1986) and women are taught to manage their appearances and regulate weight and grooming in an attempt to conform to the cultural ideal. This ideal may strongly affect body image and appearance-altering behaviors, such as dieting, makeup use, surgical procedures, clothing selection, and exercising. The purpose of this research was to examine the complex link between body image and appearance-altering behaviors.

Female university students (N=95) voluntarily submitted an essay on body image and self presentation in which they (1) assessed body image both qualitatively and quantitatively, (2) reflected upon their appearance and appearance-altering behaviors, and (3) assessed self-esteem. Analysis of quantitative responses revealed that over half of the subjects were satisfied with their bodies, while 20% were undecided, and 15% were dissatisfied. Qualitative responses were content analyzed and yielded 8 major themes: world view, social comparison, influence of others, eating disorders, frequent behaviors, hazardous behaviors, social interaction, and coping mechanisms. Overall, essays reflected a strong sense of self-esteem, yet also an underlying and widely held belief that the human body is malleable, and that anyone can achieve the cultural ideal. The appearance behaviors practiced to this end are socially acceptable, with most subjects giving little thought to their advisability. A seeming inconsistency exists between the relatively high body image scores and the high percentage of those practicing risky behaviors, suggesting that women may be satisfied with their bodies only if engaging in such behaviors.

CLASSIFICATION SYSTEM FOR TYPES OF DRESS: APPLICATION AND IMPLICATIONS FOR VISUAL ANALYSIS

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"Dress and Identity," an article by Roach-Higgins and Eicher in the 1992 Clothing and Textiles Research Journal, outlined a theoretical framework entitled the "classification system for types of dress and their properties." The framework was developed to provide a method for systematically analyzing dress.

The overall purpose of this study was to investigate the nature of conformity in dress at a particular point in time. One of the main objectives of this study was to determine if the classification system could be used to analyze visual dress in a specific situation. The data base involved 300 black and white photographs of twelfth grade students in a 1991 high school yearbook from a midwestern suburban high school.

Content analysis based on the classification system was developed as the means of analysis to determine visual conformity. The research instrument was designed to obtain information on the types of dress including both body modifications and supplements to the body.

The classification system did provide a method for accurately identifying and describing types of dress presented in the photographs. This classification system will provide researchers with a systematic framework for analyzing visual aspects of dress.

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COMPUTER TECHNOLOGY IN THE TEXTILES AND APPAREL CURRICULUM

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In order to enhance student understanding of the role and scope of the domestic textile and apparel industry within the contemporary international setting, computer analyses of trends in apparel production and consumption have been integrated into the existing undergraduate and graduate curriculum. The underlying goal of this pedagogical technique has been to expand student boundaries both geographically and intellectually, by challenging them to critically examine, process, analyze, and synthesize information.

Foundation material regarding the evolution and importance of the domestic textile and apparel industry are initially presented in introductory courses required of all textiles and clothing majors. Subsequently, students are provided further opportunities for assimilating and integrating information regarding the global context within which the domestic industry has been required to compete. At the senior level, students are expected not only to be knowledgeable regarding the global nature of the textile and apparel industry, but also to apply critical thinking and analytical skills in processing and interpreting industry data.

Computer modules have been designed and provide secondary trade data which serves as the basis for creating spreadsheets, using software programs such as Lotus 123 or EXCEL, in which raw data is processed through a variety of mathematic and graphic presentation techniques. As part of the process, students are required to integrate theoretical concepts with knowledge of the industry and to apply these in analyzing and interpreting trends regarding domestic consumption of textiles and apparel. The modules encompass both historic and contemporary issues, including domestic employment and wage trends, consumption expenditures for textile and apparel products, importation of textile and apparel manufactures, market penetration by textile and apparel imports, and the textile and apparel deficits as portions of the total U.S. merchandise trade deficit.

Through these exercises, students are provided a framework for integrating problem solving skills, as they learn to engage in information processing aided by computer technology. In the process, they become active participants in organizing and assimilating information in useable formats which serve as the bases for written analyses and class discussions. Integration of a variety of techniques and skills has been found to enhance both cognition and the ability to articulate newly acquired knowledge and understanding of what has been learned.
INTERNATIONAL TEXTILE TRADE: TEACHING CRITICAL THINKING SKILLS

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Study of the international trade of textile products may require more critical thinking on the part of both students and professors than any other course in our curricula. The need to question and analyze information and to understand why information is presented in a given manner for public consumption by various agencies and organizations is essential.

Exercises in critical thinking are highly interactive. Students choose one of two formats for the assignment, debate or the drafting of legislative or congressional testimony. Both formats require students to acquire a broad and balanced pool of knowledge. They must learn to prioritize issues and sort out variables, identify potential solutions or conclusions, and support those conclusions with appropriate data. Both the debate and legislative options require students to a) gather information about a textile products trade issue, and b) present and defend a position on the issue, convincingly, in a public forum. Anticipating the opposition and successfully fending it off requires appropriate use of data, understanding of interrelated issues, and the ability to articulate a well-organized argument. Data gathered in the legislative format has been used to support or defend legislation relative to Hawaii’s garment industry.

Debate or legislative arguments and data are presented over three successive class periods so that students have an opportunity to reflect and gather additional data to defend against unexpected arguments. Students also present their findings in a term paper format. Papers for both sides of an issue are bound together and placed on closed reserve in the library.

In order to successfully present their cases in either assignment, students must understand, from more than one perspective, many political, economic, social and legal issues which impact the trade of textile products relative to fiber and fabric production, garment manufacturing, and retailing. Through critical thinking assignments students are able to acquire broad theoretical and practical experiences. Students assemble complex interdisciplinary data, anticipate and defend against opposing views, and communicate verbally and in writing, in a logical manner.

A VIDEO STUDY OF INTERNATIONAL RETAIL DISTRIBUTION: CHINA, JAPAN AND RUSSIA

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To perform successfully in an international setting, information about foreign retail distribution systems is critical. Little information is available in the U.S. about foreign distribution systems, creating a challenge for educators teaching international content. Adding a visual component to international content will increase student’s level of interest.

The authors received a two year USDA Challenge Grant to develop a series of eight videotapes on the following topics: 1) The International Buying Trip, 2) International Product Development: Sourcing and Distribution, 3) Food Retailing in People’s Republic of China, 4) Food Retailing in Russia, 5) Food Retailing in Japan, 6) Retailing in People’s Republic of China, 7) Retailing in Japan and 8) Retailing in Russia. Target audiences for the videotapes include academicians, practitioners and students interested in international consumer retail distribution systems.

Each country-specific tape includes an overview of the economic and political systems because the evolution of consumer distribution systems follows the economic development of a country. Other topics included are the role of wholesalers, consumer buying practices, logistics, and the relationship between culture and retail distribution.

The videotapes are designed to be integrated into classes with course content on international buying and sourcing of products or with a focus on comparing various international consumer distribution systems. Each videotape is 30-40 minutes in length, is accompanied by discussion questions and a bibliography of supplementary references to provide opportunities to expand on the topics in the videotape.
The purpose of this research was to survey the articles that were published between January 1980 and Fall 1992 concerning clothing, textiles and the import issue; categorize the direction of clothing and textile research related to an international focus; and evaluate implications for future research with recommendations for trends and directions in the international arena.

Nine journals were used for the analysis with twenty-eight articles meeting the search criteria and comprising six categories: Consumer Issues, Opinions and Attitudes; Import Guidelines, Restrictions, Agencies, etc.; Crafted With Pride/Buy America; Retailers Views, Attitudes and Buying Practices; Manufacturers Perception; and Product Analysis.

Although a variety of journals were examined, the research was published in only four of the nine selected journals and three of these were rooted in a traditional home economics context. Sixty-eight percent of the articles had been published since 1988. The two dominant areas for quantity of articles related to Consumer Issues and Import Guidelines, Restrictions and Agencies and accounted for sixty percent of the research related to the import issue. While consumer opinions and attitudes about domestic and imported merchandise is very important and the documentation of trade regulations, agencies, etc. provides excellent resource materials, a stronger link with the apparel and retail industry needs to be developed through research. Retailers indicate that off-shore apparel manufacturers are more willing to cooperate and provide new and innovative merchandise than domestic manufacturers (Sternquist, Tolbert & Davis, 1989) and that domestic apparel manufacturers must become more technologically advanced in order to compete in the world market (Dickerson, 1989).


In a previous study, six experimental fabrics with a cotton warp and wool/mohair blend filling were developed under simulated textile manufacturing conditions. The purpose of this study was to survey female consumers to determine response to (1) six experimental fabrics, (2) intent to purchase the experimental fabrics, (3) characteristics of the consumer of mohair apparel, and (4) characteristics of consumers in regard to fibers and purchase decisions. A random sample of female consumers, age 18 and over was mailed a self-administered questionnaire and a swatch of the experimental fabric. The findings of the study indicated acceptance by consumers of the experimental fabrics. Consumers (n = 569) rated five of the six fabrics "extremely good" or "excellent." MANOVA testing found no differences among the six fabrics according to consumers' evaluation of physical characteristics (texture, hand, luster, appearance). Results of Wilcoxon matched-pairs signed rank test indicated care method (laundring vs. drycleaning) had a significant influence on the likelihood of purchase, with consumers more likely to purchase the fabrics if launderable.

Mohair apparel consumers (32%) were those who had purchased apparel made from mohair and still owned the garment. When compared to the nonconsumer of mohair apparel, the consumer was more highly educated, earned a higher income, and favored natural fibers over synthetic fibers.
CLOTHING DISPOSITION PRACTICES

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Little recent apparel research has focused on the post-consumption disposal process despite increased environmental concerns. The purpose of this study was to investigate apparel disposition practices of female consumers and selected factors that may influence clothing disposition. A taxonomy of permanent disposition options was developed based on previous models. The variables of disposition method, reasons for disposal and clothing involvement were measured using 4 and 5 point scales. Age, income and education comprised the demographic variables. A national random sample of 1000 adult female consumers was used. Of the 964 deliverable questionnaires, 402 were returned for a 41.7% response rate.

Respondents were found to be fairly evenly distributed across age, education and income categories. Results revealed that consumers disposed of clothing for a variety of reasons and most often utilized charitable organizations as a means of disposal. Chi Square analysis revealed that respondents in the high clothing involvement group more often disposed of clothing because it was out of style or they were tired of it. Additional relationships were also found between the demographic variables of age and education and both reasons for disposal and the options employed. A number of interactions between reasons for disposition and the alternative employed were also discovered. Relative to the taxonomy, results indicated that the majority of consumers disposed of clothing in a non-remunerative manner. Fashion played a role in the disposition of clothing for a significant number of consumers; particularly for those involved with clothing and for younger, more educated, consumers. Most respondents disposed of clothing in an environmentally responsible manner by choosing disposal options that recycle clothing.

CONSUMER TYPOLOGIES BASED ON BENEFITS SOUGHT: AN APPLICATION OF BENEFIT SEGMENTATION TO AN INSULATED APPAREL STUDY

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Prior research using benefit segmentation has focused on packaged goods and services and not on apparel products. What is lacking in the research are attempts to understand how benefits are combined in the apparel decision making process and how benefit segmentation can be used as a marketing strategy in the apparel industry. More importantly, there is a lack of research utilizing benefit segmentation with specific apparel that is actually purchased by the consumer.

In considering the relevance of benefit segmentation to theory and practice in retailing, and in noting the lack of research studies concerning apparel and benefit segmentation, continuing investigation as represented in this study is needed to further the current knowledge of benefit segmentation. Benefit segmentation is used to distinguish among consumers of insulated apparel. The study aids marketers in: (1) examining benefit segmentation as a method of segmenting consumers of insulated apparel, and (2) developing the profiles of segments in terms of benefits sought, demographics, consumer information environment, and lifestyle.

Data from 474 consumers were obtained from "hang tag" questionnaires attached to insulated garments. After purchasing the insulated apparel, consumers returned the attached questionnaire for a gift of a dollar. Eight regional retail stores participated in the study. The data were analyzed statistically by Principle Components Analysis (PCA), K-Means cluster analysis and Chi-Square analysis. Split half techniques and Cronbach's Alpha were used as reliability checks.

Segmentation was effected on the basis of benefits sought: insulation performance, practical cues and risk aversion, derived by factor analysis. Cluster analysis produced consumer segments which were labeled as Performance Directed, Utilitarian Oriented, Confidence Seekers and Overall Influentials. Descriptive profiles of the four segments were developed using factor scores from sixteen insulated apparel benefits, lifestyle variable interests, information concerning media habits, plus selected demographic variables. The results indicate that benefit-based cluster solutions can provide important strategic implications for understanding and influencing consumers of insulated apparel.
MANUFACTURER SPONSORED LOGO
COMPETITION AS INSTRUCTIONAL
STRATEGY IN MERCHANDISING

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Merchandising faculty often rely on a case study approach to provide students with experience in solving problems that may be encountered in industry. Feedback is given at semester's end and many students fail to see the relevance of this approach to actual merchandising situations.

Objective. The objective of using a logo competition as instructional strategy was to give students experience in solving a merchandising problem that would receive an immediate and tangible response from industry.

Method. A national sportswear company sought help in developing a new logo. Logo design was incorporated into a computer-aided design class. Company executives provided data on current and desired image, logo restrictions and customer profile. Students developed logos for two categories of sportswear according to specifications. Written concept statements accompanied logos. Students presented design concepts to the company. Executives judged the logos and provided monetary rewards. Winners were selected for both categories of sportswear. Faculty evaluated students independently of judges.

Evaluation of instructional strategy. Students were inspired by the possibility of recognition and financial reward. Executives were pleased with the variety and quality of logos. Over 25 students participated in the logo design competition. This strategy was first used in Fall, 1992. Logo design is a planned instructional strategy for Fall, 1993.

ENTRY LEVEL COMPETENCIES FOR INTERIOR DESIGNERS: THE PROFESSIONALS’ ASSESSMENT

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Competence in interior design is acquired through education and experience. The relationship between interior design education and practice is strong. Although educators do not want to limit educational goals to the specific needs of the interior design professional, their input is significant to identify requirements for entry level positions.

The Foundation for Interior Design Education Research (FIDER) has developed a competency based matrix that includes a list of criteria (divided into eight major categories) with minimum levels of student achievement as a guide for accrediting interior design programs. The purpose of this study was to determine if practicing interior design professionals ranked achievement levels for entry level competencies differently than those recommended in the 1988 FIDER Standards and Guidelines for First Professional Degree Level.

The FIDER standards and guidelines served as the bases for the development of the questionnaire that was sent to 340 practicing interior designers in Northern Ohio. A total of 137 (40%) usable questionnaires were returned.

A comparative analysis of the data was conducted to identify the existence of discrepancies between the assessments of the professionals and the FIDER recommendations for minimum student achievement levels. Discrepancies meant that less than 50% of the professionals rated the criteria the same as the minimum proficiency level recommended by FIDER.

Results indicated discrepancies existed between the ratings of the professionals and the guidelines established by FIDER in 53% (26/49) of the criteria. Of the criteria with differences, professionals rated 54% (14/26) of the criteria higher than FIDER, 15% (4/26) lower than FIDER, and 31% (8) were split, with some professionals rating the criteria higher, some lower than FIDER.

Discrepancies between FIDER achievement levels and the responses of the professionals may be due to growth and development of the profession, introduction of new technologies and a growing concern for the environment and human needs. This study was limited to a small geographic region. However, based on the number of discrepancies found, we recommend a national survey of interior designers be conducted. Continual assessments should be conducted to allow academic programs to either initiate or respond to the ever-changing need of the profession to provide the best possible preparation for new professionals.
CHARACTERISTICS of TEXTILES AND CLOTHING PROGRAMS and FACULTY in the UNITED STATES

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As higher education in the United States undergoes restructuring in adapting to environmental changes, so do Textiles and Clothing programs. Comparison data are needed by campus units for the self study phase of strategic planning. The purpose of this project was to provide baseline data about textiles and clothing programs in higher education settings. All academic units with four-year textiles and clothing programs were the population. Inclusion criteria were campuses with a program, major, or option that fit the definitions under Classification of Instructional Programs 19.09 categories - Textiles, Clothing and Apparel Studies. The exclusion criteria was that the unit reported no majors enrolled in any of these categories. Characteristics of the unit, curricula and faculty were obtained through a 1991-92 mail survey and follow-up telephone calls, with 78% of the population responding. Baccalaureate, masters, and doctoral programs are at 143, 58 and 18 campuses, respectively. Over 77% of the 16,000 undergraduate students major in Retailing/Merchandising, followed by Fashion/Apparel Design (13%) and Textiles, Apparel, Clothing, General (9%). There are 51 (36%) Category I (doctoral level), 56 (39%) Category IIA (comprehensive) and 24(17%) Category IIB (general baccalaureate) institutions. The smaller enrollment and few faculty units are generally found at the Category II institutions. Approximately two-thirds of the units have fewer than four faculty. A relevant indicator of a department’s research strength is its output. A ranking of institutions’ total theses/dissertations, 1986-90, included (1) Ohio State, (2) Maryland, (3) Tennessee, (4) Iowa State and Oklahoma State, (6) Cornell, (7) Virginia Tech, (8) Illinois and Louisiana State, and (10) Minnesota. The highest number of refereed journal articles were recorded at the Category I institutions and the most prolific authors were at these campuses. An index was calculated to rank the most productive textiles and clothing programs: (1) Tennessee, 8.4; (2) Cornell, 7.6; (3) Ohio State, 7.3; (4) Oregon State, 6.5; (5) Nebraska, 6.2; (6) Missouri, 5.6; (7) Illinois, 5.2; (8) Oklahoma State, 5.1; (9) Iowa State, 5.1; and (10) Louisiana State, 4.8. Faculty yet to complete the terminal degree, the large proportion of faculty appointed within this time, the percentage of faculty promoted within the last decade, and the faculty yet to earn tenure (46%) are indicators that ITAA should make an ongoing commitment to professional development of the membership.

USING PRODUCT FAILURE AS A LEARNING OPPORTUNITY

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Retailers and producers are concerned with products returned due to poor performance. Textile and apparel professionals use critical thinking skills to minimize returns and lost sales because returns are expensive for the industry. Professionals identify the material aspect that failed and explain how that failure came to be incorporated in the product. Students seldom work with failed products, even though these products provide opportunities to explore consumer expectations and failure prevention, understand consumer use/care of products and investigate failure.

A senior level textile science class assignment focuses on failed products. Class content includes fiber, dye, finish, and detergency chemistry, and fabric geometry. Each student group receives a failed apparel or furnishing product with descriptions of the failure, fiber content, cost, and product age, care, and use. Failed products are purchased at garage sales; sellers provide the history and reason for dissatisfaction, i.e., shrinkage, color migration, pilling, loss of applied design, and component mismatch.

Groups identify fiber content, yarn count and type, fabric weight, fabrication, coloration, and applied finishes and examine relationships between consumer use/care and product failure. Students explore the failure using books, trade press information, theory papers, consumer satisfaction and textile research, or quality perception studies. Students discuss probable causes, consumer expectations, and theoretical explanations. Groups propose two solutions for the failure, discuss the effectiveness of each, and describe how each solution would be incorporated. Groups recommend one solution and predict its impact on product cost and performance.

The project is challenging, beneficial, and practical. Students apply, integrate, and analyze information from this and other classes and use problem solving and critical thinking skills. Students gain an understanding of product failure from a professional perspective.
ASSESSMENT OF COLOR LEVELNESS
BY LAB COLORIMETRIC SYSTEM

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Visual observation has always been the means for evaluating color levelness. Different parts of a fabric are held together for comparison: the larger the color difference, the poorer the levelness. The main shortcoming of this subjective technique is its lack of a quantitative description of the levelness which makes communication very difficult. Furthermore, the subjective differences between observers cause variation of the evaluation. To solve this problem, especially to meet the requirement of quality control of unevenly colored textiles, some objective methods for the assessment of color levelness have been developed (Chong et al., 1992, Yang and Li). Chong et al. used the relative standard deviation of reflectance value (R) measured in the whole range of visible wavelength to describe the color differences by a relative unlevelness index (R.U.). Yang and Li established a levelness parameter (L) from the determination of K/S values of the fabric. For most of the colorations, L-value is in the range of 1 to 5. The larger the L-value, the better the color levelness. Although the established methods give a very good description of color levelness, both require a spectrophotometer for the measurements. In addition, the amount of calculation needed to determine either R or K/S in the whole range of visible wavelength is large. The equipment and calculation requirements limit the popularity of these methods.

This research developed a method for the objective evaluation of color levelness using a popular colorimetric system. Using a standard colorimetric system simplifies the calculations for the levelness parameter and is more practical for many laboratories equipped only with colorimeters for measuring color levelness.

Eight color spaces, each with five illuminants and two observers, are examined by three different levelness parameters using 28 different fabric samples to develop the best objective evaluation method of color levelness by the colorimetric system. A levelness parameter, L_{AE} in the Lab color space, is established for the measurement of color levelness. Compared to the previously reported methods, this method for obtaining quantitative levelness data from a simple procedure is suitable for any kind of colorimeters and requires no spectrophotometer. The levelness data obtained from this method accord with the levelness parameter from K/S values and with the visual observation.

IMAGE ANALYSIS: A QUANTITATIVE METHOD OF CARPET WEAR EVALUATION

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Currently, the textile industry uses a subjective human panel to analyze the retention of appearance in carpets with wear. This method is very expensive and vulnerable to variation due to the human factor. An easily repeatable instrumental method would be useful in the evaluation of carpet wear and appearance retention.

Image covariance can yield information on overall spatial structure of an image. The goal of this study was to quantify what has previously been a qualitative process, that is, subjective human measurement of wear and appearance retention in carpets. This study explored the use of a computer image analysis system in evaluating the effect of wear on texture periodicity for a set of cut-pile nylon carpets differing in linear density, turns per inch of plytwist, and pile weight per square yard.

The restricting consideration in the life of carpets is often the development of ugly wear patterns, not actual mechanical degradation. An unworn carpet will have more periodic appearance than a worn carpet. That is, with wear, the periodicity of a structure decreases.

The uniformity or periodicity of texture may be used as a measure of appearance retention in carpets. Images are converted from color or gray level to black and white binary images. Image covariance measures the periodicity of the image texture, i.e. the regularity of the image. The procedure for investigation included the following steps: 1) image capture, 2) resize image, 3) convert image to gray scale, 4) convert image to binary, 5) apply image covariance to the images, and 6) data analysis.

In cut pile carpets, loss of aesthetic appeal is seen in matting, thus, causing the carpet to lose its aesthetic appeal. The changes in surface texture regularity allow the technique of image analysis to be applied as a measurement tool for change and loss of uniformity on the surface of the carpet.

This study has shown that application of covariance through image analysis has excellent potential in providing reliable measurements for objective evaluation of carpet texture and appearance. The techniques used in this study are useful for quantifying carpet appearance and evaluating nonwovens, flat textiles, and structures other than pile fabrics, as well as various nontextile surfaces.
A NEW APPROACH FOR EVALUATING FABRIC APPEARANCE RETENTION: IMAGE ANALYSIS

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Overtime and with use, the appearance of a fabric may change. The aesthetic change in a fabric may limit usefulness of a garment or other textile product. Standardized methods for evaluating appearance change have been used for decades. Generally, they are based on the subjective judgments of observers. While these testing procedures provide a quick, overall evaluation, their accuracy and reliability have been questioned. Recently, researchers have begun employing computer image analysis as one alternative to subjective testing methods in an attempt to provide a quantifiable way to judge fabric characteristics.

The purpose of this research was to compare selected subjective methods using standard replicas for evaluating fabric appearance to an image analysis system. Three fabrics were tested. Appearance changes were created using AATCC Standard Test Methods for wrinkle recovery, for soil release, and for colorfastness to washing. Each of the treated fabrics was then evaluated by the two approaches. The image analysis system consisted of a color scanner, an image board and a PC computer.

In the image analysis program, the equation to grade wrinkling was based on 1) the standard deviation of the variations in the fabric surface (pixel intensity), and 2) the size of the wrinkled areas (number of black pixels on a binary image of the fabric surface). Computer grading for soil removal was based upon an index of normalized stain intensity and normalized stain size. The image analysis for colorfastness utilized distributions of HSV (hue, saturation, value) of the samples.

Results compared the visual assessment of fabric appearance changes to computer calculated assessment (i.e. grades). There were no statistical differences in the visual and computer calculated grades for wrinkle recovery. The computer calculated grades for stain removal (for 0 through 5 washings) were very close but consistently underestimated the grades given by human observers. Color change was measured and reported separately for the hue, saturation and value for each fabric.

This research examined computer image analysis as a way of evaluating fabric appearance retention. Image analysis can be an objective and accurate tool, even though much work remains before it can be regarded as a universal supplement to standard visual assessment. In addition, the fabric characterizations provided are precise and can be used to show the mechanisms of fabric appearance change.

CONSULTING PROJECT FOR RETAILERS(CPR): A STUDENT GENERATED STRATEGIC CASE ANALYSIS

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As part of a senior level retail course, the CPR was developed to help four small-town retailers improve their businesses. The Chamber of Commerce and the Business Development Committee in Logansport, IN relayed the request to an Indiana Co-op Extension Specialist, who then contacted the author.

The CPR is used as a teaching method by replacing published case studies with those developed by the students and allows them to assume the role of business consultant. Finally, the CPR provides to retail businesses information, expertise, and opportunity.

Strategic Management Teams, with each four-member team assigned to one store, used an assessment outline (Power, Gannon, McGinnis, & Schweiger, 1986) to collect data about in-store operations, merchandise mix, human resources, and trade area & competitive environments. The Retail Audit (Berman & Evans, 1989) was the primary tool used.

Students then analyzed data, identified key issues & problems, and developed strategic options with short and long-term impact statements. Findings and solutions were reported in oral and written form, with a copy delivered to each retailer. Follow-up determined if any strategy was used, with the best response as: "Good, right what we needed.... Hope to implement them within the next year."

The CPR was revised and used twice more, by focusing on: Shopping Centers & Malls and research questions generated from 10 non-traditional, retail store owners. The CPR’s applicability was confirmed.

REFERENCES:
A SELF-DIRECTED PROCESS FOR
REPOSITIONING CENTRAL BUSINESS DISTRICT
RETAILING IN SMALL RURAL COMMUNITIES

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As the United States population has migrated to
larger metropolitan areas, attempts have been made to
maintain the vitality of small towns throughout the
nation through support of downtown retailers and rural
tourism. A major problem has been the development of
situational awareness and consensus among the
stakeholders in communities.

The purpose of this study was to audit central
business district owners and managers in a small
commuter college community which had recently
become the site of the largest outlet mall in the nation.
Critical areas of investigation included the current
economic role served by the existing retail professional
mix; the information as to the perceived optimum image
and role of the Main Street area in five years; and the
building of consensus as to areas of focus and cluster
components intrinsic and enhancing of the focus.

The investigation process was developed with the
cooperation of the local Main Street Director and included
a survey of the business community, followed by a focus group meeting of stakeholders. The survey
was developed by the researchers and pilot tested on the
fifteen member local retail advisory board. Surveys
were mailed to 227 business owners in the central
business district. Sixty-five completed surveys were
returned after one mailing. Results indicated the
community was perceived of as conservative,
traditional and yet culturally diverse. The majority of
respondents felt the area was a courthouse feeder and
entertainment district with some student services and
shopping. Only a few felt that the current focus was
historical or tourist. Respondents indicated that they
would most like to see the area become one of upscale
shopping and historic in emphasis followed by being an
entertainment and professional or marketplace district.
A role of university feeder was the least desired focus.

The initial survey served as a catalyst to the
formation of stakeholder focus groups. The goals of the
focus groups sessions were to: 1. Reach consensus on
one possible focus for the downtown area or a
downtown vision; 2. Identify challenges and key
facilitators required to reach the vision; and, 3. Develop
an action agenda of tactics to achieve the vision.

As a result of this process the retailers in the main
street area are working together and have a positive
action plan. Most buildings are now rented, a
marketing plan is in place and a very successful grand
opening of the concept with extensive media coverage
has been held.

CONSUMER SHOPPING ORIENTATION
AND THE EFFECTIVENESS OF MERCHANDISE DISPLAY

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The purpose of this research is to investigate
the impact of merchandise display in relation to consumer
shopping orientation. Knowing the type of consumer
shopping orientation, most likely influenced by mer-
chandise display, could be useful to the retailer as promotional
strategies are planned.

P.G. Stone (1954) did a seminal study on
consumer orientation. He identified the following four
consumer orientations: economic, personal, ethical,
and apathetical. Moschis (1976) conducted further re-
search in this area. Since that time additional work has
been done on various types of shopper orientation.

A systematic sample of 347 Northern Plains
residents were sent a two-part questionnaire
based on Moschis (1976) study measuring consumer
shopping orientations and respondents’ attitudes toward
merchandise display. A 62% response rate was obtained.
Results were analyzed using the psychographic scale
developed by Moschis, which divided the respondents
into shopping orientations. Analysis of variance was
used to determine if there were differences among shop-
ner types in response to merchandise display. Chi-square
tests were run to see if there were differences among
shopping orientations and age in relationship to the
product categories of cosmetics, clothes, and groceries.

Data analysis indicated no significant
differences were found between the types of shopping
orientation and respondents’ reaction to merchandise
display. However, it was found that the majority of
respondents were special shoppers (37%), those who
liked to shop for special deals and brand-loyal shoppers
(35%), those who tended to continuously purchase the
same brand. It was found that all respondents had very
positive reactions toward merchandise display (mean=
4.11 on a 5 pt. scale). It was found that 82% of the
respondents believed that clothing displays were the
most effective. Further research might focus on
updating Moschis’ 1976 psychographic scale and
retesting or investigating differences in reaction to a
variety of merchandise.

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VENDOR CHOICE PROCESS OF RETAIL BUYERS

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The purpose of this research was to gain a better understanding of the retail apparel buyer's actual choice behavior when selecting vendors. Prospect theory was used as the theoretical framework for this study.

An experimental survey research design consisting of a 2 (budget) X 3 (probability of a merger occurring) between-subjects factorial was used. Subjects consisted of 272 apparel buyers employed by department stores in the West South Central U.S. Buyers were randomly presented with one of six possible hypothetical purchasing scenarios in which they were given a preimposed budget of either $300 (difficult to achieve) or $400 (easy to achieve). Buyers were required to choose between two competing vendors. Vendor A represented the riskless vendor by offering a set price. Vendor B represented the risky vendor by offering an adjustable price based on a quantity discount. Vendor B's offer was only attractive if the buyer believed they could purchase enough merchandise to take advantage of the discount. The amount of merchandise needed was dependent on the buyer's belief that a merger with another company would occur. After selecting one vendor, buyers responded to measures designed to identify their decision frame.

Reported reference points of $350 and below were labeled difficult while reported reference points of $351 and above were labeled easy. A buyer's decision frame was labeled positive if they perceived their choice to be between two gains, negative if their choice was perceived to be between two losses and mixed if they perceived their choice to be between a gain and a loss. Chi square analysis was used to determine if the preimposed budget influenced a buyer's reference point, decision frame and ultimate choice in a manner consistent with the propositions of Prospect Theory.

Results revealed that a preimposed budget did influence reference point formation ($X^2=22.34, p<.0001$). Buyers who were given a difficult budget reported difficult reference points while buyers who were given easy budgets reported easy reference points. Results also revealed that reference point tended to significantly influence decision frame ($X^2=45.81, p<.0001$). Buyers reporting a difficult reference point indicated having a negative decision frame while buyers who reported an easy reference point indicated having a positive or mixed frame. Significant findings were also revealed for the influence of frame on ultimate choice ($X^2=136.38, p<.0001$). Buyers with negative frames chose the risky vendor's offer while buyers with positive or mixed frames chose the riskless vendor's offer. Overall, Prospect Theory was found to explain the choice behavior of retail apparel buyers when selecting vendors.

CONSUMER'S CLOTHING INVOLVEMENT AND EXTERNAL INFORMATION SEARCH

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The purposes of the study were to clarify the construct of clothing involvement, and then to determine the effects of clothing involvement on information searching behavior and on purchasing behavior of clothing. The study was carried out through critical evaluation of the literature as well as the empirical analysis.

A questionnaire was developed and administered to 780 housewives living at Seoul and Taejon in Korea during the fall of 1990. Social daytime wear was selected as a clothing item for the study.

Through the critical evaluation of the existing literature, the concept of clothing involvement was found to be composed of six dimensions: interest, symbolism, pleasure, importance, fashion, and perceived risk. The empirical data from the subjects were analyzed to confirm the construct. As a result, all dimensions of clothing involvement were confirmed with the exception of the importance, which was not independent from the other dimensions.

Consumers acquired information by ongoing search without any specific buying intention. As a result of common factor analysis, five factors were extracted representing different patterns underlying the prepurchase information searching activities. They were mass-media search, store search, print-media search, interpersonal search, and professional search. There were significant relationships between clothing involvement, ongoing search, prepurchase search, clothing buying behavior.

In conclusion, clothing involvement is multidimensional concept and important consumer variable in decision making process. Fashion as a dimension is specific to clothing involvement, so it is the characteristic which can distinguish clothing involvement from general product involvement. As the result of the empirical study, consumer's ongoing information searching behavior is the continuous and regular activity, and apparently distinguished from prepurchase information searching behavior. The accumulation of information by ongoing search didn't reduce the efforts of prepurchase search. It is inferred that this result should be yielded from the positive relationship of the two types of information search with clothing involvement and continuous fashion change.
EXPECTATIONS OF CUSTOMER SERVICE IN APPAREL RETAIL STORES

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Objectives of this study were
1) to compare the expectations of customer service in excellent apparel retail stores and in a specific apparel retail store; 2) to compare customer and manager perceptions of customer service in one retail store; and 3) to compare consumer and manager importance ratings of customer service components. The questionnaire used in this research was based on Parasuraman, et al. (1991) SERVQUAL instrument and guidelines for using SERVQUAL. Focus group input added 16 new apparel related statements to the original 21 statements. Customer service questionnaires were completed by 92 customers and 21 management persons in ten California Eddie Bauer stores. The instrument showed a high reliability of .89 but failed to duplicate Parasuraman, et al. (1991) SERVQUAL factor analysis.

t-tests showed twelve expectations/perceptions statements were significantly different: six with expectations higher than perceptions and six with perceptions higher than expectations. t-tests also showed consumers perceived customer service at Eddie Bauer higher than managers in five instances and managers perceived higher scores than customers once. Out of five general customer service components, one, "The ability of the store to perform promised service dependably and accurately," was significantly more important to consumers than to managers. Findings will be used to formulate specific recommendations for Eddie Bauer's customer service program. Further refinement of the SERVQUAL instrument is needed in an apparel retail setting.


THE AMERICANS WITH DISABILITIES ACT: AN EXPLORATORY STUDY OF SHOPPING CENTER ACCESSIBILITY

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The purpose of this study was to examine the exterior and interior design elements of retail malls and determine whether the malls were adhering to state and federal accessibility legislation. Objectives were to: (1) develop operational definitions for legislative elements of the Americans with Disabilities Act; (2) use the operational definitions in the development of an evaluation instrument which could be used in assessing mall accessibility; (3) pilot and refine the instrument in order to make it usable to persons involved with assessing a structure for accessibility; (4) identify levels of compliance and offer recommendations for further research.

A select stratified sampling method was implemented using three selection criteria: (1) small, medium and large malls in terms of square feet; (2) years built: 1980s, 1970s, 1960s; (3) renovated and nonrenovated malls. Permission letters were directed to mall managers, requesting permission to evaluate the mall if selected for the sample. A self-addressed postcard was enclosed for background information which was used for sample selection. A select sample of eleven malls was chosen for evaluation to coincide with the Americans with Disabilities Act's required compliance date of January 26, 1992.

Results indicated there were no common characteristics in the malls with lower percent compliance in each of the eleven primary structural areas. However, in the 89 evaluation items, seventeen items were identified as having a high degree of non-compliance in the eleven malls.
DIRECTIONAL ASYMMETRY IN WOMEN OVER AGE 55: IMPLICATIONS FOR GARMENT FIT

by Lucinda Schoenberger, Iowa State University, Janice E. Huck, Kansas State University, and Betty Jo Dedic, University of Kentucky

In directional asymmetry, the dimensions of one side of the body are consistently larger than those of the other. During adolescence, handedness can contribute to the development of asymmetries of the upper arm. As the preferred side is used more, the musculature develops more on the preferred side. Asymmetry among non-righthanded subjects often favor's the right side of the body in some dimensions (e.g., writing with the left hand, but carrying heavy objects such as a child or groceries on the right side). As a body ages, it changes physiologically. Thus garments that formerly fit, may no longer conform to the new body configurations. Sometimes garments fit one side of the body better than the other. Thus, the research objective was to determine whether women over 55 experience body asymmetry and whether it worsens with age.

Investigators for this study measured 371 apparently healthy females over age 55 in two different regions of the country. Ages of the subjects were evenly dispersed across the five age categories. Measurements were taken over the subject's undergarments and a soft nylon spandex Giogello leotard in the subject's size. The subjects stood barefoot while measurement data were taken with a tape measure.

Differences in measurements between the right and left sides of the body (i.e., body asymmetry) were computed by subtracting the left side from the right side for 17 body measurements. Data were analyzed using means, standard deviations, t test pairwise comparisons for differences and chi square tests. Seven measurements were statistically significant with the average difference being slightly less than one centimeter larger on one side. The waist to full hip distance changed slightly with age. The cross back width and back vertical trunk length tended to be slightly longer on the side on the preferred hand. This variation due to sides was several times larger than measurement error, indicating that measurement error does not account for the difference in measurement between the right and left sides of the body.

These small differences probably would not require designers and manufacturers to accommodate changes in slopers. The underbust circumference, however, averaged 2.6 centimeters larger on the right side regardless of age or handedness. This could make a difference in the fit ease and have implications for designers and manufacturers of garments for women over age 55.

CURRENT BODY MEASUREMENTS OF WOMEN AGED 55 AND OLDER: A CONTRAST TO BODY MEASUREMENTS REPORTED BY THE PS 42-70

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This study examined differences in current body measurements of women aged 55 and older and the body measurements reported by PS 42-70. After a pilot test of data collection and computing methodologies, state project coordinators (n=38) and data collectors (n=391) in 38 states were recruited and provided training during the two-day workshops conducted in 24 regional locations. Measurements of a total of 6,652 ambulatory women, representing 38 states, were included in the final analysis.

By utilizing a FORTRAN program specially designed to sort subjects by size based on the same bust, height, and weight criteria as those used in the PS 42-70, subjects were classified into 7 figure types (Junior Petite, Juniors, Misses Petite, Misses, Misses Tall, Women's, and Half-sizes) in 6 to 10 sizes each. Based on t-tests, significant differences between the current body measurements and the PS 42-70 were found in the majority of sizes across the figure types. Body measurements that were significantly greater than the PS 42-70 across the sizes and figure types were abdominal extension, waist, sitting spread, armscyce, bust height, back width, chest width, hip and hip arc. Some measurements (e.g., hip height, inseam, cervical height, waist arc, abdominal arc, and weight) tended to be generally greater than those of the PS 42-70 with a few exceptions in some figure types. Depending on the sizes and figure types, bust, crotch length, vertical trunk, thigh max, and mid thigh tended to vary in both directions from the PS 42-70. Finally, degree of shoulder slope and bust arc tended to be less for current subjects as compared to those in the PS 42-70.

The findings indicate that most of the measurement differences in women 55 and older and the PS42-70 database relate to differences in posture (spinal curvature), body carriage, height, weight, and change in flesh/muscle relocation, which occur as the human female ages, and represent a different body conformation than their younger counterparts. Manufacturers and marketers must now work in concert to develop a coding system for product distribution while garment testing apparel products for this new market arena.
A MODEL FOR SPEED SOURCING
DOMESTIC APPAREL PRODUCTION

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Most countries that supply significant amounts of textiles and apparel to the U.S. have detailed national databases that facilitate international sourcing by retailers of apparel products. A few of the most profitable apparel retailers are electronically linked to manufacturers in the Far East to allow them to source apparel production in a matter of hours. Currently, the U.S. does not have a comprehensive, centrally located database.

Market responsiveness and strategies that involve being able to quickly identify options and produce apparel to meet consumer demand at the retail level in an ever shorter time frame have been identified as important competitive strategies. However, Dickerson and Dalecki (1991) noted that smaller, less active producers report greater difficulty in their working relationships with retailers.

The purpose of this research is to identify the basic tenets retailers use in sourcing in order to develop a model database to speed domestic sourcing. The objectives of the research were to: (1) Identify current sourcing practices of retailers/manufacturers, and (2) To classify and standardize apparel production information for use in an electronic database.

Current sourcing practices of major retailers (Macy's, J.C. Penney, Frederick Atkins, the May Co. and MAST Industries) were identified through focused interviews with apparel buyers and product developers. The interviews indicated that buyers use a gender and product specific sourcing classification.

Using retailer input, a survey instrument was designed to capture apparel production capabilities by product category. The questionnaire administered by post secondary industrial representatives asked apparel producers to identify all apparel production categories currently produced then to further define their production capabilities by identifying their equipment and technical capabilities. Researchers followed up with phone calls to clarify information. Data were coded into a model relational prototype database. The PC-based model includes 205 apparel producers and was designed to be user friendly and accessible by modem or fax. It can be updated on-line and has confidential access. Field tests with retailers are in progress.


CARE LABEL ADVISOR EXPERT SYSTEM

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In the apparel product development and specification processes, the contents of mandated care labels must be identified. Field work with product developers and apparel executives for a three-year research project, Computer-Integrated Forecasting for Demand-Activated Product Development, Production and Merchandising, revealed problems with the level of expertise of individuals responsible for designating care requirements. Incorrect labels can be costly mistakes which leave consumers with dissatisfaction, and retailers and manufacturers with returns, markdowns and lost sales. Since professionals in the field of apparel and textiles have care-related knowledge, improving the transfer of that expertise to industry could have a high pay-off in reduced errors or avoided problems.

Expert systems, a form of artificial intelligence, provide a means for making the integrated decision-making of an expert readily available to a novice. The purpose of this research project was to design a care labeling expert system prototype. An individual responsible for knowledge acquisition was teamed with one responsible for knowledge engineering to create a computer program which utilizes facts and rules to make inferences. A purchased software shell, VP-Expert, provided a framework for the program.

As a first-pass trial, the prototype was developed for sportswear or separates made of woven fabrics. It was designed with the goals of easy use by individuals with little care knowledge or computer skills. The user answers a series of simple questions on fiber, fabric weight, color, finish and trim character, resulting in the automatic provision of care instructions or advice to seek more information. A manual was written with step-by-step instructions and illustratory information.

The prototype was validated using standard beta testing methods. Seniors and graduate students majoring in apparel and textiles or merchandising, and apparel design and production faculty served respectively as surrogate novice and experienced product developers. With relative ease, all surrogates averaged two minutes to complete the system for two or three garments. Observation of their actions and feedback stimulated limited revisions in the form of placing textile term explanations onto the screen from the manual. Content validation by a textile scientist resulted in no changes. Strategies for industry trial are being explored; several apparel executives have seen demonstrations and expressed interest in the system.
"Interdisciplinary Approach to Dress" is a sophomore level course taught in support of a Merchandising, Apparel and Textiles (MAT) program and is required of all majors and minors. The overall objective of the course is to enable students to understand the relationship between clothing and culture.

In an effort to develop the student's appreciation of cultural diversity, an International Student Project was developed through cooperation with UK's Office of International Affairs. Students in the course are paired with an International Student through the assistance of that office. Applications are taken from both International Students and students enrolled in the course and "partners" are determined. The objective of the project is that students understand the relationship between clothing and culture while developing an appreciation of cultural diversity at their own university.

The students are initially introduced to their "partner" in a group setting to offset the anxiety of meeting for the first time. After the initial introduction, partners are required to meet a minimum of five times during the semester. The project has been developed so that three of the meetings employ an interview format, while the remaining two have an activity/sharing format. In addition to the five meetings that require a written report, the student in the course writes a summary paper to synthesize his/her experience. International Students receive one credit hour through Experiential Education and also write a summary paper.

To date, the project has been taught twice with a total of 72 MAT students participating, plus an equal number of International Students. In addition to in-class evaluations, close contact with the Office of International Affairs informs the instructor of perceptions and experiences International Students have. Feedback from both groups of students are incorporated into the project.

Recently courses across campus have been evaluated for their potential to be included in the University Studies Program (courses required of all university students). The University Studies Program requires students to take at least one course in the Cross-Cultural area. Cross-Cultural courses are defined as those which deal primarily with the Third World or with a non-western civilization. Interdisciplinary Approach to Dress was proposed for Cross-Cultural credit within the University Studies Program. The course has been approved for Cross-Cultural credit and will be taught both Fall and Spring semesters hereafter.

The purpose of this study was to investigate the culturally constituted or shared symbolism of two key dress dimensions (waistline placement and skirt length). Is it possible to identify a collective feeling about what it means to have hemlines going up, or down? to have waistlines high or low or in the middle?

A convenience sample of 100 females was derived from home economics classes at Queens College, which serves a multicultural, multiage, urban student population.

Data were collected in a two-stage sequence. In Stage 1 respondents were asked to make a free listing of three associations (people, places, events, feelings, moods, images, etc.) with five dress dimension categories: low waistlines, waistlines in middle, high waistlines, skirt lengths moving down, and skirt lengths moving up. All responses in each category were tabulated and counted. For example for skirt lengths going up the predominant associations were: young, sexy, and trendy.

In Stage 2 the same respondents were asked to group reoccurring concepts (e.g. "elegant," "old," "comfortable," etc.) utilizing pile sorts. Analyzing the pile sorts by means of multidimensional scaling (Kruskal & Wish, 1978) it was possible to create a cognitive space for each category of dress dimension.

Skirts moving up and skirts moving down appear to inhabit very different regions of cognitive space. Movements in skirt length are associated with a powerful and coherent symbolic pattern revolving around such key concepts as youth versus maturity, and professionalism/elegance versus non-professionalism/casualness. A similar but less definite pattern was found for waistline placement.

Reference
FASHION AND MODERNITY
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This study examines the historical foundations and evolution of fashion in Northern Europe during the medieval period, from 900 to 1400 A.D. Theoretical constructs that have been presented as initiating fashion are important precursors and/or enhancers of fashion change, but they do not singularly account for it. Status competition, market economies, extensive communication and trade, urbanization all existed in highly developed forms in China and the Middle Eastern countries that were contemporary with medieval Europe, however these areas did not have fashion. Thus it is clear that the underpinnings of fashion theory were not adequately fastened to reality.

This study examines the theoretical constructs utilizing an empirical, comparative, socio-psychological/historical approach. Those precursors which were central to fashion theory were examined as to their presence and timing in different parts of Northern Europe during the medieval period and their relationship to changes in dress. Dress took on a different meaning and reflected a changing view of the self and society. The speed-up in the change of dress styles corresponds to the 12th century Renaissance—a result of the impact of the sudden, overwhelming rush of the re-opening of world communication/trade with the preexisting propensity for ostentatious display of the Franks. This resulted in new ways of approaching culture and a changing view of the self (Elias, 1939/1978)—the rise of the individual and increased gender differentiation (Stannard, 1997).

Blumer’s (1969) concept of fashion being a means of adapting to social change can be applied to the origins of fashion in the Middle Ages. Konig’s (1972) integrated approach, which combined most of the theories of fashion, is most explanatory, especially when juxtaposed with Elias’ “civilizing process,” whereby multitudes of factors interact with individuals and society, resulting in mutually reinforcing changes in the micro and macro levels of society. Thus, fashion resulted from several centuries of development, where changes in individual self concept interacted with culture and society to produce a new way of viewing and presenting the self. This suggests that the macro differences in the development of the eventual states of France, Britain, and the Low Countries would be reflected in the peoples’ use of fashion and dress. Thus, Elias’ example of France as the epitome of centrifugal, competitive, and then coalescing forces in state formation can be seen in France’s lead in the development of fashion. Blumer, H.G. (1969) “Fashion: from class differentiation to collective selection.” The Sociological Quarterly 10:275-91.


DRESS, GENDER IDENTITY, AND THE PUBLIC DISPLAY OF SKIN
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Eicher (1981) proposed that the dressed body could be analyzed in relationship to presenting the public, private, and secret self. This paper draws from 8 field trips and archival documents to analyze gender and public presentation of the Kalabari of Nigeria, relating to expectations for body coverage and skin display.

Kalabari males and females have a hierarchy of dress that emphasizes sociopolitical status for males and sociophysical status for females (Michelman & Erekosima, 1992). These hierarchies differ. Adult males in public are expected to cover their bodies from neck to foot with garments, for public formal ceremonies or everyday activities; in private, they may be bare-chested. In contrast, females in public ceremonies are expected to cover the genital area after onset of menstruation, but traditionally exposed the breasts as a sign of beauty, eligibility for marriage, or accomplishment of motherhood. Today, as a result of knowing Western standards of modesty, females cover the breasts, but leave their shoulders bare for public ceremonies known as bite pakiri inwain, konju fina, and iriabo. Adult women in everyday public life are expected to cover both upper and lower body.

The difference in the amount of skin display and coverage of the body for male and female relate to the basic orientation of adult males and females in public life, for males are seen as sociopolitical figures who are formally responsible for power and economic decisions, and females are seen as sociophysical figures, formally responsible for the reproduction of Kalabari society. In conclusion, Kalabari gender differences are similar to the display of body coverage and skin in the Academy Awards and many wedding ceremonies in American society.

References:


A CLOSER EXAMINATION OF RETAIL MANAGEMENT MOTIVATION

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Retail management employees have beliefs about rewards and opportunities available within an organization that contribute significantly to their motivation. Motivation of retail management is a necessary additional component in the quest for competitive superiority. Relationships between demographic characteristics and motivation levels of retail management employees will be examined.

The purpose of this study was to determine if retail management employee motivation scores differ by age, educational level, and length of employment. The survey research method was used and the questionnaire was administered in conjunction with a major department store chain Fall 1991. The stratified sample consisted of 237 retail management personnel (80% response rate).

Motivation was measured using Vroom's (1964) valence, instrumentality, and expectancy components of motivation. Forty-three items were obtained to measure these components. A motivation score was calculated for each respondent. Analysis of variance was used to determine if retail employee scores differed by age, educational level, and length of employment.

Results indicated that employee motivation scores ranged from 0 to 85. Motivation differed significantly by retail management age (p = .0189) with the highest motivation scores from the youngest group. Motivation scores did not differ significantly by educational level and length of employment.

Younger employees have a stronger desire to explore the job trial-and-error and newness of a management position. Older individuals may feel more affiliation with the organization and better understand the responsibilities and expectations of their position.

Retail management can use this information to restructure employee training and benefit programs. Educators, who prepare students for the retail industry, can re-evaluate students' demographic characteristics and career goals to closely match students with potential employers.


STORE MANAGERS' COMPUTER TRAINING AND COMPUTER-INTEGRATED RETAILING: FAMILIARITY, INVOLVEMENT, AND ADOPTION

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The changing environment of the apparel business, especially regarding technology, has encouraged most retailers as well as manufacturers to make appropriate adjustments in order to stay competitive (Kincade & Cassill, 1993). However, the extent of computer integration has varied considerably according to retail store types. For example, small independent retailers have been relatively slow in adopting new technology in their operations.

There have also been some indications that computer training, especially that of store managers or decision-makers of the organization, fosters different levels of motivation for adopting computer-integrated retailing. The major objectives of this study were (1) to describe the current adoption status of computerized retail operations and integration; and (2) to investigate whether store managers' general computer training is related to their (a) familiarity with computer-integrated retailing, (b) computer involvement on the job, and/or (c) future prospects for the adoption of computer-integrated retailing at their stores.

Approximately 150 retail store managers in a medium-sized city in a midwestern state were first informed about the study over the telephone and were asked for their cooperation. When they agreed to participate, a questionnaire was personally delivered to them by retailing major students, giving each manager an opportunity to ask questions if uncertain about any aspects of the study or questionnaire. The final sample resulted in 106 responses from managers of discount stores, department stores, specialty stores, and small independent stores.

Major findings of the study supported the notion that one of the most critical and effective elements in increasing the retail store managers' intention or willingness to adopt computer-integrated retailing is computer training. Computer training as a means of communication increases familiarity which in turn increases managers' motivation to adopt computer-integrated retailing.

THE STRATEGIC RECRUITMENT OF OLDER PERSONS FOR ENTRY-LEVEL RETAIL POSITIONS: A PILOT STUDY
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A dramatically changing work force has forced retailers to re-evaluate their recruiting methods chiefly by targeting non-traditional labor pools such as the elderly. The purpose of the present study was to develop and pre-test a procedure for assessing the attitudes toward and recruitment strategies used for the employment of older persons in entry-level department stores.

Independently-owned retail department stores with 30 or fewer units were gleaned from the 1992 listing of the top 100 department stores (Gallagher, 1992). The resulting sample size was 73 store units from which a 38% usable response rate was gained. As well as respondent demographics, the questionnaire addressed employer attitudes toward and recruitment methods used to hire an older work force. The 21-item employer-attitude scale (measured on a 7-point Likert scale where 7 anchored strong agreement) was factor analyzed. Sixty-five percent of the variance was explained by Physical Ability (19.7%), Perceived Social/Psychological Needs (14.3%), Behavioral (11.7%) and Attitudinal (9.0%) Commitment and Employability (10.5%). The alpha reliabilities for these factors ranged from .61 to .81. The recruitment methods in use, measured on a five-point Likert scale from 1 (not used) to 5 (used a lot), revealed that community news advertisements (mean = 3.6±1.34) and employee referrals (mean = 3.6±1.30) were used a great deal more for entry-level jobs than any of the 16 other methods.

REFERENCE

UNDERNEATH IT ALL: INNOVATIVE TEACHING
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Ideas for the production of an exhibit of historic underwear titled "Underneath it all: The shape of fashion", germinated for over two years before the exhibit was produced. The goal was to provide students with experience in the production of an exhibit and its ancillary activities, while gaining the attention of the University and community for the Textiles and Clothing program. It was the intent of the exhibit to demonstrate how undergarments from 1878 to the present have been used not only as a buffer between the body and coarser outer garments, but also to shape or reshape the body in ways that reflected social, economic, political and aesthetic trends of various periods.

The vignette arrangement of the garments, by time periods, grew out of a desire to have the undergarments displayed in intimate environments suggesting boudoirs, where the garments would normally have been seen. Period appropriate furniture was borrowed for each vignette.

The Western Costume class selected representative undergarments from the Costume Collection, and students studied the design, fabrication, extant condition and history of garments. The accuracy of ascribed proveniences was assessed through historical research. Each garment was put into socio-historical context in a research paper that described the garment and the era from which it originated.

Concurrently, the Fashion Illustration class prepared illustrations of the garments for the exhibit, and learned to follow the process of drawing from rough drawings to polished presentations. Drawing from actual garments aided students in drawing three dimensionally. Translation of actual details, such as stitches, ribbons and laces into various media, was a challenge. Observing colors, patterns and textures helped students translate design to a 2D surface.

The exhibit was successful. Students enjoyed the experience, and stated that it aided them in understanding the role of socio-historical factors in fashion. They saw the impact of idealized images on fashion, and how undergarments literally shape the body to support outerwear.

For future exhibits, we may include Museum Methods and Visual Merchandising students to provide them with a forum for visual display of fashion. By doing so, we hope to use the exhibit as a "hands-on" method to enhance both our curriculum and the experiences of our students.
"I Was Here: A Study of Julia E. Wolfe
Based On Clothing and Photographs

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In 1980 three trunks, containing over 300 items of Julia Wolfe’s clothing
and accessories, at the Thomas Wolfe Memorial in Asheville, NC, were opened.
Julia Wolfe was the mother of the acclaimed American novelist Thomas Wolfe
(1900-1938). He made his mother famous by using her as a model for his
fictional character Eliza Gant in the novels Look Homeward, Angel and Of Time
and the River. Many readers accepted the portrayal as true to life since so
many details were undeniably accurate.

The artifacts, which ranged over a
period of fifty-five years from 1885 to
1945, were established as the property
of Julia Wolfe based upon nineteen
positive photo identifications of
clothing articles worn by Mrs. Wolfe.
Sizes reinforced the assumption. Dates
were established from primary
periodicals, catalogs, newspaper
articles, and photographs.

Could Julia Wolfe’s clothing be
interpreted as indications of her
character and lifestyle? If so, would
the artifacts support the assumption
that Thomas Wolfe had indeed transferred
his mother from life to the written
page? Was Julia Wolfe a typical North
Carolina middle class woman? A study of
the clothing in conjunction with
historical research into her life and
time period through manuscripts,
personal letters, journal articles,
biographies of Thomas Wolfe, histories,
and interviews with family members and
acquaintances of the Wolfe family
answered these questions.

The artifacts did not substantiate
the assumption that the personal
identity and values of Julia Wolfe and
her fictional counterpart Eliza Gant
were identical. The artifacts did
reflect attitudes toward women, and
changes in economic and political
conditions in North Carolina during
Julia Wolfe’s lifetime. Julia Wolfe
emerges as a dynamic woman who met the
circumstances of her life in sometimes
expected, sometimes unexpected, ways.

Wolfe, Thomas. (1929). Look Homeward,

Wolfe, Thomas. (1935). Of Time and the
In the 1930s, women's roles in America revolved around the home, and working women encountered discrimination for "stealing" jobs from men. After Pearl Harbor, expanding manpower shortages in war industries prompted the government to turn to middle-class women to fill the gap, but it first had to change society's attitudes about women.

Akron, Ohio served as a test site for voluntary enrollment of women for factory work, and a qualitative content analysis of the local newspaper showed that department stores used fashion advertising not only to sell clothing, but to validate and encourage women's new roles as factory workers. Department stores offered special clothing for women war workers, opened "Women at Work" shops beside fashion departments, and elevated women workers to heroine status in ads. Retailers used fashion as a tool of war designed to influence women's participation in war industry work.

Because department stores targeted middle-class women, they served as an important force in changing societal attitudes about women and work. Theoretically, fashion reflects society, but this was a time when fashion also served as a change agent in temporarily altering women's roles within a society. Actively encouraging women's involvement in the war effort proved to be both patriotic and good for the fashion business.

The purpose of this research was to determine if there were observable differences in design process strategies between native Japanese and American college age students. The significance of this study is that it provides a larger and culturally different sample than previous exploratory studies in the design process.

Thirty-six subjects were classified into high and low level elaborator groups. Subjects completed a task in which they created a rendering from three abstract lines as they verbally reported their thoughts on videotape. Twenty-two variables of elaboration were analyzed using analysis of variance.

Japanese low level elaborators were found to spend more time examining the image while rendering, as well as rendering more images after they stated the essential idea, than the American low level elaborators did. The Japanese high level elaborators tended to wait longer before stating their first idea, to begin rendering the final image sooner, to spend more time examining the image while rendering, to render more complex images, and to experiment with ideas less often than the American high level elaborators.

This study reinforces the idea that strategies taught and valued within a culture may vary.
MEASURING BODY CATHEXIS WITH A VISUAL BODY GRID

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Numerous studies have found that men and women vary drastically in overall satisfaction with their bodies; women are more dissatisfied with all aspects of their appearance than are men. This dissatisfaction is undoubtedly in response to a more narrowly defined cultural body ideal for women which is reinforced through media images. Body cathexis, which is defined as the satisfaction with the body and its separate parts and processes, is an integral part of the self-concept.

Body satisfaction data were gathered from 109 college students, 103 female and 6 male. The instrument utilized was a visual "body grid" showing both front and back views of a line-drawn unclothed body. A 7 1/2 head length, mesomorphic figure, considered as representing an average figure, was shown for both a male and a female body. This resulted in a 32 cell "body grid", comprised of 8 vertical cells and 4 horizontal cells. Students were asked to shade in the precise areas they disliked or wished to change if it were possible. Three trained raters evaluated the shaded grids to determine specific areas of body dissatisfaction from both front and side views.

Results indicated that females shaded more body parts than men. There were common areas of dissatisfaction: thighs (70%), stomach area (57%), hip area (41%), and bust or chest (33%). Grid analysis revealed specific locations of dissatisfaction (ex., outer thighs, 28%, and inner thighs, 26%). These findings are in keeping with several other body cathexis studies. Responses were quite diverse for other areas of dissatisfaction, including fingernails, teeth, eyebrows, eyelashes, height, toes, toenails, ankles, chin, and hair.

The influence of media images on children through advertisements, Barbie dolls, television, and fashion models serves to create and reinforce firm impressions of what the ideal body should be. The fact that females shaded more body parts than males is testimony to the belief that women are more dissatisfied in general with their bodies than are men. This finding supports the belief that worth for women comes largely from their looks, while worth for men is tied to their achievements.

The visual body grid measure proved to give specific cathexis readings, with strong inter-rater reliability, and is being employed in longer-term data collection as one aspect of a larger study on body image. A side benefit was that students were able to see how emotionally invested they were in their body appearances, and how dissatisfaction were molded by media images.

DEVELOPMENT OF PROTOTYPE DESIGNS FOR TICK PROTECTION

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The increased popularity of camping and similar activities puts more Americans at risk for contracting diseases associated with ticks including Rocky Mountain Spotted Fever and Lyme disease. Tourism is the second largest industry in Oklahoma and the majority of recreational activities occur in the eastern one-half of the state where a significant tick population exists. Because Oklahoma usually has the highest incidence of Rocky Mountain spotted fever in the U.S., there is significant concern over this problem.

The research objective was to develop prototype designs that prevent the incidence of tick contact with skin surfaces using materials that prevent the physical exclusion of the smallest tick life stage (larvae) through the fabric structure. Previous efforts to prevent tick attack have focused on impregnating textiles with various chemicals, primarily permethrin, to provide protection against the lone star tick. Because permethrin is a toxicant, this research proposed examination of an alternative method of protection based on an "exclusion" concept.

Since the primary site of ticks attaching to humans is at the ankle area, efforts were directed toward the design of footwear that provides a sealed interface with the inside lining of the pants cuff to prevent ticks from entering under clothing where they can attach and remain undetected for several hours or even days. The functional clothing design process was used to develop a list of candidate fabrics, conduct two textile exclusion tests, and evaluate alternative closure and attachment mechanisms. The results of these components yielded two promising textiles and two sock designs. A subsequent wear test showed the effectiveness of the prototype designs and test fabrics.
CLOTHING DEPRIVATION: INFLUENCE ON SELF-ESTEEM AND PERCEPTIONS OF SCHOOL CLIMATE FOR MIDDLE SCHOOL FEMALE STUDENTS

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Adolescence is a critical time for changes in self-concept and body-image awareness. Self-esteem, the evaluative component of self-concept, has been found to be influenced by acceptance by peers which, in turn, has been found to be influenced by appearance. Elliot, Voss, and Wendling (1966) reported that school drop-outs believed that while they were in school they could not meet the demands of peer groups regarding clothing. Researchers have coined the term, clothing deprivation, to identify such feelings of clothing inadequacy. Previous studies suggest that perceptions of clothing deprivation may contribute to lower self-esteem. However, little is known about the influence of clothing deprivation on perceptions of the school environment (or climate). The purpose of this study was to examine relationships between perceptions of clothing deprivation, perceptions of school climate, and self-esteem for a convenience sample of middle school females using standardized published scales. Multivariate analysis of variance indicated that perceptions of clothing deprivation, self-esteem, and perceptions of school climate did not differ significantly by demographics. Pearson Correlation Coefficients indicated the following moderate associations. As perceptions of clothing deprivation increased students were likely to have lower scores in the Social Acceptance, Physical Appearance, and Global Self-worth domains of self-esteem. Higher perceptions of clothing deprivation were associated with less positive perceptions of school climate. Subjects with more positive perceptions of school climate had higher self-esteem. These results suggest that competitiveness among adolescents with regard to clothing may lead to perceptions of clothing deprivation and may contribute to lower self-esteem and less positive perceptions of school climate. More research into relationships is warranted to elucidate possible influences on youth at risk.

References

SELF CONCEPT AND CLOTHING USE IN EARLY, MIDDLE AND LATE ADOLESCENCE

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Adolescence is often nebulously defined as the transitional period of development between childhood and adulthood. Clothing plays an important role during this time both as a communicator of information and as an aid in the establishment of self-identity. It is expected that as an individual matures, his or her identity becomes more stable. Increasing autonomy in adolescent behavior regarding clothing throughout this transitional period may serve as evidence of this. The present study was undertaken to examine self concept and clothing use in early, middle, and late adolescents in rural and urban residences. Examining differences in these variables by stage of adolescence fills a gap in the clothing literature and contributes further knowledge to our understanding of the role that clothing plays throughout adolescence.

A survey was administered to 478 sixth, ninth and twelfth grade male and female adolescents, representing the early, middle and late adolescent stages of development, respectively. Distribution by gender and grade was approximately equal, with 33% of the sample belonging to a minority group. The survey contained existing measures of self concept (Rosenberg, 1965) and clothing use (Sweeney & Zions, 1989), and questions regarding influences on clothing choices.

Few differences were found between adolescent groups regarding clothing use and self concept. However, younger adolescents were found to be more satisfied with the appearance of their bodies and with their clothing than were older adolescents. Rural adolescents were more conforming in dress than were their urban counterparts, but these differences diminished with age. And males indicated being more conforming in appearance than did females. The media was found to be most influential in clothing choice for at least 21% of the adolescents and this influence increased with age. Parental influence on clothing choice decreased with age as friends influence increased.


OBJECTIVE SELF-AWARENESS AND RATINGS OF ATTRACTIVENESS

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The purpose of this study was to test the effects of self-awareness and exposure to fashion models on ratings of attractiveness. There were two independent variables: self-awareness (61 females wrote a paragraph using words which caused either an internal or external focus), chair (subjects viewed a model in a wheel chair or straight chair) and three dependant variables: ratings of self and model’s attractiveness (rated on 9-point scale) and social distance [measured by subjects drawing a stick figure of themselves at a comfortable distance from a drawing of the model].

MANOVA and ANOVA were conducted. ANOVA revealed main effects for chair on attractiveness of the model, difference between ratings of self and model’s attractiveness, and social distance. Subjects placed themselves closer to the model in the wheel chair, who was rated more attractive than the model in the straight chair and also more attractive than self. Internally focused subjects, who saw the model in the wheel chair, rated themselves as less attractive than the model. Subjects, who rated themselves less attractive than the model, placed themselves farther away from the drawing of the model.

State of self-awareness and exposure to a model in a straight or a wheel chair affected ratings of self and model’s attractiveness and social distance. An aversive state may have been reflected in greater social distance maintained by subjects who rated themselves less attractive than the model. Greater social distance is often interpreted as an avoidance mechanism.

WOMEN OF SIZE: A COMPARISON OF RACE ON SELF-ESTEEM AND BODY-CATHEXIS

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American women are under constant pressure to conform to a culturally defined "ideal silhouette". Larger-sized women (size 14 and above), may feel dissatisfaction with self and body from failure to fit into this cultural standard. The importance of physical attractiveness involving clothing and appearance is well established.

Research on self-esteem and body-cathexis (degree of body satisfaction) has focused primarily on average-sized White women. The few studies including Black women indicate higher body satisfaction for Black women even though they tend to have higher average weight than White women (Maddox, 1968). However, few researchers have included larger size as a research variable.

This study compared self-esteem and body-cathexis levels of Black and White women in two larger-size categories based on dress size and height ratios. Instruments included a 10-item self-esteem evaluation and a body-cathexis scale adapted from Franzoi and Shields (1984). Subjects included 229 White women and 58 Black women recruited in a shopping mall.

One-way ANOVAs determined that Black women had higher overall self-esteem and body-cathexis scores than White women regardless of size group, but that the smaller-sized group of large women had higher body-cathexis scores than the larger-sized group of large women. A 2-way ANOVA revealed a main effect of .001 with no interaction between race and size, indicating that the larger-sized group of Black women had greater body-cathexis than the smaller-sized group of White women.

The higher scores of Black women may indicate a lack of acceptance of the dominant culture's quest for thinness or a protection from that quest through some nuance in the Black subculture. Future research should investigate factors that contributed to the significantly higher scores for Black women.


ALTERNATIVE TRADING ORGANIZATIONS: A CULTURE OF SOCIAL RESPONSIBILITY

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The purpose of this research was to develop a profile of the organizational culture for Alternative Trading Organizations (ATOs). ATOs are vertically integrated, nonprofit organizations that import and retail ethnic apparel and textile crafts from developing countries. Kotter and Heskett’s (1992) model of organizational culture served as a conceptual point of departure for the research design and as a model to which the findings could be compared. Kotter and Heskett define a successful business culture as one where core values and normative behaviors are clearly understood; the culture is strategically appropriate to its context; and strong leadership is adaptive to and can effect change on behalf of customers, stockholders, and employees. The model, developed based on large, for-profit companies, was examined for its usefulness in understanding small businesses with a nonprofit structure.

Case studies were conducted with three major U.S.-based ATOs that varied in size, years in operation, retail organization, and geographic focus for sourcing crafts. On-site interviews were conducted with 25 managers and employees; an additional 75 employees were observed as they received and filled orders, participated in meetings, and made product design decisions. Data were also gathered from sales records, mission statements, and newsletters. A grounded theory approach was used for content analysis of the data.

Major themes that emerged included a widely agreed upon driving force of providing income for the world’s poorest artisans. Time, attention, and travel is devoted to careful selection of artisan groups in need of assistance. Oft-repeated artisan success stories nourish a culture of social responsibility and efforts toward micro-economic development. In this producer-driven culture, greater attention is given to artisan employees than to other constituencies. Problems related to inventory control and lack of target marketing have emerged after a period of consumer prosperity and limited competition in craft importing. An organizational culture of creative tension is evolving as the enduring focus on producers is being nudged by an emerging focus on marketing. ATOs are examining their cooperative structures, leadership styles, and reactive models for change as they position themselves in a more competitive craft marketplace.

The ATO profile illustrated both similarities and differences with Kotter and Heskett’s model. Core values and behaviors were actively communicated not only to employees, but to customers as well. Maintenance of a primary focus on artisan employees challenged Kotter and Heskett’s attention to a three-part constituency. A reactive model for change contrasts with Kotter and Heskett’s more proactive model.


ORGANIZATIONAL CULTURE OF GUATEMALAN TEXTILE AND APPAREL BUSINESSES

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Organizational culture is defined as the shared values and behaviors that guide a firm and includes variables such as management visibility and respect for employees; acceptance of individual initiative, non-conformity, and risk taking; clarity of objectives and standards; commitment to training; organizational closeness; customer and product orientation; internal communication; orientation to action and change; and family relationships. Understanding a firm’s organizational culture provides insights as to what makes an organization effective and distinct.

The purpose of this study was to 1) profile the organizational culture of Guatemalan businesses that produce textile and apparel products for export to the U.S., and 2) compare the profiles with past research describing the cultures of apparel businesses located in the U.S.. Case studies were conducted of seven textile and apparel businesses that export to the U.S. through a Houston-based catalog retailer. In-depth interviews were conducted in Spanish with 18 management and production employees; 97 employees were observed as they performed their daily work. Qualitative data were content analyzed using a coding guide including categories of organizational culture assessed in past research.

The overall profile of organizational culture included improved family well-being as a motivating force for initiating and sustaining business. Cooperative management provided mutual respect and fairness among all members. Little organizational risk taking was evident, yet joining the group was an indicator of individual initiative. The objective of creating a successful business required new product development. Customers were often the primary source of new ideas for product development.

Similarities among Guatemalan and U.S. small apparel and craft businesses were noted in terms of financial need, importance of family, geographic marketing focus, product development strategies, and risk in ownership. Unique to Guatemalan businesses was their cooperative management style. Suggestions were made for future research and for policy-making in international economic development.
MARKETING PRACTICES OF THE CANADIAN TEXTILE & APPAREL INDUSTRIES\(^1\)

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This research is part of a 1990 study on marketing practices of the Canadian textile and apparel industries.\(^2\) Objectives were to investigate: 1) marketing strategies of textile manufacturers/importers and apparel manufacturers, 2) relationships between textile manufacturers, importers, apparel manufacturers and retailers, 3) the extent to which the GST and free trade have influenced marketing strategies and 4) the success of manufacturers and importers in the recent recession. Depth interviews with upper management of 7 textile manufacturers, 4 importers and 31 apparel manufacturers were conducted in 1991. Follow-up telephone interviews with 6 of the 7 textile manufacturers, the 4 textile importers and 20 of the 31 apparel manufacturers were conducted in 1992-3.

The exploratory nature of this study prevented generalization to the industry at large. However, key marketing strategies identified were open communication, adherence to delivery schedules, reduced lead times and relationships with other members of the textile-apparel-retailer chain. Communication with apparel manufacturers and retailers was stated as crucial to the success of all textile manufacturers. A close working relationship was instrumental to the success of each. Apparel manufacturers stated that their relationships were strained due to increased retail bankruptcies. Textile importers stated that delivery and quality were important to their relationships with the apparel manufacturers. The textile manufacturers stated that they were successfully working directly with retailers. The GST did not affect the textile manufacturers and importers directly but its impact was felt through the apparel manufacturers and retailers. Textile importers faced non-threatening competition from domestic manufacturers. Some domestic textile manufacturers stated that competition had increased because of the entry of American textile manufacturers; Canadians entering the U.S. market experienced increased competition from American companies. Several textile companies were suffering financially with one not having survived the recession. All but one of the importers broke even or earned a slight profit; of the original 31 textile manufacturers, 4 were no longer in business.

\(^1\) Supported by the Social Sciences & Humanities Research Council of Canada.


MARKETING AND PLANNING IN THE CANADIAN APPAREL INDUSTRY: A FOLLOW UP STUDY\(^1\)

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In this study the results of a 1990 inquiry into the marketing activities of the Canadian apparel industry were compared with a follow-up in 1992 in order to determine coping strategies for surviving the recessionary economy. In 1990, upper management of 31 apparel firms across Canada were personally interviewed\(^2\). In 1992, follow-up telephone interviews were conducted with 20 of the firms (11 of the original group were unavailable including four who were out of business). The interviewee was asked to compare the information given earlier with their company's current situation. Responses were recorded manually during the interview, and were subsequently content analyzed.

The qualitative nature of the study prevented generalization to the industry as a whole. However, the fashion and price levels of the firms were slightly lower than two years earlier. In part, this was a response to the 7% federal Goods and Services tax which had exacerbated the effects of the economic downturn and decreased consumer demand for clothing. As well, the sales volume and number of employees of most of the larger firms had dropped substantially and most companies had increased the amount of off-shore contracting and private label production. The amount of production on speculation was substantially less and emphasis was now on filling orders. Because of retail bankruptcies, including several major chains, relationships with retailers had become strained. However, firms that had weathered the economy most successfully frequently had been identified in the 1990 study as oriented toward long term strategic planning including strong consumer awareness, clear understanding of their retail customers and investment in technology for both production and management.

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INTRODUCTION TO TEXTILES AND APPAREL: 4-H SOUTHERN REGION TEXTILE SYMPOSIUM

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The educational community and textile industry are concerned that the number of college/university graduates in textiles and related fields is declining. A partnership among North Carolina Universities, Cooperative Extension Service and textile industries was formed to address these concerns. The result is the 4-H Southern Regional Textile Symposium for 15 to 17 year olds. Approximately 55 participants (Textile Fellows) are selected annually from 12 Southern states using the following criteria: academic excellence, extracurricular involvement and interest in a textile related career.

The symposium is an annual week-long educational program. Intensive seminars utilize university faculty and industry experts. Fellows participate in lab experiences, seminars, and industry tours. Second year Fellows "earn" their participation by designing/implementing a textile project with a mentor or practicing professional in their home state. Second year Fellows complete an in-depth track focusing on one aspect of the textile field. The Textile Symposium graduates approximately 45 first year Fellows and 10 second year Fellows annually, and has been expanded to include a furniture track.

Specific objectives for the 4-H Southern Region Textile Symposium include the following:

- Participants to develop a broad knowledge base of the textile and apparel industries;
- Participants to gain knowledge of the scope and career options associated with the textile and apparel industries;
- Participants desiring a second year experience complete an individual focused practicum experience with the guidance of a local mentor;
- Extension staff to gather data for a longitudinal study of participants, their education and career choices.

In addition to program evaluation, a longitudinal study will track career choices. To date some participants have enrolled in Textile Management, Textile Chemistry, Textile Engineering, Fashion Merchandising, Apparel and Textile Production and Fabric Design.

ALTERNATIVE SCHEDULING TO ATTRACT NONTRADITIONAL STUDENTS

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Traditional scheduling of college level courses with two or three class meetings per week has been adhered to for so long there are many who will give little consideration to teaching at other times. One has only to look at the make up of a typical college class to see that institutions of higher education are attracting increasing numbers of nontraditional students. Alternative scheduling should be explored as one means of meeting needs of this group while not jeopardizing enrollment of traditional students. Objectives to be achieved through course management were (1) schedule class at an alternative time; (2) publicize class to regular full-time students and potential part-time students; (3) revise course materials and assignments to fit class format; and (4) evaluate student reaction to the alternative format and their achievement based on final grade.

A three credit split level course in apparel design was identified as one which would likely appeal to non-traditional students. Projected enrollment of full-time students was insufficient for the course to be offered so it was necessary to attract other students. The course was scheduled for a Friday evening and all day Saturday once a month for four months. Each class meeting was planned to include lecture/demonstration and laboratory activities; assignments were given which allowed students to do portions of work at home. Course enrollees included full-time undergraduate and graduate students, extension home economists, special non-degree students and secondary teachers. Class size was limited due to nature of the class. Feedback from students has been positive in regard to many aspects including: alternative time fits needs; long block of time good; and association with diverse student population is good. More than half the members of each class held full-time employment and were eager for more opportunities such as this. Achievement level of students based on final grades has been favorable.

Some limitations to the format may be noted. Faculty work week is extended; format lends itself better to some courses than others; and the institution's printed schedule may not accurately reflect the course format giving the department major responsibility in publicizing the offering. Future plans in the reporting department call for continuation of this format on a limited basis while also seeking other ways to offer courses that will not impede enrollment of full-time students and their achievement.
EFFECTIVE WRITING - ITS BENEFITS, ASSESSMENT AND IMPORTANCE IN THE FASHION INDUSTRY

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Once fashion students did not expect writing to be a necessary part of their career field. Today effective communication is considered a pivotal ingredient for success in every vocation. Writing is a requirement in merchandising and marketing, for training personnel and motivating salesmanship, public relations and fashion events, fashion reporting and sales promotion.

In the wake of poorly trained high school graduates, American colleges and universities are establishing writing-across-the-curriculum programs. The objective is to supplement English courses in the major and to enhance critical thinking.

Addressing these goals, Marymount University developed the required course Fashion Research and Communication six years ago; its benefits are greater than first conceived.

Students learn:
1. to express thoughts and feelings.
2. to organize ideas.
3. to address varying audiences and markets.
4. to use and add to vocabulary of the field.
5. to discover appropriate and desirable subject matter.
6. to research.
7. to execute the format of specific communications: a press release, news story, magazine feature, fashion report, copy for print ads and catalogs.
8. to consider writing as a viable career.

Students' responses to assignments show passion for the field, insecurities, humor, creativity, and seriousness of purpose, whether they write a personal remembrance, a report on rock and roll-inspired fashion, an article promoting ecologically safe apparel or a travel feature encompassing wardrobe advice.

Writing assessment is a hot topic even in English programs. There is dispute over the best measures. Regarding Fashion Research and Communication, these methods are used:

1. Surveys in which students assess their own improvement.
2. Critiques in which students assess each other's writing or that of students from the previous year.
3. Identification of students who want to write during their internship.
4. Evaluations of students' written communications by field supervisors during the internship.
5. Identification of graduates who take jobs that require writing.

They will continue, but there is a constant search for others. However, the course's benefits are known through campus success stories - graduates employed at the Washington Post, Washington Times and Glamour Magazine.

WRITING DESIGN CONCEPT STATEMENTS

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Designers are usually asked to express the inspiration, basis, or justification for their designs. However, writing in a manner which reflects the academic aspects of designing may not be emphasized in courses. Students often write a hurried sketch, if one is required.

A formal method of expressing a designer's intent is in the form of a concept statement. This written form may be used by designers of products, packaging, apparel, machines, and environments. Writing a design concept statement relies on a systematic way of thinking and organizing what the designer would like to convey to the reader. A design concept statement may be used to enter a design in a competition, to promote a design, or to compare one design to another.

An exercise in writing design concept statements was developed to reflect the methodical process of developing and executing a design. The objectives of the assignment were: a) to incorporate writing into a traditional design class; b) to recognize the methodology behind the creation and production of a design; c) to express sources and modes of inspiration; d) to consider possibilities and limitations of the design; and e) to exercise problem-solving techniques.

Overall, students evaluated the assignment as giving them the following: a) a sense of the aesthetic and functional processes associated with designing; b) an increased ability to express intent; c) encouragement to organize thoughts regarding the design inspiration; and d) ability to foresee design problems through written expression of the intended design. Seventy-five percent of the students using this assignment had designs accepted for juried shows or competitions.

This assignment was written in response to the trend of encouraging writing across the disciplines (Thorlaksson, 1990). Further, the format for evaluation of the design concept statements empowers students to be creative and innovative. Thus, the assignment emphasizes the conceptual learning process referred to by Lowman (1989).


THE INTERACTION BETWEEN DESIGN AND TECHNOLOGY: USING CAD TO PREPARE APPAREL DESIGNERS FOR THE FUTURE
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Revolutionary developments in industry technology, along with changing needs of female consumers, have the potential of transforming the way that apparel designers operate. A design project was developed using CAD and a video capture system to introduce advanced design students to a client-based, computer-based design process.

In 1984, Heisey predicted technology driven changes in apparel production, away from a ready-to-wear industry to a system of producing custom-fitted apparel on a large scale (Heisey, 1984). Current technologies make these predictions a near reality. This project enables design students to: experience the effect such a technology might have on the design process, develop CAD skills, develop a better understanding of individual body variations, and develop improved communication skills with a client.

In framing this project, an assumption was made that custom-fit technologies would trigger a shift from the current aesthetic - the tall, slim, long-legged fashion figure - to greater acceptance of a variety of body types. Students viewed slides of women with different body types, and clothing proportions from a variety of cultures and eras. They discussed aesthetics, how a designer uses proportion, and the range of body types in the population. Students then located clients with alternative body types to the fashion figure. A computerized video capture system generated and saved images of profile views of the client’s body and several fashion poses. This provided each student with accurately proportioned croquis figures of their client’s body in an AutoCAD drawing file. A variety of CAD systems, and alternative methods of image capture such as scanning still photographs, could also be used.

Using the individual croquis figures, students developed several garment styles for their clients. Together, student designers and clients modified the computer images to develop the final design. A pattern of the garment was created, and a muslin constructed and fitted. The finished garment was photographed on the client. The final assessment was based on: sketches with a summary of client responses and the student’s analysis, the garment, the photograph of the client, and a design illustration based on the croquis figures.

Projects were graded on the creativity and aesthetic quality of the design, the wearability of the garment (including fit), and the professionalism of the student’s interactions with the client.

Students found this CAD project challenging, valuable, and an important addition to their portfolios. They developed a greater understanding of, and appreciation for designing for alternative body types.


TEACHING PRODUCT DEVELOPMENT AS A PROBLEM-SOLVING PROCESS
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Product development was a process for balancing aesthetic and functional goals. Students worked as teams negotiating solutions per phase. Problem definition focused on creating attractive and functional swimwear for mature women. Major issues included need for adequate coverage for modesty, protection, and movement while providing visual enhancement of the body. Creativity and Analysis activities included wide exploration of the problem using questionnaires, interviews, and a consumer panel. Designers personally modelled swimwear and used sketching to generate numerous potential solutions. Selection critiques enabled teams to identify solutions to prototype for each of six identified body types. Production involved a translation of visual solutions into clothing on the body. Suits were developed on models representing respective figure types. All prototypes included the same high quality blue four-way stretch nylon/lycra tricot. Three teams chose to accent with black tricot. Production realities required some translations of designs in order to meet functional and aesthetic goals. Evaluation and redesign included critique of designs by models as well as reactions from observers. Three of the six prototypes yielded very strong designs. Evaluation showed that aesthetic and functional goals combined with body type differences require a range of style options. To complete product development, selected designs must be produced in all sizes and wear-tested by potential consumers.

This process emphasizes product development as a problem-solving process accomplished by a team. We recommend that the consumer be part of the team from concept to conclusion.
INTEGRATING TRADE SHOW EXPERIENCE INTO THE TEXTILE PRODUCT DEVELOPMENT AND PRODUCTION CURRICULUM

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Trade shows provide an essential link between segments of the apparel and textile industry. Manufacturers, contractors, suppliers and related industries participate in trade shows to keep abreast of technology, make contacts, and maintain existing business ties. Thus, it is critical that students preparing for positions in the textile and apparel industry understand the format, purpose and benefits of trade shows.

The objectives of this project were to: 1) acquaint students with the purpose of trade shows, 2) introduce students to the trade show environment, and 3) provide a realistic experience in locating supplies and equipment through trade show contacts.

Nine students in textile products production management developed and planned production of 3 mini-lines. They sourced raw materials, costed products, developed production specifications, determined equipment needs, selected production systems, and designed plant layouts. Students also located vendors and secured price quotes for all necessary raw materials and equipment by visiting exhibits and attending seminars at the Southeastern Apparel Manufacturers (SEAMS) Trade Show and Conference in Greenville, S.C. in March 1993.

The success of integrating the trade show experience into the curriculum was evident in the quality of the mini-line projects. The format of the relatively small regional show allowed students to talk extensively with vendors. Students developed a better understanding of the technological choices available to the manufacturer and confidence in their ability to source raw materials and equipment. Finally, they learned how manufacturing and product development work together in creating successful products. The experience will continue on an annual basis.

TEACHING PRODUCT DEVELOPMENT IN A TEN WEEK CYCLE

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As product development becomes more and more market driven, apparel manufacturers find they must continue to seek ways to shorten product development cycles. Universities also struggle with providing meaningful product development exercises to prepare students for real-time work experiences. In response, a creative product development teaching strategy focused on problem solving, sourcing, and teamwork was developed to be implemented in an advanced apparel production management class during a ten week cycle.

An industry partnership, a key element, was supplied by CPN Enterprises, a Washington, D.C. based product management firm. They needed a proposal and prototype samples to support an effort to seek a license from Nabisco to produce a line of clothing called "NabsKids".

One of the primary strategies employed in this class was the use of product development teams. According to House and Price (1991), the more team members understand the work of other functions and the interrelationships among all functions, the more likely they are to make intelligent decisions that will enhance the success of the product.

The class of seven students from varied academic backgrounds including fashion merchandising, apparel production management and apparel design was structured into a multi-functional team to implement product development in a short sequential phase. Industry based motivational techniques were used to stimulate the team. These included team building exercises, creativity activities and environmental scanning.

Designated students took the responsibility for the line development, logo design, pattern design, sourcing of fabrics, labels, embroidery, screen printing and merchandising. Students developed a line of garments around an "Oreo" theme after conducting surveys with mothers and children in the area during the design phase. RJR Nabisco supplied licensing information. Camptown Togs, a childrenswear manufacturer, critiqued manufacturing potential of the line. The team produced a line of seventeen product samples and a bound color copy proposal with manufacturing specifications and marketing strategies. Intellectual property rights for profits from the venture were assigned from the students to university scholarships. CPN Enterprises is pursuing a licensing agreement.

PESTICIDE PROTECTIVE CLOTHING USING DUAL FUNCTIONAL FINISHED NONWOVENS

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The purpose of this study was to evaluate the pesticide barrier property and physical performance of dual functional finished nonwoven fabrics compared with the water- and oil-repellent finished fabrics, and to investigate the relationship between the fabric performance and the garment wear performance.

Three types of nonwovens were treated separately with an antimicrobial finishing agent (A) using organic silicon quaternary ammonium salts, with a water- and oil-repellent finishing agent (WOR) using fluorocarbon, and with a dual functional finishing agent (DF) which is combination of A and WOR at various treating temperatures and times by pad-dry-cure method. Pesticide barrier property was measured in terms of amount of pesticide penetration and residue. Antimicrobial activity was measured by the shake flask method, and water resistance, oil repellency and air permeability were measured. Wear performance (microclimate temperature and humidity, and subjective wear sensation) of the experimental pants was measured in a vinyl plastic house (30±1°C, 70±5% R.H., 0.25m/sec).

DF finish and WOR finish improved the pesticide barrier property of Sontara and Kimlon, but there was not significant difference in the property according to the finish. DF finished Sontara showed higher water resistance value when it was laundered, but the oil repellency and air permeability of DF finished one was not different from WOR finished. At the same time DF finished nonwovens showed excellent antimicrobial activity. Considering the subject's microclimate temperature and humidity, and subjective wear sensation, the Sontara pants were evaluated as more comfortable than Tyvek and Kimlon. It was explained well from the fabric's physical properties, and they were highly correlated with the wear performance of the garment.

CRISTALLINITY OF BACTERIALLY AND CHEMICALLY RETTED KENAF FIBERS

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To incorporate kenaf fibers into textiles, it is important to understand the effect of processing on molecular, physical and chemical structure of the fibers. Fiber bundle strength and gum is reduced in chemically retted fibers. However, a combination of chemical and bacterial process did not affect the bundle strength, which indicates that gum content may not be the only criterion for bundle strength. Fiber bundle strength of bast fibers may depend on both physical (crystallinity, crystallite size and orientation) and chemical (lignin, gum and hemicelluloses) properties (Bhattacharyya and Paul, 1980). The objective of this study was to evaluate the effect of processing on bundle breaking tenacity, elongation, crystallinity, crystallite size, and gum and lignin content.

Decorticated kenaf stems (variety E41) were chemically (1% NaOH) and bacterially retted to extract fibers. Fiber bundles from base to tip were used for lignin and gum content (Das Gupta et al., 1976), bundle breaking tenacity and elongation (ASTM-D-1445-75) and crystallinity index and crystallite size (Segal et al., 1959). Processing with 7% NaOH reduces strength by 20-35% of bacterially processed fibers, however processing with 1% NaOH does not reduce the strength of kenaf fibers. Fiber bundle strength ranged from 22-30 gmu/tex. Gum content reduces from 20-10% with the initial chemical processing, later degumming does not reduce gum levels. Initial gum removal increases crystallinity by 3-5% and crystallite size by 20-25%. This indicates that gum in addition to the interfiber regions, is also present in the amorphous regions, because when gum is extracted from amorphous regions, there is more space for realignment and increase in the size of crystallites occur (Ray et al., 1975). Physical and chemical properties of kenaf fibers are uniform along the whole length of the native stalks. Extractable lignin properties of kenaf fibers is not sufficient to impart noticeable stretch. Important implications are that it assesses suitability of processed fibers to a particular end use. And importantly, reduction of gum content cannot be a rapid one-step process.
EXTRACTION OF FIBERS FROM SUGAR CANE RIND

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The rind of sugar cane contains vascular bundles of cellulosic fiber cells bound together with lignin and hemicellulose. The rind can be separated from the pith by the Tilby cane separator which splits the cane longitudinally, routes out the pith, and leaves controlled lengths of the rind. Earlier work determined that alkaline treatment could be used to extract fiber bundles from cane rind. This continuing study explored the efficacy of high temperature water pretreatment before alkaline treatment in extracting fibers from sugar cane rind.

Sugar cane stalks were washed and prepared for treatment by separation in a Tilby separator. A 3x3x3 factorial design was used to determine the effects of water pretreatment temperature, pretreatment time, and time of treatment with 0.1N NaOH on lignin removal and properties of extracted fibers.

Higher pretreatment temperatures allowed more lignin removal in the subsequent alkaline treatment. Fibers pretreated at higher temperatures and longer times were shorter and finer. The linear densities of fiber bundles were slightly higher than comparable fibers such as jute. The most severe conditions, high pretreatment temperature with longer pretreatment and treatment times produced a pulp with fibers too short to measure, whereas under the lease severe conditions, fibers did not completely separate from the rind. Higher pretreatment temperature also produced fibers with higher tenacity and lower bending resistance, although the highest temperature lowered the tenacity, modulus, and toughness. The moisture regain of the fiber bundles varied between 8-10%.

The fiber bundles produced in this study are too large for spinning on current equipment, but can be formed into fiber mats. These mats are being studied as biodegradable textiles for soil erosion control. Other extraction methods for obtaining finer fibers suitable for conversion into yarns are being investigated.

THERMAL PROPERTIES OF NOVEL CARBON FIBER BATTINGS

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Many materials used for warmth cannot be used in fire protection because they will not withstand high temperatures or an open flame. Some of the so-called fire resistant materials are also incapable of withstanding high temperatures and flame when used in loose fiber form such as nonwoven insulative batts. The purpose of this research was to evaluate the thermal properties of batts constructed from a new carbonaceous fiber to determine its usefulness in thermal and fire protection. The non-linear carbon fibers provide high loft and improved thermal insulating properties to structures and/or materials utilizing them and a porosity which inhibits the spread of fire.

Three carbonaceous/polyester blends were selected for evaluation 75%/25%, 85%/15%, and 40%/60%. These batts were compared with materials currently in use by the U.S. military (aramid batt) and a commercial product (Thinsulate®). All batts were composed of relatively fine fibers, some classified as microfibers. All batts were quilted between two layers of Nomex® pajama check and subjected to five launderings and dryings and then evaluated.

Thermal Transmittance (ASTM D1518) was used to evaluate thermal resistance. K values and R values were obtained. Thermal Protective Performance (TPP) (ASTM D4108) tests were conducted to determine thermal resistance when exposed to a convective energy level required to cause a second-degree burn in human tissue.

Carbonaceous batts tested at 0.5 inches thick varied only slightly (R = 2.39 - 2.45) in thermal resistance. These small differences may be attributed to fiber size, composition, or the arrangement of fibers within the batt. Commercial batts with a thickness of 0.2 inches (aramid) and 0.3 inches (Thinsulate) yielded R values of 1.06 and 1.09 respectively. Thermal resistance was independent of fiber type and primarily a function of volumetric batt density.

TPP data indicated a high level of carbon fiber was not required to greatly increase flame protection compared to aramid batts (time to second degree burn = 13.9 seconds). TPP tests on the 75/25 carbonaceous/polyester (time = 34.5 seconds) and the 40/60 carbonaceous/polyester (time = 30.5 seconds) were illustrative of this finding.

From these data, it has been shown that carbonaceous fiber properly blended and at an appropriate density can provide superior thermal protection. These batts provide insulation equivalent to commercial products while improving flame protection.
STORE DESIGN THROUGH THE PERCEPTIONS OF PERSONS WITH DISABILITIES: SLIDE/TAPE PRODUCTION

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Introduction
With the recent passage of the 1992 Americans with Disabilities Act (ADA), it is essential that the new legal requirements be incorporated into existing curriculum. The visual merchandising class and several interior design classes focus on store layout, visual presentation, traffic patterns and lighting. Course projects require students to design retail businesses utilizing design concepts to meet the needs of the consumers. The Americans with Disabilities Act will impact current store layouts as well as store planning for the future. A slide tape production as viewed through the eyes of persons with disabilities was developed to enhance the students’ learning process. This teaching resource has improved instruction, initiated innovative instructional techniques, and improved the course offerings.

Purpose and Objectives
The purpose of the project was to develop a slide tape production that illustrated shopping from disabled persons’ points of view. The following objectives were implemented to complete the project:
1. Increase students’ awareness of the problems that a person with disabilities faces when shopping.
2. Increase students’ understanding of the ramifications of the Americans with Disabilities Act for retailers in relation to planning visual presentation and store layout for retail businesses.
3. Identify actual store layouts which have not met the legislative mandates and those which have met the requirements.

Justification and Significance
The design, housing and merchandising students in the universities today are the designers and retailers of the future. Students will need to know the mandates and learn how to incorporate the legislative requirements in creating universal design concepts as they learn to visually present various types of retail stores and departments within large business establishments.

The timeliness of the project aids in providing students with a socially and ethically responsible curriculum. Through this slide tape production students have the opportunity to see how a person with disabilities can or cannot maneuver in a store setting. The slide presentation addresses problems with store entrances, layout, traffic patterns, access to fixtures and provides visual examples from over 15 Oklahoma retail stores with a narrative of interviews by person with disabilities.

Assessment and Benefits
The quality and usefulness of the slide tape production was assessed through student evaluations and through participants in a Conference on Aging. Suggestions for refinement were completed for the final production. Students benefited from the interpretation of mandated regulations specifically applied to a retail environment. The production will benefit students, instructors, and professionals in the field.

STORE ENHANCEMENT A RECIPROCAL PROJECT

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A partnership was entered into by the resident teaching staff and the state extension specialist for the purpose of providing an experiential learning opportunity for students in a visual merchandising class along with contributing to community development. Retail store owners from rural communities had identified a need for assistance in the areas of store planning and visual merchandising. At the request of the extension staff these store owners allowed their stores to serve as real life case studies for students to analyze. Student teams addressed problems relating to store layout, merchandise display, and store recognition.

One goal was to provide an experience that both the students in the class and the participants from the community would contribute to as well as benefit from the project in some way. Along with the goal of reciprocity the project was designed to heighten the students’ accountability since the work generated from the project would not only be screened by peers and instructors but would be presented to members of the community.

The project was divided into three phases with the initial phase being recruitment. Interested store owners provided a store floor plan, filled out a store profile questionnaire and consented to have their store photographed. Store owners were further involved in either a store planning seminar or an on-site visit.

During phase two, students analyzed the information and developed alternative solutions to enhance the visual aspects of the stores. Students generated a new floor plan, a color scheme, a new store logo, and a materials board. They also submitted a prioritized list of recommendations for enhancing the store utilizing resources and budget as factors.

Phase three involved supplying the store owners with the intended solutions for their store along with providing opportunity for evaluation. The results indicated that the store owners appreciated the students innovative ideas even if the facilitation of the ideas were not all carried out.
USING CAD AS A TOOL
FOR VISUAL MERCHANDISING IN A
COMMUNITY-BASED, STORE DESIGN PROJECT

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CAD is a well-established tool for
store architecture and interior design.
In a visual merchandising course,
students used CAD to develop store
layout and display alternatives for
local retailers.

Students selected among 10 local
businesses participating in the project.
These included department, discount, and
specialty stores selling a variety of
merchandise at different price points.
One-of-a-kind stores, local chains, and
national chains were represented.
Students selecting a particular store
worked as a team.

Each team visited the target store
to observe the merchandising and display
techniques used. Students interviewed
the manager, owner, display artist, and
others about the store’s philosophy,
merchandising and display plan, and
target customer. To broaden their
perspectives, they also visited and
compared stores selling similar
merchandise at various price points and
stores selling completely different
products. Other assignments included an
analysis of customers’ movements through
the store and the completion of a store
accessibility checklist, which examined
parking facilities, entrances, aisles,
dressing rooms, etc.

Students used information from the
interviews and observations to develop
an alternative merchandising and display
plan. Problems with the existing floor
plans included inaccessibility, poorly
positioned displays; incorrect use and
placement of fixtures; and poor use of
floor space.

Each team either obtained site and
floor plans from the retailer or
actually measured the site. Students
also recorded the position of all
displays and furnishings within the
store. They then used AutoCAD® software
to draft and dimension the original and
alternative floor plans.

Retailers were invited to
a presentation of the alternative plans.
Each received a copy of the report on
his/her store.

Students reported that the project
provided insight into actual display
practices. These often contrasted with
information in the text. Students and
retailers agreed that CAD was extremely
helpful for developing floor plans. CAD
drawings were also considered excellent
visual aids when arranging the floor.

TEACHING CULTURAL SENSITIVITY IN
VISUAL MERCHANDISING

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Visual merchandising is an important
component of Textiles and Clothing programs.
Traditionally taught from a Western perspective,
students could benefit from a cultural approach to
visual merchandising since after graduation many
students work in multi-cultural environments.
This unit utilized a cultural approach to visual
merchandising by exploring the goals and needs
of visual merchandising from the perspectives of
artisans/producers, visual merchandising
consultants, and tourist consumers when
planning and executing displays using non-
Western products and natural materials.

A case study and accompanying teaching
notes were used as the basis of the unit which
focused upon a women’s weaving cooperative in
Guatemala. The unit was taught in four two-hour
sessions and utilized products from an
Alternative Trade Organization, weaving tools,
and natural materials gathered by this instructor.
Besides the case study, assigned readings
addressed culture, social and political factors
affecting weavers, and information about
consumers. Group discussions encouraged
critical thinking skills and discussions centered
around cultural similarities and differences of
visual merchandising from the three perspectives.
Visuals such as slides, maps, and actual products
were also used.

Student groups were first assigned to create
a small table top display and were given similar
materials such as ikat yardage, baskets, yarns,
and loom parts. Their goals were to create a
display in which the yardage was the product and
which portrayed the production process. The
second project was a large wall display in which
students had many products and natural materials
to choose from, focused upon a theme, and
portrayed the production process. Projects were
critiqued by all class members and course
instructors. They focused upon display
objectives, incorporation of cultural elements,
portrayal of the production process, and the use
of natural materials.

Students expressed increased cultural
sensitivity as a result of this unit. Plans for the
future include placing the unit towards the end of
the semester, grouping of students into groups of
two to three persons, and covering more table-
top display techniques prior to the unit.
ANALYSIS OF U.S. APPAREL IMPORTS FROM THE EUROPEAN COMMUNITY PRIOR TO FORMATION OF THE E.C. '92

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Countries within the newly formed European Community (E.C.) have traditionally been among the United States’ most significant trading partners. Since implementation of the single European market in 1986, the U.S. had a trade surplus in total trade volume trade; however, in 1991 the U.S. experienced an approximate $1 billion trade deficit in apparel trade (U.S. Department of Commerce, 1992).

The purpose of the study was to estimate U.S. demand for apparel imports from the E.C. prior to enactment of E.C. 1992, and then compare the elasticities of demand for apparel imports from the E.C. with the elasticities for U.S. imports from all world countries.

The economic theory of consumer demand, provided the conceptual framework for the study. Quarterly time series data (1983-1991) from a variety of secondary sources, including the U.S. Department of Commerce and the U.S. Department of Labor, were used in estimating the price and income elasticities of U.S. demand for apparel imports by MFA fiber type and in aggregate. Two single equation double log-linear models were used in the analysis; OLS and GLS regression techniques were used in the estimation process.

Results indicated that, across categories, no significant relationship existed between U.S. disposable income and the quantity of apparel imported from the E.C. The estimated own-price elasticities indicated that U.S. demand for apparel imports from the E.C., across categories, were inelastic. The income elasticities estimated for U.S. demand for apparel imported from the world were elastic.

In sum, findings of this study support the trend of continuing growth in the volume of apparel imported by the U.S. from both the E.C. and the world. Increases in world imports are likely to exceed those from the E.C.

Reference

EXPANDING OPPORTUNITIES: THE MEXICAN APPAREL MARKET

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Mexico has become the fastest growing major market for U.S. consumer goods. Although domestic demand for apparel products remains weak, Mexico offers the opportunity of a $20 billion apparel market. It is imperative that U.S. firms understand Mexican consumer markets in order to provide U.S. products which will meet the needs of Mexican consumers.

This study represents the first phase of a multi-year research project to examine the Mexican apparel market and is grounded on the premise that the decision process for apparel among consumers in Mexico may be examined from the theoretical perspective of consumer behavior models popular in the U.S. The objectives were to: 1) identify and profile consumer markets in Mexico that may be targeted by U.S. apparel manufacturers, 2) identify preferences for U.S. apparel products and product attributes desired by Mexican consumers, and 3) compare Mexican consumers perceptions of U.S. apparel products with apparel products from other countries.

A case study research strategy was used that combines data collection methods including interviews, questionnaires, and direct observations. Both qualitative and quantitative data were used to identify consumer markets and apparel purchase criteria. Mexican buyers attending the Dallas Apparel Market and vendors at the Dallas Market who sold apparel products to buyers from Mexico were surveyed. Buyers and vendors rated the importance of eight clothing attributes — price, quality, style, color, sizing or fit, fiber content, care required, and brand name. Although all were important, quality was perceived as most important, followed closely by price and style. Overall, U.S. brands were rated highly, especially on comfort, quality, and style. The U.S. was the most favored country of origin for apparel among Mexican buyers. Additional findings included: 1) preference ratings for U.S. apparel brands among Mexican buyers, 2) identification of U.S. apparel products and brands popular in Mexican retail stores, and 3) attitudes of Mexicans toward U.S. apparel products. Follow-up interviews with buyers provided additional insight regarding the buying decision of Mexican buyers. A second survey of Mexican buyers (faxed to their offices in Mexico) provided an opportunity to compare the results of the Dallas Market survey with a random sample of buyers throughout Mexico. Findings of this survey were consistent with the results of the initial survey at the Dallas market, lending additional credibility to the Dallas survey findings.

Overall, this research indicates significant opportunities for U.S. apparel producers and retailers who are interested in competing in the Mexican market.
A COMPARISON OF U.S. AND CANADIAN APPAREL EXPORTERS: ATTITUDES AND CORPORATE CHARACTERISTICS

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Canada and the U.S. have a long history as trading partners. The purpose of this study was to identify differences in company characteristics and attitudes toward exporting of U.S. and Canadian apparel firms.

Chief executive officers of Canadian and U.S. apparel businesses were sent a 3 page questionnaire consisting of 18 items on attitudes toward exporting and demographic characteristics. Approximately 50 percent of the respondents were exporters.

Three factors emerged from factor analysis and were used as the dependent variables (Negative Attitudes, Complications and Time). The sample was divided into U.S. and Canadian exporters and non-exporters and a 2-way MANOVA was conducted. T-tests were used to analyze differences in sales volume, number of employees, profitability, and years in business. Chi square analysis identified differences in corporate ownership.

Negative Attitudes and Complications were significantly different for exporters and non-exporters (F=14.07, p<.0001) and (F=4.43, p<.05). Non-exporters perceived higher barriers to exporting and higher complexity in the export process than non-exporters. U.S. firms had: more employees (t=2.72, p<.005), higher sales volume (t=8.08, p<.0001), been in business longer (t=4.65, p<.0001) and were more likely to be a publicly owned corporation (X^2=12.07, p<.005).

Canadian and U.S. apparel firms held similar attitudes toward export practices, despite Canada’s greater dependence on the U.S. as an export market. Exporting and non-exporting firms did differ in their attitudes toward export practices.

HANDCRAFTS AS AN INTERNATIONAL DEVELOPMENT TOOL: EVALUATING EFFECTIVENESS

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The purpose of the research was to evaluate four textile handcraft development projects sponsored by Aid to Artisans, a non-profit development organization. Four case studies were developed based on project records, interviews with ATA consultants and staff, and observations at the New York International Gift Fair. The case studies involved 1) handknitting in Nepal, 2) rug weaving in Jordan, 3) hand stitching in Bangladesh, and 4) felted and handstitched textiles in Hungary. Common and unique characteristics were summarized across the four projects.

Evaluative criteria were developed from international development literature including women in development, small business, handicrafts, and income generation. Five criteria emerged from the work of Dhamija (1989), Baizerman (1987), and Baucelerk (1988). Evaluation of handicrafts development should include: 1) preliminary assessments of socio-economic conditions, 2) adequacy of indigenous skills and resources, 3) sensitivity to intervention, 4) empowerment of people, and 5) stimulation of credit and market sources. The analysis of each of the projects provides for ATA and other development agencies a set of criteria that can improve project participation, market effectiveness, and documentation of socioeconomic changes of beneficiaries.

Utilization of design consultants, indigenous resources and skills, contractual relationships between ATA and existing in-country artisan organizations, vital market links to the U.S., and training of selected artisans to recognize the limitations of a product as it is currently produced have contributed to the success of the projects. The research contributes an understanding of cultural marketing perspectives involving organizations, technologies, and marketing systems in a global environment.


TAILORING: A 4-H INSERVICE TRAINING BY SATELLITE

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Electronic technology for satellite programming has been established throughout Nebraska. Thirty eight Extension offices out of 82 are hooked up to the satellite system. Each of the Educational Program Units which are a cluster of counties, has access to a "downlink" in their area. Reduction in budgets, and the time a specialist spends away from the office on the road traveling provided the incentive to conduct an inservice training by satellite. For the first time, a 2 1/2 hour inservice training was conducted for 4-H volunteer leaders and Extension Educators on the new 4-H Tailoring project using satellite technology.

Objectives of the inservice training were to enable participants to gain knowledge about the Tailoring project, participate in learning experiences and increase confidence and knowledge in the tailoring process.

A total of 83 evaluations were returned from 20 different sites. The audience consisted of 33 Extension Educators and staff, 42 volunteer leaders and eight others such as mothers, fabric store owners and interested sewers the day the show was aired.

Responses by the participants on the following statements using 1-Strongly Agree to 5-Strongly Disagree indicated: Delivery by video conference was appropriate 1.47; Content was presented in an interesting manner 1.35; Handouts were useful 1.66; Learning table resource breaks were relevant 1.73; Content was well organized 1.35; Knowledge about tailoring improved 1.81; attitude about tailoring is positive 1.61; Interest in tailoring increased 1.75; Confidence in using the content increased 1.76.

Comments from participants noted that being able to tape the inservice and use it for future audiences was a plus and taking an actual trip to a fabric store via video was informative.

It was concluded that a video-conference was a viable way to conduct an inservice training for volunteer leaders and Extension Educators. Using satellite programming will be considered for future 4-H inservice training not only for introducing new 4-H projects, but as a way to train judges.

STUDENTS ENCOUNTER REAL LIFE EXPERIENCE BY DESIGNING GYMNASTIC TEAM LEOTARDS

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The women's gymnastic coach suggested the junior-level fashion illustration and design class design new performance leotards for the team. The project's design objectives were written to meet specific aesthetic and functional needs. The coach, assistant coach and a team gymnast brought uniform catalogs, old leotards and a performance video for a hands-on discussion with student designers about their needs and preferences. The 18 students majoring in either apparel design or merchandising management were invited to attend workout practices and to interview gymnasts. Design sketches were critiqued in class, then final design presentation boards were illustrated in color on a female figure in an action pose. Garment technical drawings of the leotard front and back views, and fabric swatches were required. The projects were presented by the student designers in a formal classroom critique to the coach and assistant coach. Successful areas of their designs were praised, and design and manufacturing concerns were discussed. The timeline for the course required final grades to be assigned prior to the next step in the overall plan. The projects were shown to the team, and one leotard was selected as the team favorite. The instructor served as the liaison during the manufacturing process. A prototype of this leotard was made by a gymnastics apparel company. The prototype design and fit were analyzed on a gymnast "fit model," revised, then approved for production. The student designer was involved in each step in the process. Much was learned about design changes due to manufacturing constraints, coach and team preferences, fitting solutions and strategic approaches to compromise. All the students who had participated in this project experienced the reward and unified effort of working on this project when the new leotards were recently unveiled.
ENHANCING CREATIVE DESIGN SKILLS

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In preparing students for apparel design positions, an important academic program element is to enhance their creative thinking. When faced with this challenge, it was important to find creative projects related to the academic program that were scholarly, beneficial, and put students in real-life situations that allowed them to apply knowledge they had learned in the entire sequence of professional courses.

Design students were given an assignment which incorporated skills in research, apparel design, construction, fitting, computer-aided design and communication. Class involvement included a cooperative problem solving with the local chapter of the American Cancer Society.

Through an interview process each student identified a clothing problem encountered by a mastectomy patient. The next step was to find a creative solution for the problem identified and to execute their solutions utilizing their design and fitting skills.

Student self-evaluations and critical analysis by faculty, students and participants of the study enabled the students to integrate more critical and creative thinking into their project.

Students utilized skills from all the professional courses in sketching their design, making a pattern for their original design, constructing a sample garment, and preparing a computer sketch & marker of their design.

THE ELEGANCE OF THE PAST FOR THE FUTURE

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The design of this outfit is based on the concept of "Wearable Art." The ensemble is composed of three pieces: skirt, blouse, and vest. The focus of attention for this design is the macramé weaving in the garment as well as in the trim. The entire look is inspired by the ethnic, specifically Middle Eastern, influences. It includes such accessories as the headdress, made from a rectangular piece of fabric and wrapped like a turban. The jewelry was specifically designed for this garment. One of the necklaces is macramé and the beaded necklace is a collection of semi-precious stones. The platform shoes are covered with matching fabric from the skirt.

It is possible that the peace process currently happening in the Middle East may exert influence on western fashion again.
THE ELEGANCE OF THE PAST FOR
THE FUTURE

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This black evening gown was inspired by
the "Flapper Era" of the 1920's. The outfit
consists of two pieces, a sleeveless shift
dress and a vest style jacket. The shift is
trimmed with a long soft rayon fringe at the
hem and the jacket is made of silver and
black lamé chiffon with bugle bead accents.
The jacket style is reminiscent of the
sideless gowns of the medieval period. The
pattern pieces are geometric in shape. The
armscye is dropped to the hip. It also has
two cape sleeves which are gracefully
draped over the shoulders and weighted at
the pointed tips with beaded tassels.

This original design includes accessories
such as a cloche hat, purse, gloves and
jewelry.

Even though the design is characteristic of
the past the elements are elegant and would
make a lovely evening gown for the present
and the future.

COPPER RUFF

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This piece of wearable art was generated
from a project where various forms of neck
treatments were analyzed as to their structure
and meaning. These ideas were then translated
into contemporary forms using color rendition
and exaggeration as factors to influence the
contemporary translation.

The act of wearing a ruffle around the neck
has occurred several times throughout history
but never more spectacularly than in the late
16th, early 17th century when it was worn not
only as an accessory to showcase intricate
textiles but as a badge indicating one's station
in life. This form of body adornment inspired
the "Ruff Series" which consists of several
translations of the traditional ruff into
contemporary forms.

"Copper Ruff" relies on metal as the
dominant material with the integration of
copper and verdigris. The processes of fluting
and goffering were incorporated into the
structure that evolved from a basic neckband.
The addition of feathers and spiral projections
provided a departure from the regimented
convolutions of a traditional ruff while adding a
degree of informality and spontaneity.
EMERALD ELEGANCE

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Inspiration for this design came from the luster of the silk charmeuse fabric, Ginkgo leaves, and Japanese family crest designs. The goal was to create a quietly elegant cocktail suit which celebrated the intrinsic capacity of silk to reflect light. Contrast was used to call attention to the difference between the pleated and unpleated silk. The fabric was hand-pleated and heat-set in a convection oven. Applique, reverse applique, trapunto, and couch-stitch embroidery were used in combination to create the surface embellishment.

TEARS OF JOY AND SADNESS

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"Tears of Joy and Sadness" is from a body of work based on an exploration into being female. This piece is an expression of the emotions, from happiness to sadness, that my tears represent. This piece is a framed 3" x 3" stitchery. It was created with satin-stitches on linen canvas. The tear forms are primarily in blues with the addition of some pinks and reds. The piece was completed in March of 1993.
Prehistoric petroglyphs from cave art in France, Africa, and American Southwest were the inspiration for this piece. The lizard first appeared to the artist in a dream, then was drawn using a CAD system. When the drawing was mirrored the negative space emerged as the shape of a stylized deer head. This shape was duplicated above the pair of lizards. Batik, shibori, embroidery, and the application of shells and beads were used to create the image on fabric.

A pre-Columbian textile was the source of inspiration for this design. A silkscreen design was developed using computer-aided design and photo silkscreen method. The bolero jacket was filled with high-loft batting and tufted with multicolored threads. Silkscreen, embroidery, and bound-resist surface techniques were applied to the khaki-colored cotton twill weave fabric to create the jacket. The shell blouse was tied using shibori technique and overdyed.
MEN PULL THE STRINGS

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The male dominated fashion industry's influence on women's apparel was the inspiration for this fiber arts project. The present century was selected as the era of interest. A typical woman's dress is depicted for each decade in a mural-type form.

100% cotton percale was hand dyed blue for the male section and pink for the female section with the colors blending in the middle. It was used as the background fabric and the center pleated section. A smocking pleater was used to make 10 pleated sections. This pleated piece was placed in the center of the mural. The pleated sections run vertically with the "strings" used to make the pleats were connected to each man and woman.

Women's garments were developed using piecing techniques and were glued to the body. The same body form was used for each woman for consistency. Women's and men's bodys were made from 2 layers of undyed percale. Lapels and shirt collar silhouettes were machine stitched on each male with ties matching the corresponding female garment glued in place.

Masculine control over women's dress is symbolized in three ways: (1) the men are positioned at the top of the mural while the women are at the bottom; (2) the width of the pleated sections changes; and (3) the "strings" running through each pleated section are all held by the men, while not all are attached to the women below. Thus, more restricted eras have wider pleated sections and more strings attached to the women.

PLATFORM SHOES

Amber DeWeese, University of Delaware.
Newark, DE, 19711

I am presently a senior apparel design major at the University of Delaware. After studying in Paris and Milan last winter, I was inspired to create platform shoes. Growing up in Oregon and living near the tribes of the Native American Indians influenced me to use a weaved pattern on my shoes to represent all the hand weaving the Indians do on everything from baskets to blankets.

The outer surface is made of ultra-suede for practicality and the base is made of leather soling. The platform section, supports, and heels include rubber, cork, buckram, and wood.
TREASURES OF THE TOMB

Jill S. Bowser
University of Delaware
Newark, DE 19711
Mary Jane Matranga
University of Delaware
Newark, DE 19711

ILE DE CHEINS

Loran Latham and Sue M. Parker
The University of Alabama
Tuscaloosa, AL 35487

The purpose of this project was to create a handwoven garment using naturally dyed yarns which would achieve both aesthetic and functional qualities. Inspiration came from garments viewed in several wearable art books. The research process included surveying yarns that would be appropriate for the warp and weft and objects for embellishment. Shells collected on "Ile de Cheins," an island located in the Gulf of Mexico, were chosen and thus gave the name to the project.

The ensemble consists of a cocoon jacket and skirt. The off-white warp yarns and synthetically dyed weft yarns of magenta, teal, deep blue, gold, and rose were chosen. The jacket embellishment was created using 100% wool indigo dyed yarns, 100% white rayon yarns, and shells. The jacket was created by folding the corners on the long side of a 68" x 30" rectangular piece of fabric and seams were stitched along the shoulder. The tubular skirt was constructed by machine stitching a casing along the waistline and inserting elastic. Turkish knots were tied along the hemline to finish the edge.

The ensemble was woven on a 36" wide, four-harness loom with a 10-dent reed. A tubular weave was used to construct the skirt and the herringbone weave was used to construct the jacket. Finger manipulations were used to add the naturally dyed wool yarns to the jacket. Wool yarns were attached to the shells and suspended at various lengths along with the white rayon yarns. The garments seams were sewn using a home sewing machine.

A variety of techniques were used to create the set. The shoes were fitted through plaster casts, and pieced leather was sewn by machine to create the design. The hat and purse were first draped for form, then drafted and pieced using the same procedure.
THE DREAM
Melinda C. Ooglas
and Cheryl Jordan, Ph.D.
Oregon State Univ., Corvallis, OR 97331

To traditional white satin, light pink, hand-beaded tulip lace added a personalized, unique touch. Layers are part of the gown's beauty. First, a lightweight polyester satin, then nylon iridescent organza catches the light in the cascading skirt. The organza also serves as a shimmering backdrop for the exquisite cutwork lace. The floral lace consists of white rayon needlework on nylon organza with appliqued pale pink satin tulips; accentuated with iridescent glass pearls, and silver bugle beads.

The bodice was drafted and the skirt was draped with a tulip-style crossing in the front that flows into a 3-foot train. The lace was cut and shaped to conform to the bodice, after which the beads were securely sewn. The tulip edging on the skirt was achieved by cutting diagonally across the lace. The appliques on the train were cut and pieced to achieve a symmetrical look.

The synergy of the above elements created flair, elegance, and the sophisticated look I wanted to achieve. Endless hours and built-in excitement that comes with planning a wedding, enabled me to realize "The Dream."

IMPACT PROTECTION FOR FEMALE ICE HOCKEY PLAYERS

Lynn M. Boorady, Graduate Student
(Jan.'93), Cornell University.
Ithaca, NY 14850
Eileen M. Merck, Undergraduate
(May '93), Cornell University.
Ithaca, NY 14850

In this research the focus is on lower body protection for female ice hockey players. Currently, women adapt men's hockey equipment to their bodies which is unsuccessful in terms of impact protection.

Anatomically, there are several differences between men's and women's bodies which affect the placement of protective equipment. Skeletal differences include the female pelvis being wider and more forwardly tilted than the male's. Women are also 6-7% shorter than men with an average difference of 3" in the leg length alone. The sexes also differ in their respective body tissues. Men generally weigh an average of 25 pounds more than women, and women carry most of their weight on the abdomen and the front and side of the upper thigh. This combination of differences is what causes the need for separate protective equipment for women.

In our prototype, these differences were addressed in several ways. A system of protection was developed that uses three layers. The first layer is a stretch panty with protection for the pubic bone. The second layer is a stretch body suit which is sized to the contours of a woman's body. This layer is designed with a system of pockets which hold the players protective pads directly over the area of the body they were meant to protect. The third layer is an outer shell which protects the inner layers from rips and tears and adds a water resistant quality to the system.

This design for impact protection allows for comfort and ease of movement while keeping the protective padding in the proper position, maximizing the needs of the female athlete without compromising on any one.
GARDEN PARTY

Lynda O. Crouse, Centenary College
Hackettstown, NJ 07840

For as long as I can remember, my hands have been busy working, creating, and communicating, as I have developed talents through various art media. As a clothing, textile, and design student at Centenary College in Hackettstown, New Jersey, I find that my abilities, ideas, and philosophies have been continually challenged to grow and develop through experience and exposure. My original design philosophy was to create simple traditionally styled lines. Combining traditional styling with detailed construction techniques is still the foundation for my designs; however, a secondary component has evolved in which surface design and textural accents are integrated with classic lines to create a distinctive signature.

The challenge of "Garden Party" was to design a wedding gown that was elegant without over embellishing it with lace, beading or extreme fullness. When I asked brides-to-be what they wanted in a gown, their answer was something simple, but elegant. I researched individual gowns from mid-1940 to mid-1970 evaluating them for their styling and detailing. The simplicity of a 1946 organza gown hocked in a floral pattern, inspired this new gown. The gown uses self-fabric pieces to create the detail. A "garden trellis" bodice was woven from satin fabric strips and the floral theme was carried through by scattering organza flowers around the hem and train.

The gown was constructed from 100% polyester taffeta, organza, and satin. Special construction techniques include flat lining the bodice and using 3/4 inch seams. The taffeta underskirt has flat serged seams; the organza overskirt has French seam finishes. Sleeve edges, the back cutout, and the sweetheart neckline are accented with a bias satin binding. The center back zipper is concealed by satin button loops.

The pattern was developed using traditional draping methods. The bodice weaving was completed on the dress form, over the taffeta underbodice. By weaving the bodice pieces on the form, only a minimum of seaming was required at the shoulders and at the bodice side seams. Sculpted organza flowers added three-dimensional accent at the hem and around the train. The center back of the gown is accented by pearl buttons. For ease of movement, the train can be bustled by attaching a loop to the pearl button.

COLOR STUDY IN MAGENTA AND ORANGE

Robert Hillestad
University of Nebraska-Lincoln
Lincoln, Nebraska 68583-0802

A rectangular piece of fabric was darted at the shoulder area and seamed in front to create the structure of this cocoon jacket. Areas of magenta, the base color, were removed with thiourea dioxide and replaced with orange fiber reactive dye to create an abstract pattern. The surface was further embellished with stitchery.
ASYMMETRICAL SYMMETRY

Robert Hilleshad
University of Nebraska-Lincoln
Lincoln, Nebraska 68583-0802

The design concept was to create a symmetrical garment that could be worn asymmetrically over a symmetrical figure. Rayon seam tape was hand knitted in a stockinette stitch to create the garment form. Fiber reactive dyes were brushed over the surface to achieve a compositional arrangement of vermillon and navy blue.

BERIBBONED AND TIED

Nancy O. Bryant
Oregon State University
Corvallis, OR 97331-5101

This ensemble was designed to incorporate a silk necktie that belonged to my father. The necktie was taken apart, pleated, and cut into two triangular pieces. These were used as the cuffs on the coat. The woven structure of the necktie fabric inspired the use of ribbons, woven and pleated, to decorate the front and back center panels and sleeve overarm seams of the taupe wool gabardine coat. The hood, lined in teal sand-washed silk, is cut generously to create a collar effect in front. Fringe made from 4 yarns edge the hood; paillettes and glass beads decorate the hood and front and back center panels. A teal silk blouse and taupe silk pants complete the ensemble. The coat was also influenced by a third source - Frank Lloyd Wright sketches for 2 Liberty magazine covers. Flat pattern design was used to create the patterns for the jacket and pants.
WEDDING DRESS WITH PETALS
JoAnne Collier Shaw
College of Human Resources
University of Delaware
Newark DE 19711

This elegant "no frills" wedding dress was designed for a six feet tall medical doctor. The petals give the dress feminity and provide a space for the train to be gathered and tucked away underneath. The moiré taffeta looks especially attractive when puffed into large sleeves and in the folds of the heavily gathered skirt. The bodice and petals are made of ivory cotton velvet, the sleeves and skirt, ivory moiré taffeta and the neck trim and fitted sleeves are 100 year old lace. Waistline points are created on front and back and the petals fall in a spray down the dress back.

Three grosgrain ribbons are sewn into channels formed by the seam allowances in the center back and sides of the skirt. To allow ease of movement for the bride during the reception, the train is gathered easily and quickly on these ribbons which are hooked in place leaving the train cascading in scalloped folds repeating the line of the petals in the skirt.

A TRIBUTE TO WATTEAU
Jean K. Dilworth
Eastern Illinois University
Charleston, IL 61920

Research of life styles of English country estates led to this analysis of and experimentation with the back pleating of the Watteau 1720s robe (sack). This ensemble is designed to have a wide range of fit flexibility and comfort, show discretion in styling and portray excellent aesthetic value which will enhance feelings of self worth.

My design is for at-home relaxation and reflection. The robe was designed by draping a practice fabric (batiste) on a size ten dress form. Careful consideration of grain line was given to each of the 13 different robe pieces to ensure a graceful flow when worn. The neck and skirt flounces plus the sleeve engageantes are cut with increasing width from the front to the back. To guarantee that trim and lace edges would remain flat throughout time, the straight grain of the flounces and engageantes is placed at the trimmed edge.

The cotton/polyester patterned batiste robe features a modified Watteau back which was formed by a series of tucks layered over a wider box pleat and two inverted pleats. The white 100 percent cotton chemise is drawn to fit the wearer by three lace inserted ribbons in the bodice area. This feature provides perfect fit for numerous body types.
The purpose of this project was to develop a contemporary woman’s business suit using an African print. The print selected for this design contained angular patterns in an angular stair step design. A jacket and skirt were designed to enhance the angular pattern in the fabric and to mimic the wrapping technique used in African dress.

The jacket has angular style lines accentuated by fabric contrasts on the sleeve cap, sleeve hem, and in the upper right and lower left front and back sections. The jacket was developed from the dartless torso sloper and has long sleeves, a collarless V-neckline, a single button closure at center front, and a hem that gradually angles away from the button at center front. Angular style lines match at the jacket front and at the jacket left side seam. This style line forms a continuous line from left back shoulder across the front to the left back hip, representing the wrapping technique used in African dress. The angular style line was also repeated in the skirt front overlay which forms a diagonal line from the left side seam to the hem revealing a contrasting underskirt of black fabric.

To maintain the integrity of the fabric, the pattern was matched at all seams. The fiber content of the print fabric was 100% woven cotton and the black fabric was a polyester/rayon blend. Both jacket and skirt were fully lined with 100% black polyester fabric.

"Political Gold" was designed for a woman in politics whose career requires her to wear something elegant and feminine while conveying a sense of power and confidence. The ensemble had to be appropriate for meetings, receptions and evening wear. Elegance, simplicity, and beauty were required. The suit of black Ultra Suede, has a design of gold lamé strips woven into the suede on the front shoulder. Gold foil knit was used for the shell. Lining of black polyester taffeta was selected to make the inside as elegant as the outside. While a flared, stand-up collar frames the face, gold cording piping accentuates the vents of the sleeve, jacket back, and skirt.
TYING THE KNOT

Anna Duggins Roberts
East Tennessee State University
Johnson City, TN 37614

Problem Statement: The design problem was to
creative a simple, yet elegant, wedding gown for a client
on a very limited budget. Since the client did not desire
a traditional gown, but rather a derivation of a period
piece, inspiration came from American day dresses of
the period 1910-1920. Other goals were: a) to explore
techniques for overlock applications on formal fabrics
and designs, b) to experiment with draping and knotting
fabric tiers, and c) to create a gown versatile enough for
an informal wedding or an afternoon tea.

Description: The ivory, two-piece, ankle-length
gown is constructed entirely of polyester. A princess-
seamed underdress of charmuese features a neckline lace
inset encrusted with hand applied seed and teardrop
pears. The gentle hand of the georgette used for the
overdress drapes gracefully around the body through the
use of two knotted skirt tiers. A platter collar with front
tie extensions (cut low to allow visibility of the neckline
lace inset), kimono sleeves, elasticized waist, and shirred
waistline sash compliment the structural lines of the
skirt.

Techniques and media employed: Draping was
used to create the princess-seamed underdress and the
bodice and knotted skirt tiers of the overdress, while flat
pattern techniques developed the collar. Wherever
possible, overlock techniques were used both to finish
inges of the garment and to attach garment pieces,
resulting in minimal labor costs and material costs of
less than $100.00.

REVERSIBLE PULLOVER JACKET

Janet Hethorn, University of California
Davis, CA 95616-8585

This jacket was designed for skiing but can also be
worn for cold weather outerwear. The needs it meets
were identified through a research project that
included observations and interviews conducted at ski
resorts. Goals were to develop a jacket that was
versatile, could be layered, and provided for
movement and protection from the weather. In
addition, skiers wanted a fashion forward look
without being too trendy and all at a reasonable
price. The visual assessment, that was developed
from analyzing several hundred slides of skiers, also
provided background information regarding color,
shape, and form. Two trends that were incorporated
into this jacket were interesting surface treatment and
the use of ethnic trims in small areas.

Side one: Tangerine colored supplex nylon quilted
to Thinsulate, trimmed with multi-colored cotton
woven fabric from Nepal. There are three pockets, a
center zipper covered with a placket, and a stand up
collar. Side two: Purple supplex nylon trimmed with
multi-colored cotton fabric from Nepal. Exposed
center zipper and one large pocket accessed by two
zipped hand openings. Ring at base of zipper is for a
ski ticket to hang. A drawstring closure at the hem
keeps the wind and snow out, as does the elastic at
the cuffs.

The original pattern design was developed
through flat pattern methods. Construction methods
included secured seams, topstitched; welt, flapped
and zipped pockets; center zipper with reversible
(two) tabs. The tangerine side was machine quilted
to Thinsulate fabric, incorporating both functional
and aesthetic concerns.
MEXICAN ARTIFACT
M. Jo Kallal. University of Delaware
Newark, DE, 19716

Problem Statement. Piecing techniques from Italian futurists and motifs/colors from pre-Columbian shields were reinterpreted in a contemporary designer coat. Geometric seamlines drawn from the shields spatially divide the upper torso. Goals were to integrate seaming, balance color, and incorporate an asymmetrical closure.

Description. The middle eastern coat features kimono-sleeves, side panel-gussets, and an uneven hem. Geometric style lines and enriched Mexican colors (gold, olive, rust) divide the upper torso of the teal wool coat. Olive soutache delineates seamlines; rust piping defines the neck and cuffs. Features include horizontal pockets, a hidden snap closure, and below-waist front slit.

Techniques & Media. The coat was drafted from a block. Seamline placement was planned through sketching, testing muslin prototypes, and transferal to the pattern. Dressmaker tailoring techniques were used to assemble the coat fabricated from mid-weight 100% wools, rayon soutache, rayon lining, interfacing, and snaps.


"BRIDAL COUNTRY"
Ina C. Murphey
Rosary College
River Forest, IL 60305

The women of country music were the inspiration for this wedding gown. Words like elegance, glitter, and femininity characterize current pop country stars such as Reba McEntyre, Lori Morgan, and Dolly Parton. Elegance is portrayed through the pearl and rhinestone crown and the graceful train. The glitter of sequins and rhinestones shine from the headpiece, as well as, the hand beaded lace of the bodice and the bustle. Femininity is exhibited through the use of Chantilly and Alencon lace and the softness of organza. Whether leather or lace, the most common and most important characteristic of "Country" clothing is the use of fringe. This trademark of "Country" clothing is carried out in the bead fringe which forms the focal point of the bodice.

A watercolor and pencil sketch was the basis for drafting the pattern through the use of flat pattern technique. Ivory crystal sheer organza was used over white taffeta lining to give added depth to the hand beaded Alencon, Chantilly, and Venice laces. The headpiece was created by covering a buckram form with the garment fabric and lace, then gluing beads, sequins, and rhinestones into place.

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BIG APPLE TURNCOAT

Margaret Schroeder
Colorado State University
Ft. Collins, CO 80523
Diane Sparks
Colorado State University
Ft. Collins, CO 80523

Inspiration came from the fabric itself with its unique reversible properties and the pattern of checks and stripes. The goal was to design a formal, full-length coat utilizing these fabric features to develop visual interest. Both sides of the fabric were used to draw attention to the front and back collar, pockets and cuffs. All the stripes and checks were matched to insure continuity in the lines. Flat pattern and tailoring methods were used.

LAST TANGO

Kathryn Bohannon
Colorado State University
Ft. Collins, CO 80523
Diane Sparks
Colorado State University
Ft. Collins, CO 80523

Ballroom dancing and specifically the Tango were the inspiration for this design. Opposing sleeves and legs of a catsuit were fabricated in either opaque or semi-transparent Lycra spandex fabrics. A short asymmetrical dress composed of two gold metallic printed on black fabrics is integrated into the catsuit. Leaves from one print were appliqued down one leg, while the other leg is embellished with a row of sequins.
TRIANGULAR INFUSION

Toni Meador
Colorado State University
Ft. Collins, CO 80523

Diane Sparks
Colorado State University
Ft. Collins, CO 80523

Inspiration for this design came from an American Indian blanket which incorporated triangular sections within the design concept. The goal was to create visual interest in an innovative suit which might be worn in casual, yet active, situations. The royal blue, teal, and coral linen fabrics signify vibrancy and a fresh approach to any environment. Added emphasis is obtained through the triangular hem treatment.

METAMORPH

Cecilia F. O'Sullivan, Oregon State University
Corvallis, OR 97331.

Nancy O. Bryant, Oregon State University
Corvallis, OR 97331.

This full-length chiffon evening gown was inspired by a costume featured on the television show "Star Trek: The Next Generation". Two layers of chiffon, one blue and one black, give the dress an airy, diaphanous quality and create an unusual shimmering effect. Extensive pleating in the bodice and skirt lend a sense of structure to the dress and allow for an unusual skirt silhouette.

The dress is constructed of 22 yards of polyester chiffon with the black chiffon layered over the blue. The upper bodice utilizes vertical pleats with the two outermost pleats formed on the bias to create a cupping effect around the bust. The lower bodice is made up of uniform horizontal pleats and stabilized by a fitted underbodice of cotton broadcloth. Graduated horizontal pleats at the hipline release the extensive flare seen in the hemline. The sleeve has three horizontal pleats in the cap and a shirred, extended cuff at the wrist.

Initially, the entire dress was draped in muslin on a body form. The drape was perfected by flat pattern to ensure uniform pleating and to balance the flare released in each of the hipline pleats in the skirt. Flare was added to the skirt by slashing along the inner foldline of each pleat and down the length of the skirt to the hemline. Spreading the pattern along these slash lines, flare was added to the skirt and incorporated into the uptake of the pleats.
The navy blue coat dress was created for the professional woman who requires stylish career apparel. Career women need clothing that is practical and possesses long-lasting wearability. The challenge to create a draped effect using flat pattern techniques was a primary interest when choosing the dress design. The drape-effect was created entirely by flat pattern methods for a flat pattern techniques class during the 1992 fall semester.

The simple, elegant, dress is made of machine washable, polyester/worsted wool fabric. It features a raised neckline, kimono sleeves, and a raised front hemline. For a soft-draped effect and contoured fit, the dress was cut on the bias.
MARSALA

Virginia Sappington, Marymount University
Arlington, VA, 22207
Pamela Stoessell, Marymount University
Arlington, VA, 22207

The gown "Marsala" was designed and constructed by Virginia Sappington, as an assignment within the Textile Design course at Marymount University. Created for an upscale eveningwear market, the silhouette evolved through research of significant designers, past and present, and methods used to create timeless garments. The exploration of unique textural combinations of fabrics employing velvet, cashmere, and chiffon, resulted in a rich, classic design, the essence of the research and inspiration.

The gown was designed using draping and flat pattern techniques. A deep burgundy cashmere/wool blend was selected for the slender body of the garment and a similar shade of silk velvet for the tapered straps. The layered circle skirt is composed of two layers of burgundy silk chiffon, a third layer of rouge polyester chiffon and a fourth layer, the lining, of brown satin.

GARNETS AND GOLD

Andrea G. Hancotte
Kathryn E. Koch
Central Michigan University
Mt. Pleasant, MI 48859

The initial inspiration for this gown came from a love for designing formal wear. Back issues of magazines were researched, looking for interesting construction and architectural details. The inspiration for the swirling pattern in the embellishment came from Baroque and Rococo architecture.

The gown is constructed of burgundy shadow taffeta of 100% acetate. The 100% polyester black lace detail is hand painted and beaded with gold accents. The bead work consists of glass bugle and rocaille beads with swirling patterns of bead roping. The underlining is 100% polyester. The fitted bodice consists of pieced geometric shapes. The dropped waistline falls into a circular skirt with an elegant train. All seams were finished with a serged rolled edge using stretchy nylon thread. The flare of the skirt was accentuated with the use of horsehair braid in the hemline. Pattern pieces were created using flat pattern and draping techniques. Test garments were draped and fitted on a live model. Completed May 1993.
PIRATE'S DRESS

Christopher J. Skenteris, Marymount University
Arlington, VA, 22207
Pamela Stoessell, Marymount University
Arlington, VA, 22207

The "Pirate's Dress" was designed and constructed by Christopher J. Skenteris, as an assignment within the Textile Design course at Marymount University. It was created in honor of the 500th year anniversary of Christopher Columbus' discovery of America. Inspired by various exhibitions on Columbus, research led to the creation of this dress, which incorporates a variety of textile design techniques.

The dress is made up of two parts. Its straight underskirt is made of cream cotton satiné with rows of hand-painted lace stitched to the front. The overdress is composed of a fitted bodice of cream cotton satiné attached to a softly pleated open overskirt of cream rayon faille. Bishop sleeves are of cream organza with cuffs of cream cotton satiné. The bodice features lapels designed to resemble scrolls and a back panel insert of cream organza that incorporates a compass motif.

The dress was designed using draping and flat pattern techniques. Its back panel insert was hand-beaded with short gold bugle beads and gold thread, forming the compass motif. In creating the scroll lapels, boning was used to add dimension. Gold trim was stitched to the front opening of the overskirt. A heavier gold braided rope was attached to the back waist.

REPEATING COWLs

Debbie Abruzzino
West Virginia University
Nora M. MacDonald
West Virginia University
Morgantown, WV 26506-6124

This elegant cowl-draped, black crepe dress was designed for the young sophisticate target market. The goal of the design was to produce a contemporary dress that fit into an energetic, yet classy lifestyle. The flat pattern technique was used to develop the pattern for this dress. It was executed in 50% rayon/50% polyester crepe.

To enhance the concept of repeating curves, three strands of gold and black rope were draped across the back, while cowl sleeves and a sweetheart neckline reinforced the concept. A rounded styleline above the bodice back waist allowed the bodice to be cut on the bias.

A lapped side seam zipper was used for garment entry. The neckline was finished with a fitted front neck facing while an extended fitted facing was used for the back cowl neckline. A shaped sleeve hem facing was used to finish the sleeve hemline since the sleeves were cut on the bias. Sleeve and skirt hems were clean finished and slip stitched.
ADAPTABILITY

Joyce Huizinga and Carolyn Callis
The University of Alabama
Tuscaloosa, AL 35487

Two distinctive fabrics, a taupe linen and a coordinating windowpane plaid silk, served as inspiration for this dress and jacket ensemble. The full trapeze style three-quarter length jacket of handwoven silk features yellow and grey base colors with multi-colored single yarns woven in to create a windowpane plaid. The linen blouson style dress features a triple draped cowl collar, dolman sleeves, and a dirndl skirt. Design details were incorporated to flatter the proportions of the full-figured body type. Quality features include: linings, covered snaps, hand-picked zipper, Hong Kong seam finish, French tacks, covered shoulder pads, and waistline stay plus channel stitching and pad stitching on the jacket collar, lapels and cuffs. Machine and hand sewing techniques were used by the designer in the construction of the garments.

The designer enjoys overcoming challenges presented by the characteristics of the fabric and/or the needs of a client or market segment. Marketability, timelessness, functionality, versatility, and workmanship are criteria the designer utilizes in designing apparel. Above all else, the designer strives to create apparel that gives pleasure and a feeling of self-confidence to the wearer.

EDWARDIAN FUNK

Roxi Sliger and Carolyn Callis
The University of Alabama
Tuscaloosa, AL 35487

This suit was designed as part of a line for the missy market, bridge price category. The direct inspiration for the suit came from viewing the movie "Amadeus." In addition, the designer studied trends for Spring 1993 and decided to base the line on the "Edwardian" look. The suit features a waistcoat jacket and bellbottom pant. The jacket has three functional buttons which cover the breast area. The bellbottoms are hiphugging to complement the bare midriff look, as well as to correspond with the trend for 1970's inspired designs.

The suit is constructed of creme colored, lightweight, 100% wool crepe. The lining fabric is 100% polyester. The drapable fabric worked well for the bias insert in the back of the jacket as well as for the belled sleeves and belled legs of the pant. All seams were serged very close to the stitching due to the translucency of the fabric. Polyester rope braid was sewn around the edge of the jacket and the top of the pants for weight as well as aesthetics. The jacket buttons are simulated pearl and brushed silver.

The patternwork was developed using a combination of flat pattern and draping techniques. A panty facing was also drafted to serve as an inclusive undergarment. All construction was completed on a home sewing machine and serger. Some hand stitching was required for finishing.

The designer's philosophy is to take a holistic approach when designing apparel. This means that the designer considers the target market coupled with an awareness of social, political, and aesthetic trends. The designer believes that clothing is one of the principal vehicles by which individuals present their personalities to the world and thus should be designed with a flexibility and practicality that can accommodate many people.
My inspiration came from Vogue magazines ranging from the years 1933 to the 1970’s. I liked the slim fitting silhouettes of the thirties and the wide pant legs of the seventies. I sketched ideas until I came up with something I liked. The jacket of aubergine twill weave rayon/polyester blend was draped on a personal body form. Asymmetrical pleats hang from a back yoke. Beneath the yoke, the jacket is gathered into a fitted waist and lower back. The front gathers under the bust onto a fitted lower jacket. Double collars, pocket flaps and back pleats are edged with contrast print fabric piping. The pants of olive green silk noil were designed by flat pattern from a drafted pants sloper. Pleats from waist to hem on the left leg are edged with the same contrast print fabric piping.

This lapis blue and white ensemble is made from of an acetate/rayon bengaline. The sheath style dress is fitted with released waistline darts. The box style jacket is closed in the front with snaps and hooks and eyes.

Flat pattern and draping techniques were employed in the development of the design. Channel stitching enhances the scoop neck band of the dress. Beading and hand couched cording echo the shape of the neckline and front opening of the jacket.
Military Elegance

Emilia Quitero,
Kathy Mullet
Radford University
Radford, VA 24142

The inspiration for this outfit was the military uniforms used during the Civil War and at West Point. The waist length jacket uses three techniques of surface embellishment. A free motion machine quilting was used for the swirl pattern. Trapunto to outline the quilting and applique for the development of the chest ribbon.

The outfit was developed through flat pattern techniques. A shirt with stand collar and a high-waisted pant complete the military uniform look.

LABYRINTHS

Jill Dibbern
University of Nebraska-Lincoln
Dr. Barbara Trout, instructor

In the Medieval period, labyrinths or mazes were cut into bushes to deter intruders. This concept was used as inspiration for creating this jumpsuit made of wool double knit with black cowhide accents. Labyrinth patterns were used to form the detail stitching on the accent pieces at the shoulders, sleeves and back. Trapunto was used to simulate the labyrinths by creating a three-dimensional surface. The zipper was concealed in the princess line to keep the line flow of the garment.
The traditional oriental technique of paper folding or Origami was the inspiration for creating this vest. Squares of silk shantung were folded and then sewn together in groups of four to create a larger square. Then these larger squares were hand sewn to one another to create the form. A color combination of blue plaids and solids were used for the squares with the application of a gold bead to the center of each large square to add interest.

The purpose of this project was to design a garment that would display art. Silk fabric was chosen as the canvas and life was then given to the art piece through the use of the fabric in a wearable art garment. Inspiration for the surface design came from the designer’s perception of line and rhythm observed within old tree roots and flowing hair. The garment design was kept simple to complement the art.

An off-white 100% silk flat crepe fabric was chosen for the dress and lining. A 100% polyester sheer was used to underline the garment pieces to give them body and enhance the visibility of the surface art.

The garment was draped on a size 8 dress form. The pattern was created from the draped muslin and each garment piece was traced onto the silk fabric. The fabric was stretched onto a metal painter’s embroidery hoop with pan before cutting out. The surface design was hand drawn with black fabric markers in small sections using cross-hatching and pointillism. Attention was given to assure that the design on each pattern piece would match the design of the corresponding pattern piece.

The dress and lining were constructed with French seams to enclose all raw edges due to the sheerness of the fabric. All darts and seams were encased in the lining. Understitching was used along the neckline, side slits, and hemline to assure an even edge. Hand stitching was used to attach the zipper and the edge of the sleeves. A home sewing machine was used to construct the garment.
ODE TO SHEEP

Joyce Huizinga and Sue M. Parker
The University of Alabama
Tuscaloosa, AL 35487

As a designer I enjoy overcoming challenges created by the fabric with which I’m designing or a problem area for which a client needs a solution. Both design and fabrication must be creative, aesthetically pleasing, and complement the client’s positive attributes. The purpose of this project was to design an ensemble from fiber to finished product. The handwoven ensemble consists of a cocoon jacket, straight skirt, and boat neck top. The fabric was woven on an eight harness loom with 10 treadles and a 10 dent reed. The loom was dressed using a straight draw treadling sequence and the fabric woven using a variety of treadling sequences. The pleated cocoon jacket has narrow stripes of white plied yarns off-setting wider stripes of handspun natural wool yarns progressing from light brown on the sides to dark brown at the center back. The cocoon jacket bands and skirt were woven of purchased white wool, rayon, and cotton plied yarns. The skirt is pleated in the front, darted in the back, and lined with a 100% polyester fabric. The lined top, which incorporates both the yarns of the skirt plus a plied rayon/cotton combination in the brown colors of the cocoon jacket, features cap sleeves and side-seam slits. A blanket stitch finishes and decorates the top’s edges.

THE QUILTED PANTSUIT

Patricia L. Joe
Janine W. Manley
University of North Carolina
at Greensboro
Greensboro, NC 27412

The Quilted Pantsuit was inspired by the "quilted look" that became popular in the Fall/Winter 1992 season as well as a trend toward the use of comfortable clothing in the workplace. Oriental influence is reflected in the use of a mandarin collar and handmade Chinese ball buttons. The ensemble was designed using flat pattern techniques.

Cameo blue polyester/rayon fabric with magenta undertones was used for the ensemble. The jacket was machine quilted at the collar, cuffs, and peplum with metallic magenta thread to enhance the magenta undertones of the fabric. The slacks are designed with added fullness in the hips, tapering to the ankle with an elasticized waistband.
Satin, Sequins, and Lace

Theresa Marie Maag-Harlan
Janine W. Manley
University of North Carolina at Greensboro
Greensboro, NC 27412

Satin, Sequins, and Lace is a wedding gown for the bride of the 1990's. The garment was inspired by a desire to produce a classic gown that was simple, elegant, and sophisticated. The dress brings together different fashion features from a variety of eras in an effort to flatter the shape of the bride while providing freedom of movement.

The dress is made of 100% acetate slipper satin, lined with 100% acetate taffeta and overlayed with lace. Design features include a fitted bodice with a lowered, softly v-shaped neckline, exaggerated Juliet sleeves and full length straight skirt. A lace peplum and large satin bow accent the detachable train. Lace-on-lace applique was used at the neckline, forearm of the sleeve and hem of the peplum. To provide a luminiscent appearance to the bride during the candlelight wedding, over 3,000 sequins and 1,000 seed pearls were hand sewn to the dress.

This original design was completed as an independent project using flat pattern techniques in 1992.

Black Mist

Theresa Marie Maag-Harlan
Janine W. Manley
University of North Carolina at Greensboro
Greensboro, NC 27412

Black Mist is an after-five cocktail dress for the contemporary woman. The design is reminiscent of the 1950's silhouette when skirts were full, waists were fitted and sequins and sparkles accented the evening wear. This original design was created using flat pattern techniques during the 1992 fall semester.

The dress is made of 100% Tiara Charmeuse with 100% polyester crepe chiffon used as the overlay fabric. The bodice is strapless with a chiffon overlay providing the illusion of a surplice neckline and an extended shoulder line. The skirt is a full circle skirt with a separately sewn chiffon overlay. The focal point of the dress is a beaded floral design that flows from the right side of the bodice and down the left side of the skirt. A beaded fabric rose accents the waistline. French seams were used to construct the garment and all rhinestones, beading, and sequins were sewn by hand.
HOLIDAY REDUX
Mark Schaaf, Marymount University
Arlington, VA 22207
Jean L. Parsons, Marymount University
Arlington, VA 22207

Holiday Redux was designed to make use of recycled materials. The ensemble consists of a vest, hat, bra-top, and shorts. Holiday cards were chosen for the vest and hat because of their art-like quality and design, and their festive coloration. The cards were laminated and then laced together with red ribbon. The top and shorts were first constructed of cotton fabric, using original patterns. Christmas tinsel was then attached to the fabric using a spray adhesive. Tinsel was chosen because of its ability to reflect light, to coincide with the holiday theme, and to recycle something that is frequently discarded after the holidays.

BUBBLE MADNESS
Sharon Klump, Marymount University
Arlington, VA 22207
Jean L. Parsons, Marymount University
Arlington, VA 22207

Bubble Madness was designed for a festive occasion such as a New Year’s Eve party. The shape of the dress mimics the shape of a champagne glass filled with champagne, the bubbles overflowing the top. The body of the dress was constructed using white pleated polyester charmeuse. At the hem, boning was inserted to stretch the pleats and form the base of the glass. The top of the glass was constructed of clear plastic vinyl and edged with gold. The glass was filled with champagne colored charmeuse. Styrofoam balls were covered with charmeuse and then beaded. These “bubbles” fill the top of the glass and overflow down the stem.
VELVET FLAMES

Priscilla Ann Meredith (PAM)
The Ohio State University
Columbus, Ohio, USA
Sponsor Nancy Ann Rudd
The Ohio State University
Columbus, Ohio, USA

Velvet Flames was designed for an evening wear target market. The target client is a woman that is not afraid to break the current trend and dress on the wild side.

The garment consists of a two piece dress, which includes a wine velvet boned gown with a petal shaped peplum and a rayon itaki chiffon scarf skirt. Each scarf of the skirt is weighted with a combination of African brass and Venetian glass beads with seed tassels. The garment was designed to allow the movement of the body to be expressed in the dress.

The designer believes in a rebirth of High Victorian and Art Deco designs. Erete's unique use of lines and fabric treatments and Eileen Gray's Japanese influence lead to the development of this dress and the designers creative process.

AN EVENING WITH MAINBOCHER

Heidi Herrman, Kansas State University
Manhattan, KS 66506

Janice Huck, Kansas State University
Manhattan, KS 66506

The design approach for An Evening with Mainbocher came as an inspiration after studying Mainbocher's work. Mainbocher, like Vionnet, used bias cut fabrics in his dresses to achieve impeccable fit without fasteners.

For his evening gowns, Mainbocher favored black. This evening gown is black to emulate Mainbocher's design approach. Accentuated with a mocha hand-dyed silk sash, the lines are simple and elegant. The gown is cut on the bias, uses no fasteners, and incorporates couture level construction. The black fabric is a rayon crepe and the sash is a silk crepe.
TROPICAL MONTAGE

Dianne Atkinson Mount Mary
Milwaukee, Wisconsin

The psychological impact of color on design is of great interest to me. Exciting combinations of pattern, color, and fabrics are the impetus behind consumer behavior. Inspired by the Australian designer Maggie Shepard’s unique color and piecing techniques, my design evolved by combining seven different silk fabrics into a visual montage of tropical colors.

100% silk fabrics were used for the piecing, with Bemberg rayon used for the lining. The design was flat patterned from an existing jacket draft I previously designed. Getting the fabric to react as one, rather than as individual elements, was tricky, as was pressing and hemming the parabola line of the jacket.

The four inch squares were pieced into a fabric first, then cut and handled as a whole. Multicolored ribbon was then applied to enhance the total design. I didn’t use any interfacing to stabilize the jacket, preferring the natural flow of the material to dictate the final design.

GOLDRUSH

Dianne Atkinson Mount Mary
Milwaukee, Wisconsin

The goal of the design was to create a machine knit sweater ensemble that was comfortable yet elegant for the woman over 40. Versatility is heightened in this sweater because it can be worn knee length as a blouson, below the calf as a wedge, or thigh length as a tunic with leggings. Initial research concentrated on silhouettes that fit this criteria.

The body of the sweater is black 65% wool, 27% rayon, with 8% lurex twist. The neckline, cuffs, insertions, and skirt are black 65% wool, 27% rayon with 8% gold and silver lurex twist. The body is stocknette stitch embellished with iridescent jet/gold beads applied in the yoke area by hand with silk thread. The accent pieces are ribbing which has been machine joined to the rest of the sweater. Seams were finished by hand to make them invisible.

Careful consideration was given to proportion and the balance of gold to black in the total design. The greatest challenge I faced was planning each individual piece and then assemble them to the accenting rib pieces.
BLACK NARCISSUS

Michelle Wahlen, Mount Mary College
Milwaukee, WI 53222

This design, entitled Black Narcissus, is indicative of my minimalist design philosophy emphasizing fashion as a functional art form through the creative manipulation of fabrics, line and proportion.

The columnal gown is in black four-ply silk crepe with black silk taffeta strips at the midriff and bias binding at the neck, armholes, side slit and hemline. The lattice wrap is composed of black silk taffeta strips which were individually woven to conform to a predetermined silhouette. The dress is completely bias, with the bodice underlined with silk crepe. The construction techniques used were completely couture and included applying bias bindings by hand, felling, mitered corners and hand overcasting.

MOOD INDIGO

Michelle Wahlen, Mount Mary College
Milwaukee, WI 53222

One of the greatest design challenges I have experienced is the successful combination of unlike materials into a unified whole. Inspired by European designers who move fashion forward, I chose to work with fabric, leather and hardware closures to achieve my design entitled Mood Indigo.

The body of Mood Indigo is midnight blue wool twill with a black leather shaped midriff and nickel turnscrew closures. The dress was draped in muslin and then refined on a fit model to achieve the correct proportions and silhouette. A combination of ready-to-wear and couture techniques were employed in the construction.
EVENING ELEGANCE
Rita F. Bass, Texas Woman's University
Denton, Texas 76204
Deborah D. Young, Texas Woman's University
Denton, Texas 76204

Problem: While many fabrics are used for the creation and production of evening wear, rarely are natural fibers other than silk used as the fibers of choice for evening elegance. Thus, inspired by the growing popularity of all of the natural fibers, this evening gown, made from 100% wool, was created specifically to appeal to the needs of individuals attending formal occasions.

Description: Winter white, light-weight, 100% wool sweater rib knit was the fabric of choice for the original evening dress design. The dress was lined with 100% nylon tricot and corde' was used as a binding for the neck and back opening. In addition, tiny beads were sewn around the neck opening for an elegant embellishment.

Techniques and Media Employed: Because of the stretching characteristics of the sweater knit, the design of the dress had to be simple and incorporate an easy fit. Because of the warmth of wool, the design included vented sleeves, a vented back, and a high leg slit to allow the wearer additional comfort. These design details also gave the wearer a long, lean look. The lining gave the entire dress stability and supported the vented areas.

LIVING LUXURY
Rita F. Bass, Texas Woman's University
Denton, Texas 76204
Deborah D. Young, Texas Woman's University
Denton, Texas 76204

Problem: Traditionally, luxury coats have been associated with animal skins. However, in order to manufacture such coats, the animals must be destroyed. Currently, many consumers are concerned with, and even opposed to, the process of destroying animals for the production of apparel. Consequently, changing consumer lifestyles and pressure from activists have stagnated the ownership of luxury coats as well as other related consumer goods. Therefore, a viable alternative for the production of a "fur" coat was sought by the designer. A woven, brushed mohair fabric was selected as mohair fibers have a luxurious hand, rich luster, and great durability and can be obtained by shearing a live animal. In addition, a design was created that would mirror the look of better fur coats.

Description: Woven, winter white, brushed 100% mohair fabric was selected for an elegant presentation of a floor-length, formal coat. The original design incorporated raglan sleeves and flaired styling in order to accommodate a variety of body shapes and sizes. The mohair fabric was backed with a 3/4" layer of 100% polyester fiberfill and a layer of 100% cotton muslin to create a look of fullness similar to the three-dimensional appearance of fur. The coat was lined with a woven, winter white, 100% acetate satin. Rayon novelty cord was used to trim the lining at the collar band seam. The single closure of the coat consisted of a covered hook and eye placed directly beneath the collar.

Techniques and Media Employed: To simulate the appearance of a traditional fur coat, the letting-out technique used for the production of better fur coats was also used in the production of the mohair coat. To facilitate the use of the technique, each of the main pattern pieces were cut into strips of equal width and used to create the marker needed for cutting the mohair, fiberfill, and muslin. To conserve fabric, each of the strips were sewn together with alternating nap direction to form each of the main pattern pieces and finally create the coat. The lining was constructed and sewn in a traditional manner.
EDEN-NO TRESPASSING
Jennifer Foust and Gail Goodyear, Ph.D.
California State University, Chico
Chico, CA 95929-0310

This design is styled after a cyclone fence which is sparingly covered with leaves from a vine. The design symbolizes current confusing sexual messages ingrained in America's youth. Through the media, particularly MTV, the message seems to be: "Look hard, but don't touch." The shell of the dress is composed of intertwining "diamonds" made of silver metallic-covered rope. Velvety green leaves were individually wound onto the fence-like shell of the dress to create the vine.

CRUSHED
Jennifer Foust and Gail Goodyear, Ph.D.
California State University, Chico
Chico, CA 95929-0310

The desire to have fun recycling products inspired this design. The visual image created on the body represents a smashed Guinness Stout beer can ready for the recycling bin. A plastic Guinness Stout beer banner was draped on the dress form and fitted with darts to created a crushed effect while maintaining the legibility of the name of the beer. The "darts" were glued with rubber cement. The wearer enters the garment via a velcro closure down the center back.
AZTEC WHEELCHAIR RAIN PONCHO

Nancy Wade, California State University, Chico
Chico, CA 95929

Gwen Sheldon, Instructor
California State University, Chico
Chico, CA 95929

This garment concept was developed after observing the need for functional rain gear for people using wheelchairs. A poncho was developed with careful consideration given to the following factors: comfort while sitting, ease of closure for a variety of disabilities, close fit to avoid interference with moving mechanisms of the chair, sleeve length adjustability to allow arm extension when pushing chair wheels, side back opening to allow for different types of chair backs, shortened back length to cover chair back, routing of water away from chair seat, preventing wearer from sitting on seams, large pockets and clasps for storing items and securing a briefcase and updated styling.

The rain poncho which has an Aztec theme, is made of blue and purple water resistant, 200 denier, rubber backed Trail Pack nylon. The Aztec style braid trim is woven 100% polyester. A fashionable jacket style fit with v-yoke and back pleats for easy reaching movement was designed using flat pattern and drafting methods. Velcro was used on the front placket opening, sleeve cuffs, back gusset, the side opening that allows the back to be slipped over the chair back then attached to the front and for securing the hood with a tab in a rolled up position when not in use. The hood, made of five separate pattern pieces, is similar in design to fashionable outdoor wear.

SIGNATURE PIECE

Lyra W. Bobo
San Francisco State University
San Francisco, CA. 94132

This garment was designed as a signature nightgown for Eileen West's Queen Anne line of sleepwear. The manner in which a series of squares are joined diagonally to create the gown is representative of the company's bed and table linen lines as well. The lace finishings are reminiscent of those on a Victorian handkerchief and enhance the gown's jagged hem line.

The gown is made from 100% cotton lawn and finished with Eileen West's Queen Anne lace, a fine quality rayon lace which the company designs specially for this line. Throughout the garment lace inlays and edge finishes are stitched, serged, and top stitched close to the folded edges to ensure a smooth finished appearance. A narrow placket opening buttons down the front of the gown.

A traditional Victorian technique of inlaying lace into a sheer fabric inspired this gown. Draping techniques were used to achieve a diagonal theme throughout the gown. This resulted a series of diamond shaped forms outlined in lace, particularly within the hem and the back bodice.
LIONESS
Laura Johansen and Nancy O. Bryant,
Oregon State University
Corvallis, OR 97331-5101

This two-piece pant suit was inspired by the tropical Lion fish. The initial idea was to incorporate the colors of the lion fish and its fluidity of movement. Washed rayon in the colors of rich ocher and black were used as the fabric for the pants and short cropped jacket. The rayon fabric provided a rich look, luxurious hand and fluid movement. The long fins of black and ocher inspired the long, wide-legged pant with an inverted pleat made of contrasting back fabric and a high waisted waistband. The short lined jacket displays asymmetrical lapels of contrasting black. An inverted pleat, also in contrast black, adds back interest in the jacket. Flat pattern was used to create the pattern for the outfit.

KALEIDOSCOPE
Suzan Warren and Nancy O. Bryant,
Oregon State University
Corvallis, OR 97331-5101

Kaleidoscope was born in the library. Inspired by historical design patterns I searched for geometric patterns that would work with the striped silks I had found. After finding several Korean patterns to manipulate in my design, I developed a design that was a sewing and mathematical challenge, combining flare, stripes and angles. Patchwork geometric diamonds were created using two related striped fabrics, one with a black warp, the other with a white warp and both having identical filling yarn colors. The name "Kaleidoscope" depicts the mirroring of the patchwork patterns. The jacket is made of 200 individual pieces using quilt piecing construction techniques. A cotton batiste was used as underlining to stabilize the silk. The silhouette was developed using flat pattern techniques.
The design of this dress began with the collar, inspired by a French design idea book from the 1950's. The draping assignment required sleeves, so I developed a cocoon sleeve. I used an exaggerated peg skirt to enhance the fullness of the sleeves. A fitted waist and bodice, French cuffs and narrow hem sweep balance the fullness in the hips and sleeves. A black polyester bridal satin in sued for the bodice, skirt, collar and cuffs. The sleeves are made from a silk organza with satin ribbon stripes--horizontal strips of purple and fuchsia with vertical black stripes. I pleated out the organza sections, leaving only the satin showing. The sleeve is one piece, wrapping around the shoulder and arm to create a cocoon effect that makes the sleeve look as if it has grown from the bodice. The dress was first draped in half scale to solve the design problem, then draped in full scale.

A swimsuit that fits well and looks good is hard to find. The challenge of creating a suit that bridges good fit and elegance was a formidable one. My main focus was creating a flattering supportive top. Strap placement was important for support. The gathers in both the bottom and top helped fit to the body and are visually attractive. Underwires were used in the top to support the front gathers. The two fabrics used are a gold metallic and a multi-colored ethnic print in nylon/spandex knit for the outer structure and a polyester knit lining. Flat pattern was the design approach I used to develop the suit, using body measurements and ease reduction. During fitting sessions the design was manipulated until it was both supportive and attractive.
DOUBLE TAKE

Tami Sudderth
Central Washington University
Ellensburg, WA 98926

"Double Take" is a multi-colored reversible Pendleton wool and Ultra Suede jacket. This hooded jacket has welt pockets on one side and patch pockets on the reverse. The seamless sides where designed to avoid disrupting the unique pattern. Black Ultra Suede was used to bind the edges and tape the seams to result in a finished reversible jacket.

HOT FLASHES

Abby Dalzell, Ohio State.
Columbus, OH 43210

Fabric often inspires me to create garments that are pleasing to the eye and to the wearer. Christian Lacroix and Gianni Versace also are an inspiration in the way that they so elegantly mix and match different patterns and textures. I enjoy designing evening wear because of the elegance and magic created by them. It is by what we wear that we create a persona.

It is my desire to create and design garments that are timeless and classical. To design those things that hang in your closet forever: your favorite shirt; your favorite shoes. These are the types of designs I wish to create with my hands and with my mind. Elegant classical styles that stay with you forever and ever. Whether it be an evening gown or a pair of pants I want my designs to make a woman feel elegant and beautiful the way she should.
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