

Research in Textiles and Clothing— Where Are We?

Sue Dodson, Texas Tech University, Lubbock

Anspach indicated the research direction in textiles and clothing in 1958, based on articles published in the *Journal of Home Economics* from 1925 to 1958. Where are we twenty years later? A survey of publications in the general areas of textiles and clothing in the *Journal of Home Economics* from January 1959 through Winter 1978, and the *Home Economics Research Journal* from September 1972 through September 1978 revealed 229 articles. Articles were recorded as "exposition" or "research" type articles. Exposition articles presented, explained, or expounded facts and ideas without having researched a problem. Research articles referred to articles that presented both applied and basic research studies. Each article also was placed under one content area.

It was found the number of articles published in the "Clothing" content areas have decreased over the years. Two interesting details are the number of exposition articles on construction during the 1960's, an era of a surge in home sewing, and the fact that no research articles pertaining to this same subject were published during the 1970's. One explanation is that research in clothing construction, fashion, and maintenance may be included under other sections where those particular areas predominate. A second explanation may be that emphasis placed on "research with significant results" by publishers has prevented their being published since the studies done in this area have often been descriptive.

A second trend was the decline of publications concerned with textiles. The decrease may mean that textile scientists now employed on home economics faculties find it more profitable to publish research in trade publications and journals that producers of textile products would receive.

In the historical area, there was a surge of articles during 1975 and 1976. These articles were a reflection of the American heritage interest during the bicentennial year, 1976.

The social psychological area has predominated in the number of research articles during the 1970's. Perhaps the interest in social and psychological phenomena is an aftermath of the 1960's when some types of dress stimulated much conversation and sometimes violent reactions. Another explanation for the increase may be the availability of computer technology and sophisticated statistical methods of analyses.

Approximately one-half of the articles were reports of research studies. The greatest observed difference in the research studies is their method for findings analysis. Descriptive studies were characteristic of the 1950's and early 1960's. Beginning in the 1960's, inferential statistics were used in research data analyses in the journals in question.

One concern is that only a few research studies were being reported in most content areas. A second concern is the usefulness of research in meeting current problems of individuals, families, and societies. Textiles and clothing researchers can attend more directly to the concerns of the family. Research concerning family use and disposition of resources as related to textiles and clothing can contribute to the re-balancing of the ecological system, i.e., clear air, clean water, the restoration of depleted land resources. The expanding world population demands research concerning biological and psychological needs of man. Textiles and clothing, the near environment of man, must be brought into focus with these needs.

Acknowledgement: Dr. Mary Roach Higgins, advisor and Dr. Betty Wass.

Reference:

Anspach, Karlyne. "Clothing Research in Home Economics, 1925-58." *Journal of Home Economics* 51: 767-773, November 1959.

Research

Guatemalan Textiles and Apparel

**Barbara M. Starke, Howard University,
Washington, D.C.**

Howard University Faculty Research Grant

The Program in Microenvironmental Studies and Design (MSD) in the School of Human Ecology was the recipient of a substantial collection of Guatemalan textiles and apparel donated by Mary Belle Frey. Ms. Frey is a bilingual American who has lived for several years in Guatemala. Her generosity inspired the development of a proposal to further study the Mayan textiles and apparel and to complete the cataloging of the data at Howard University for researchers and students of design.

The purpose of the research was to complete certain outfits in the collection depicting native Guatemalan Highland village apparel, to identify the villages, and to learn the technique of the weaver. Each village was distinctive by the ornamentation and color combination of the wearers.

Barbara M. Starke and E. Jean Mettam traveled to Guatemala to conduct the research. Expert assistance was provided by Ms. Frey, who was able to communicate with the village people, and who, because of her interest in Mayan culture, was equally knowledgeable of Highland customs, textiles, and apparel.

This study took the researchers into the isolated Indian villages where the Mayan descendants live much as their ancestors did 500 years ago. It was easy

From the editor:

Growth and development can be seen in the 1979 ACPTC Newsletter. The most difficult task was selecting which items to include. More than seventy people submitted research reports or articles for submission. The newsletter staff was most enthusiastic and supportive. We found the ACPTC membership has much to communicate and offer to its readers.

The articles included pertain to research, education, legislation, or announcements. We have included a listing of research and a calendar of events from May 1979 to February 1980.
Judy Zaccagnini Flynn

Greetings from the President

Reports from the regions indicate that the fall meetings were well-attended and very profitable.

This year's activities have focused on consolidation of past gains and implementation of recommendations made at the executive board meeting in New Orleans last summer.

The ballot includes certain bylaws changes that are necessary if the recommendations are to be implemented. As we seek simultaneously to maintain a mutually supportive relationship with AHEA, and to assume responsibility for the business of conducting a national organization, certain actions are required. We plan to collect our own dues and disburse appropriate allocations to the regions, to maintain our own membership rolls, and to establish a constant membership year. Some college professors of clothing and textiles, who did not receive their degrees in American universities, have been excluded from AHEA and hence from ACPTC. This will not be the case in the future if we remove from the bylaws required membership in AHEA to be eligible for membership in ACPTC. We have been the first and only constituent group in AHEA and are now working with AHEA to find a different relationship category that will be mutually helpful.

Communication among our members continues to be facilitated by the Newsletter and the publication of the joint Proceedings of the regional meetings. As we develop there is the hope that a research journal may emerge from these present publications.

Employment this past year of an Executive Secretary (Loy Walton, 6102 Covered Bridge Road, Burke, VA 22015) has been an important move. She has been a tremendous boon to us.

Many thanks to all of you who have contributed to ACPTC in many ways. Best wishes for a good year, increased membership, stimulating regional meetings in 1979, and a great reunion at the 1980 national meeting in Washington, D.C.

Ruth Gates, 1979

to see why designing and weaving became a major occupation of Guatemalan women. These women perfected the art of back-strap-loom weaving and in turn passed the skill on to their daughters.

The huipil (pronounced wee-peel'), a simply constructed blouse-like garment or covering for the upper part of the body was of particular interest because of its distinctive ornamentation, color combinations, and design. The huipil was similar from village to village, yet distinguishable by the local wearer or student of design. Such design similarities necessitated that careful attention be paid to cataloging. The researchers therefore labeled all textiles and apparel in the MSD research collection and arranged them according to the location in which the articles were worn or used.

Starke and Mettam collected additional items and completed certain outfits already a part of the collection. They then cataloged the men's, women's, and children's apparel according to the location of the wearer. Finally, they organized the accessories, looms, and other artifacts into an exhibit in the School of Fine Arts Gallery at Howard University.

The importance of the research and cataloging of data is substantiated as the villages become influenced by visitors and by greater accessibility to transportation and materials. It is therefore desirable to record as much as possible of the Mayan Indian textiles and apparel before it is lost to the 20th century industrial economy. In this way, research has assisted in the preservation of an art form and provided materials from which contemporary designers can gain information and inspiration.

Registration, Identification, and Conservation of Historic Lace Specimens Susan Crabtree and Lavonne Matern, Oklahoma State University

Historic costume collections serve as a resource for students of clothing and textile design. In studying historic costume or textiles, the student or researcher explores more than the total garment. Attention also is given to small details, accessories, or garment trim as they often tell much about the wearer and the society in which the person lived. Lace has long served as a trimming and ornamentation for clothing.

Recent research focused on the registration, identification, and determination of proper cleaning, storage, and display methods for lace specimens in the costume collection.

Each lace specimen was registered and classified as being one of three construction methods—bobbin, needle, or miscellaneous. Construction classification and specific name of the lace specimen were determined where possible.

Among the bobbin class lace specimens, examples of Cluny, Milanese and Torchon lace were identified. The needle class contained Drawnwork, Point Venise, Rosepoint and Venetian lace specimens. Filet lace, Battenburg lace, Princess Guipure, assorted embroidered net laces, knitted, crocheted, and tatted laces were

identified as examples of the miscellaneous class of construction.

Information regarding proper cleaning, storage, and display methods was sought from museums and persons either prominent in the field of historic textile care or known to be associated with a lace collection. Recommendations for cleaning, storage, and display of the lace specimens utilizing existing facilities for housing the collection were made.

Past and Present Textiles

Doris Finch Kennedy, Handweavers Guild of Nashville, Tennessee 37217 (1263 School Lane)

The Handweavers Guild of Nashville has undertaken a project that has been partially funded by the Tennessee Arts Commission. This project is to study the past and present textiles in the State of Tennessee and includes the following four phases:

(1) To collect information on current and past weavers, spinners, and dyers in the state.

(2) To conduct a workshop or seminar on textile conservation and restoration for curators of museums, historic sites, and interested textile collectors within Tennessee and surrounding states. The workshop held was conducted by Dr. Margaret Ordonez.

(3) To classify textiles in museums, historic sites, and personal collections by description and photos. This information will be housed in the State Museum for research.

(4) To make samples of weaves representing types of fabrics that have been produced in Tennessee's past that will be donated to the State Museum.

Care of Down and Feathers

Rosalie King, University of Washington

Although there exists a small amount of information concerning the chemical nature and the mechanical behavior of down and feathers, there has been very little research done on the care of these materials. The current widespread use of down and feather materials in sportswear products such as jackets and vests, and the renewed interest in down as a filling fiber for sleeping bags and quilts, has led to consumers questioning the best method of cleaning these items. The products are labeled with care instructions, but often two alternatives are given for cleaning with no indication of the best method. Some products are labeled "dry clean only," while identical products made by different manufacturers are labeled "cold water wash only."

To determine if wet treatment was preferable to dry cleaning, identical nylon units were tested under the following procedures; each treatment was followed by two controlled rinses.

	Temp	Ph
1. Cold water wash, 250 ml alkaline detergent	14C	9.0
2. Cold water wash, 250 ml neutral detergent	14C	7

3. Warm water wash, 250 ml alkaline detergent	22C	9.0
4. Warm water wash, 250 ml neutral detergent	22C	7
5. Dryclean-perchloroethylene (chlorinated hydrocarbon)		
6. Dryclean-Valclene (closely related to fluorocarbon Freon)		

The washed samples were dried in a dryer on a low setting—41C temperature for 20 minutes and then left at room temperature for 48 hours, with reversal of the pieces after 24 hours. The dry cleaned samples were put through the usual drying procedure.

Two 15.5 mm squares of rip-stop nylon were sewn together and stuffed with 3 grams of down fiber. The samples were conditioned 24 hours at 65% relative humidity and 21C for 24 hours before all weighings, both before and after treatments.

After each sample experienced the treatment two times, the sample was again conditioned, weighed, and the loft measured. The samples were opened for microscopic examination and compared to the condition of the down in the control sample. The only treatment the control samples received was that of conditioning.

In summary, the study found that a neutral detergent in either the warm or cold water wash treatment is the most desirable method of cleaning down-filled products. Wet washing and controlled drying actually increase the loft significantly with no weight increase. (An increase in the loft results in enabling the down to be a better insulator.)

Implications from this study are that manufacturers should label down-filled products: Machine wash in cold or warm water in a neutral detergent; tumble dry, low temperature. (In case of bulky items, such as sleeping bags or down quilts, a commercial laundry might be suggested.)

Two areas of possible research emerged related to the care of down filled products: 1) more exacting methods of measuring loft need to be developed and 2) commercial laundry washers and dryers should be included in the study.

Acknowledgement: The Division of Textile Science and Costume Studies is grateful to Eddie Bauer, Inc., Redmond, Washington for supplying the down and nylon fabric used in this study.

References:

1. "British Standards of Method of Test, Filling Power Index of Down and Feathers." British Standard Institute, BS 5335, 1975.
2. Dusenbury, J. H., Chang, N. W., and Dansizer, C.J. "Mechanical Properties of Feather and Down Fibers," *Textile Research Journal* 30: 277-96, April 1960.
3. Federal Trade Commission. "Guides for the Feather and Down Products Industry," October 1971.
4. Roberts, N. W. and Edelman, N. B. "Quartermaster Research on Down and Feathers and Other Filling Materials for Sleeping Bags". Office of the Quartermaster General, Military Planning Division, Research and Development Branch, Textile Series Report No. 43, 1957.

The Comparative Performance of Open-End and Ring Spun Yarns in Skirts Constructed from Woven Cotton Fabrics

Esther R. Broome, Texas Woman's University

Previous studies have shown that open-end spun yarns differ from ring spun yarns with regard to structure and that these differences are manifest in the behavior of knitted fabrics during use and care. Operating on the assumption that the differences attributed to the two types of yarns also will be conveyed to other types of fabric construction, this study related to woven fabrics was undertaken.

Twenty-four skirts representative of three fabric types served as experimental garments in this study. One fabric was constructed from 10S ring spun yarns with the twist multiple of the warp yarns amounting to 4.00 and that of the filling yarns equivalent to 3.75. Another fabric was constructed from open-end spun yarns that were as comparable as possible to the ring spun yarns, while the third fabric was composed of the ring and open-end spun yarns piled together in 20/2 yarns. The fabrics were constructed by means of a variation of the twill weave with a repeat every 16 yarns in the following pattern: 5/1, 2/1, 3/1, 2/1. After being woven, the fabrics were mercerized and vat dyed a light blue color.

The skirts, eight of each type, were worn for one eight-hour day by a panel of university women, and thereafter they were returned to the research laboratory for refurbishing. The study continued until each skirt had been exposed to 25 wear-laundrying periods.

At intervals during the study the skirts were evaluated with regard to parameters that normally are important to the consumer. Results revealed that none of the three yarn types provided the ultimate performance one would desire for the end use evaluated in this study. The open-end yarns provided the greatest degree of air permeability; none of the yarns were acceptable as far as warp stability was concerned; the ring spun yarns were the most stable, fillingwise; and either the ply or the ring spun yarns proved to be the most resistant when differences were observed in relation to the strength tests.

This study was funded by the Natural Fibers and Food Protein Commission of Texas and by Cotton Incorporated.

Cost-Benefit Analysis of Consumer Product Safety Programs

Rachel Dardis and Associates, University of Maryland

The cost-benefit of consumer product safety programs is necessary for legislators, consumers, and industry to make decisions for the future.

The objectives of the project were:

1) to develop cost-benefit models for evaluating consumer protection programs in the area of product safety, and

2) to apply the models to an analysis of actual and potential flammability standards for children's sleepwear and clothing.

Models were developed for both durable and non-durable goods. The direct costs of consumer product safety programs included the opportunity costs of resources employed in program development and implementation and the changes in producer and consumer surplus due to product banning or product modification.

The benefits from consumer product safety programs were based on the degree of protection provided by the programs and the direct and indirect costs of product related accidents.

Cost-benefit analysis was applied to flammability standards for children's sleepwear and clothing, sizes 0-6X and 7-14. Two models were used to estimate the costs of flammability standards for sleepwear. In the first model, it was assumed that flame-retardant (FR) garments were equivalent to nonFR garments with the exception of price. In the second model, it was assumed that FR garments differed from nonFR garments with respect to quality as well as price so that some reduction in consumer choice had occurred. Only the first model was used in the case of children's clothing.

Cost-benefit ratios for clothing were from five to seven times greater than cost-benefit ratios for children's sleepwear. It was concluded that flammability standards for sleepwear were cost effective in contrast to flammability standards for children's clothing.

Factors Influencing Consumers' Voluntary Selection of Flame Resistant Apparel

Hazel O. Jackson and Charles J. Noel, University of Tennessee at Knoxville

Will consumers, if given a choice, buy and pay additional money for a flame resistant apparel item for the child?

Is there a correlation between the type of information the consumer acquires on the performance of FR garments and the decision to buy a garment of this type?

These two questions guided the study that attempted to discover the consumers' behavioral response when there is a choice between a flame resistant and a comparable non-flame resistant apparel item.

The procedure consisted of an exploratory study into the nature of consumer decision making in a situation that may involve high risks to personal life. Consumers were assigned to one of six experimental groups. The groups varied in three ways: (1) pretested vs posttested (2) exposure to information and (3) type of information acquired.

Through a simulated catalogue shopping experience, consumers indicated their willingness to choose and pay for the flame resistant versus the non-flame resistant apparel item.

Most consumers were willing to purchase the flame resistant apparel item at some additional cost. There was no significant difference found between information type and the consumers' willingness to choose the flame resistant apparel item. However, exposure to information on fabric flammability, regardless of tone, had a significant impact on consumers' posttest scores on awareness of flame resistant facts.

Those consumers who perceived the risk associated with clothing burn injuries to be high and those who assigned high value to FR safety in apparel fabrics tended to be more willing to pay additional money for the flame resistant apparel item.

Body Measurements of Selected Women Over 65

Mary Irene Felkner and Jo Ellen Uptegraft, University of Oklahoma, Stillwater

The purpose was to compare body measurements of women over 65 with Voluntary Product Standard measurements for sizing women's patterns and apparel. The female population studied resided in housing designed for senior citizens or participated at senior citizen centers. Data collected from 99 volunteers were key measurements of the most often reported problem areas of the body. Nine measurements were taken in inches using a reel tape of fiber glass and recorded on data sheets. An adjustment schedule developed and validated during the preliminary study allowed body measurements with subjects fully clothed. Tests between measurements of white and nonwhite participants within the sample showed a 78 percent agreement of no significant differences. The women over 65 were significantly larger in the bust, waist, high hip, hip, cross-chest width, neck to bust point, cross-back width, and back waist length than measurements used for establishing the Standard. The front waist length showed no significant difference. Mean deviations of body measurements from the corresponding Standard measurements in the subjects' size indicated garments too tight in the bust, waist, and high hip areas; bust darts too high; upper back deficient in length and width; and front waist length too long. It was concluded age-associated bodily changes do not appear to be adequately represented in the sizing system.

Clothing as an Indicator of Perceived Quality of Life

M. Suzanne Sontag, Michigan State University

An intensive national and international research effort has been made for more than a decade to determine the components of people's well-being or quality of life.

The interdepartmental investigation focused on the determinants of the quality of life of families. "Clothing as an Indicator of Perceived Quality of Life" was one

component investigated. The goal was to provide empirical evidence to support a recommendation for development and inclusion or omission of perceptual and objective clothing indicators in quality of life measurement. The rationale was based on a human ecological framework that views clothing as the individual's most proximate human constructed environment. As such, clothing fulfills biophysical, psychological, social, and aesthetic needs. This study was limited to development and use of perceptual clothing indicators.

Two major purposes guided formation of eight hypotheses. The first purpose was to assess affective evaluations of clothing and to examine their ability to predict perceived overall quality of life (POOL) when added to a set of existing predictors. The second purpose was the determination of clothing proximity to the self on a map of the perceptual structure of people's affective evaluations of life concerns.

A survey research design was employed and questionnaires were self-administered by 116 wife-husband pairs having school-age children. Households were drawn by a two-stage systematic random sampling procedure with clustering from eleven urban/suburban townships in Oakland County, Michigan.

A domains-by-criteria matrix model developed by Andrews and Withey at the University of Michigan was the conceptual model used for measurement of perceived quality of life. This study expanded their previously tested matrix by adding the clothing domain to six other domains (housing, job, family life, neighborhood, spare time activities, and national government). These domains were evaluated by the eight value criteria in the matrix: standard of living, fun, independence or freedom, beauty and attractiveness, freedom from bother and annoyance, safety, accomplishing something, and acceptance and inclusion by others. Additional value criteria were identified through content analysis of responses to a question soliciting important reasons for respondents' feelings about clothing.

There was a significant positive correlation between affective evaluations of clothing and POOL for both women (.28) and men (.48) with effects of occupational prestige (men only), age, family income, education, and family size controlled.

Using reduced and full model multiple regression analyses, effective evaluation of clothing was found to be a significant predictor of men's POOL (standardized beta = .21) with a significant 2.0 percent increase in the adjusted coefficient of multiple determination and a 7.2 percent reduction in the residual variance. When added to other domain evaluations for women, clothing was not a significant predictor of women's POOL.

The set of eight value criteria was not significantly predictive of men's affective evaluations of clothing, accounting for only 12.4 percent of the variance. The same set of criteria accounted for 64 percent of the variance in women's evaluations, with independence, accomplishing something, and fun as the most significant predictors. Additional value criteria mentioned by both sexes were functionality, fashion, economy, self-regard, self-expression, and variety.

Perceptual structures of life concerns were mapped using nonmetric multidimensional scaling and cluster analyses. Dimensions labeled as organization of self in the environment and psychological closeness characterized the perceptual structures of women and men. When divided according to scores on the Proximity of Clothing to Self Scale developed by the researcher, clothing clustered closer to self for high-scoring women ($r = .25, p = .058$). To a lesser extent the same was true for men. High scorers tended to evaluate life more positively and have more positive views of what they are able to accomplish in life.

These and other findings provide some evidence to support the inclusion of clothing among the components of quality of life.

This study was funded by the Michigan Agricultural Experiment Station and the Minnesota Agricultural Experiment Station and will be presented at the 1979 AHEA Annual Meeting.

production, marketing, and maintenance; apparel and coverings as a resource in energy conservation. Those presenting papers included: Thomas Adams, Physiology, MSU; Larry Kuznetz, NASA; Stanley Fink, NASA; Matthew Radnofsky, NASA; Deanna Munson, Kansas State Univ.; Charles Fridley, the 3M Co.; Mary E. Roach Higgins, Univ. of Wisconsin; Susan Watkins, Cornell; J. David Reid, formerly of SRRC, USDA; Geitel Winakor, Iowa State; Leon Pastalan, Architecture, Univ. of Michigan; Manfred Wentz, Univ. of Wisconsin; Everett Morey, General Electric Co.; Dorothy Waxman, Fashion Consultant, N.Y., N.Y.; Herman Koenig, MSU; Frederick H. Rohles, Jr., Institute of Environmental Research, Kansas State Univ. Proceedings will be available from the Department of Human Environment and Design.

Texas Governor's Conference on Aging Karen Kaigler-Evans and J. Ann Pinaire-Reed; Uni- versity of Texas at Austin

A seminar entitled "Looking Good and Feeling Better" was conducted at the Conference on Aging. Karen Kaigler-Evans and J. Ann Pinaire-Reed developed a slide series concerning shopping satisfaction, wardrobe needs, clothing comfort, and fabric care that was presented during recurrent sessions of the two-day conference.

In addition to presenting the slide series, data were collected from 100 elderly female conference participants on their clothing problems and means of satisfying them. The participants in the data collection represented a cross-section of the approximately 5000 elderly Texans who attended the conference from 28 regions of the state.

The data were analyzed to determine common problems and common problem solving behaviors of the participants. In general, it was determined that the participants' greatest concerns were accessibility of clothing that complemented age of the wearer, clothing cost, and clothing fit. Problem solving behavior was found to be in the form of coping rather than actual problem solving. The participants indicated two types of coping behavior: (a) purchasing of clothing that was least objectionable in style, cost, and fit (the majority of the participants) and (b) going without new clothing rather than purchasing clothing that was objectionable.

It was concluded that little has been done to help these elderly women adjust to physical, economical, and social/psychological problems with their clothing. Many of the participants were unaware of the relationship between their clothing dissatisfactions and their physical changes due to the aging processes. Most of the elderly women could not locate clothing that was within their budgets and/or was suitable for their age. Some indicated a discontent with the self as a result of their clothing problems. Such findings have been alluded to in the literature for the past two decades. It should be evident, therefore, that a need exists for those with expertise in textiles and clothing to give direction to the elderly, in addition to researching their clothing problems.

Conferences

Clothing & Energy Resources Workshop, Michigan State University.

**Coordinated by Barbara S. Stowe, Department of
Human Environment and Design and Otto Krauss,
College of Engineering**

Limited energy resources, energy conservation, and the impact on clothing requirements mandate a common understanding among producers and consumers. There is a need to establish a meaningful dialogue among apparel designers, manufacturers, retailers, researchers, and engineers; textile producers; educators; energy suppliers; policymakers; extension personnel; citizen leaders and the media concerning clothing and energy resources.

One objective of this workshop was to more effectively integrate existing and evolving knowledge about human comfort and the aesthetic and social significance of clothing in order to identify research, education, and public policy direction. A better academic and public understanding of the role of clothing in energy conservation was another objective.

Papers and panel presentations by recognized authorities were followed by a day of intensive group discussion of the topics. A synthesis of the discussions identified issues and helped to establish priorities and formulate research and policy recommendations. Topics addressed were: the comfort requirements of the human body; apparel design for comfort and protection; clothing as nonverbal communication; fashion design; textile materials for apparel and coverings; apparel manufacturing and marketing; energy resources for apparel

Popular Culture Association

Phyllis Ashinger, Wayne State University, Detroit, Michigan

The Popular Culture Association originates from Bowling Green University. For the past several years conferences have been held at regional, national, and international levels. This interdisciplinary organization includes social science, humanities, journalism, psychology, literature, home economics, advertising, and art.

Facets of fashion were presented at the November 1978 Popular Culture Annual Conference in East Lansing, Michigan.

Icons of fashion included false eye lashes, Ben Casey shirts, bullet belts, poodle haircuts, and brand name tennis shoes. Power, tyranny, divinity, royalty, irrationality, mystery, and deviousness were stated as historical images of fashion.

This Association publishes four journals a year. In the Winter 1976 issue, "The Fibers of Our Lives" by Beverly Gordon explored trends and attitudes about textile arts as reflected in American literature.

Popular Culture is an excellent resource for clothing, textile, and fashion merchandising areas. Glance through one of these journals or attend a local meeting to discover the diversity and relevance of subject matter to the home economics profession. For information contact the Popular Culture Association, Bowling Green, Ohio 43403.

Colorado Apparel and Sewn Products Manufacturers' Seminar

Janet Else, Colorado State University

In an effort to bring industry and education closer together, a one-day seminar was held at Colorado State University March 2, 1979. The first-time Seminar was planned by the Department of Textiles and Clothing and intended for those in education and the apparel and sewn products industry.

The main objectives of the seminar were: a) to provide a forum for members of the industry to discuss the state-of-the-art in Colorado, its needs and problems, and ways in which these could be met or solved; b) to determine the educational training requirements of the industry and the best ways to meet them, c) to enable the participants to better understand the functions of different groups involved with the industry.

Feature speakers were Ed Lewis, Chairman of the Education Committee of the American Apparel Manufacturers Association from Atlanta, Georgia and Thomas Pinto, Director of Union Special's Technical Training Center in Huntley, Illinois. Three Colorado speakers talked on the Colorado apparel industry, legislation for the apparel industry, and education related to the industry. Time was allowed for discussion groups and questions.

Approximately 75 manufacturers and educators participated in the Seminar. An evaluation of the day's program indicated that the majority of participants desired holding such seminars annually.

Legislation

Fiber Content Labeling

Arlene Handschuch, Framingham State College, Massachusetts

Should fiber content labeling be eliminated from wearing apparel? This question was raised by Robert Pitofsky, Commissioner of the Federal Trade Commission. Pitofsky, in an article that recently appeared in *Women's Wear Daily*, stated his belief that fiber content labeling might no longer be worthwhile, especially in light of recent care labeling legislation.

It commonly is believed that consumers do benefit from fiber content labeling, since knowledge of the generic fiber content enables the consumer to 1) evaluate a garment's expected performance, 2) evaluate cost of the item, 3) choose correct stain removal processes, and 4) select compatible interfacings, linings, and notions when working with over-the-counter goods.

The textile and apparel industry also is thought to benefit from fiber content labeling. In such a complex industry, in which fabric often moves through many handlers, it would seem that all individuals involved would need to know what they are purchasing or handling.

When asked to clarify his views on fiber content labeling, Pitofsky gave the following statement to the ACPTC Newsletter editor.

... Some time ago I was quoted in the press as calling for reconsideration of Federal Trade Commission-enforced regulations requiring fiber content labels in wearing apparel. I did make that suggestion, but it was in the context of a view that all government regulations should be periodically assessed to see if they continue to serve their original purpose. Fiber content legislation has been on the books for about thirty years now, and it is at least worth considering whether the information provided consumers in those labels is worth the expense.

I have no firm view as to the right answer to that question but useful information, such as that provided in your letter, will help the Commission make an informed decision.

The issues raised by Pitofsky are well-founded. It is of substantial importance to all of us whether fiber content labeling continues to serve its intended purposes and whether the cost to consumers is worth the benefits received. There is now an obvious need for research to determine if consumers pay attention to fiber content labeling, and if they do not, to determine whether the proper response is to eliminate fiber content labeling, or to better educate the consumer.

Calendar of Events

- April 28 - May 2
conference
Western Gerontological Society
Annual Meeting: San Francisco
Research Report and
Workshop: **Appearance and
Aging**
Contact: Dr. Karen Kaigler-
Evans, Dept. of Home Economics,
University of Texas at Austin,
78700.
- May 15 - June 8
study tour
Oklahoma State University
Course: **European Fashion Study**
Contact: Dr. Janice Briggs,
Stillwater. 74075.
- May 22 - June 8
workshop
University of North Carolina,
Greensboro
Course: **Textile Conservation**
Contact: Dr. Billie Murphy,
Greensboro. 27400.
- June 4 - 9
workshop
North Dakota State University
Course: **Couturier Clothing
Construction with Emphasis on
Fit, Finishes and Use of the
Bias**. Taught by Charles Klei-
backer, designer, New York City.
Contact: Miss Emily Reynolds,
Fargo. 58102.
- June 4 - July 10
summer school
Iowa State University
Course: **History of Costume**
Contact: Dr. Agatha Huepen-
becker, Ames. 50010.
- June 4 - July 10
summer school
Iowa State University
Course: **Sociological and
Psychological Aspects of
Clothing and Textiles**
Contact: Dr. Agatha Huepen-
becker, Ames. 50010.
- June 4 - 15
short course
Oklahoma State University
Course: **Analysis and Compara-
tive Study of Fabrics**
Contact: Dr. Lavonne Matern,
Stillwater. 74075.
- June 4 - July 13
summer school
Texas Tech University, Lubbock
Course: **Tailoring Problems**
Contact: Patricia Horridge,
Lubbock.
- June 18 - 22
workshop
Iowa State University
Course: **Couture Seminar**, direc-
ted by Charles Kleibacker
Contact: Dr. Agatha Huepen-
becker, Ames. 50010.
- June 18 - July 24
summer school
Ohio State University
Course: **Preservation and Res-
toration of Historic Textiles
and Apparel**. M. Butler
Course: **Textile Update**.
M. Lapitsky.
Contact: Dr. Lois E. Dickey,
Columbus. 43210.
- June 18 - 22
workshop
Oklahoma State University
Course: **Special Sewing Techni-
ques**
Contact: Dr. Lavonne Matern,
Stillwater. 74075.
- June 18 - July 6
study tour
University of Wisconsin-Stout
**Foreign Study Tour: Tokyo,
Hong Kong, and Honolulu**.
Contact: Marcia Metcalf,
Menomonie. 54751.
- June 19 - July 10
summer school
University of Rhode Island and
Rhode Island Extension
Course: **Early American Textiles
in New England** (Field trips
and costume collections)
Contact: Dr. Carol E. Avery,
URI, Kingston. 02881.
- June 19 - July 12
summer school
Oregon State University
Course: **Recent Developments
in Textiles**
Contact: Dr. Holly Schrank,
Corvallis. 97331.
- June 25 - 29
workshop
Framingham State College and
Fabrics Research Laboratory
Course: **Current Issues in Tex-
tiles: Update by Industry**.
Dan Powderly, FRL
Contact: Dr. Eleanor Gawne,
Framingham, Mass. 01701.
- June 25 - July 6
workshop
University of Akron
Subject: **Industrial Sewing,
Draping, Making, Upholstering**
Contact: Mrs. Carolyn Albanese.
- July 16 - August 3
workshops
University of Akron
Course: **Machine Stitchery
Textiles, 1850-1950**
Contact: Mrs. Virginia Gunn,
Akron, OH 44300.
- July 16 - 20
summer course
University of Wisconsin-Stout
Course: **The Textile Consumer
and Government**. James B. Ryan,
Consumer Products Safety Com-
mission, guest lecturer
Contact: Marcia Metcalf,
Menomonie. 54751.
- July 23 - August 8
workshop
Florida International University
Course: **Tailoring Menswear**
Contact: Adele Smith, Miami.
33199.
- July 23 - 27
summer course
University of Wisconsin-Stout
Course: **The Garment Industry**.
Michelle Jenkins, Fashion Coor-
dinator for Shirley Manufacur-
ing Company, guest lecturer.
Contact: Marcia Metcalf,
Menomonie. 54751.
- July 30 - August 10
workshop
University of Northern Colorado
Workshop: **Recreational Sewing**
Contact: Beverly Krosky,
Greeley. 80639.
- August 5 - 9
workshop
University of Akron
Course: **Southern U.S. Home
Furnishings Tour**
Contact: Mrs. Christine Wilson,
Akron, OH. 44300.
- August 20 - 24
workshop
University of Northern Colorado
Workshop: **Wool, from Fleece to
Fabric, Southwest Weaving**
Contact: Beverly Krosky,
Greeley. 80639.
- September 9 - 14
symposium
American Chemical Society
Meeting: Washington, DC
Topic: **Preservation of Paper
and Textiles of Historic and
Artistic Value II**.
Contact ACS, 1155 - 16th Street,
N.W., Washington, D.C. 20004

ACPTC members are asked to share their views with Commissioner Pitofsky.

The following article is one response to fiber content labeling.

Consumers' Benefits of Fiber Content Labeling

Susan B. Kaiser and Zewditu Tamrat, California State University, Los Angeles

A recent article in *Women's Wear Daily* indicated that Commissioner Pitofsky of the Federal Trade Commission is considering the repeal of legislation requiring fiber content labels in garments and piece goods (e.g., Textile Fiber Products Identification Act). In response to this article, a research study was undertaken in an advanced consumer textiles course. Pitofsky's stand was used to motivate student participation in applied research; the project was incorporated into a unit of methodology in textile consumer research.

The purpose of the study was to assess benefits derived by consumers from textile product fiber content labeling by means of two major objectives: (1) to determine consumers' attitudes and awareness with respect to fiber content labeling, and (2) to evaluate consumers' knowledge of textile fiber properties. A questionnaire was constructed and administered by the class members. The sample consisted of 130 male and female students of various ages, class levels, and majors at the CSULA campus. Statistical analysis of the data is still in progress. Preliminary results, however, seem to indicate that the students surveyed find fiber content labeling useful and possess at least a "working knowledge" of fiber properties that could be implemented in the selection, use, and care of textile products. The completed report of the study will be sent to Commissioner Pitofsky. Meanwhile, the study is being continued independently by various students among other populations in the Los Angeles area to broaden the data.

Care Labeling

Joan Laughlin, University of Nebraska

Changes in the care labeling trade regulation rule are due soon. The Bureau of Consumer Protection, Federal Trade Commission has recommended that care labels be required for suede and leather apparel; for household furnishings, including curtains, draperies, linens, upholstered furniture, rugs and carpeting; for yarns; and for intermediate textile components, including fabric linings, interfacings, threads and zippers. Included in the Revised Proposed Trade Regulation Rule, Care Labeling of Textile Products and Leather Wearing Apparel, is the requirement that manufacturers have a "reasonable basis" for determining care instructions, that they be able to substantiate the recommended care instructions, and

that alternate care instructions be provided. List of care terms and definitions are proposed to accompany the ASTM D 3136 terms and definitions.

The 1972 Care Labeling Rule has been under scrutiny since early 1974. After study, comments, written testimony, and hearings on the Revised Rule are anticipated in the near future.

Education

Textile Materials for Biomedical Use

Cornell University, Ithaca, NY

C. C. Chu is developing a new course on textile materials for biomedical use. The course will focus on chemical and physical properties of textiles and the performance of textile materials (including structures for general hospital use and internal or external body use). Typical materials include sutures, surgical dressings, elastic stockings, surgical apparel, and prosthetic materials. The impact of governmental regulations also will be examined. The course will benefit both textile students and those interested in the health professions.

Tentative Approval for PhD Program

Mary Ann Zentner, Virginia Polytechnic Institute and State University

The Department of Clothing, Textiles, and Related Art at Virginia Polytechnic Institute and State University, Blacksburg, Virginia has been granted preliminary approval to offer a PhD program beginning fall 1979. The program emphasis will be on the continuous interaction between people and their near environment. A knowledge of textiles and their applications will be the common basis for all doctoral candidates. Several core courses relating to the scientific and economic aspects of textiles will be required of all students regardless of their area of concentration. In addition to courses within the Department, supportive work in other disciplines such as chemistry, physics, economics, sociology, business administration, and family and consumer studies will be included. Programs will be individually tailored, focusing on the goals and interests of the students. Applications are being accepted from prospective students interested in focusing their studies in either clothing or textiles.

Textile Testing Equipment Videotapes

Cornell University, Ithaca, NY

Videotapes for self instruction in the use of textile testing equipment are being prepared by S. Kay Obendorf with support from the College Grants Committee of the New York State College of Human Ecology. The short, modular videotapes describe properties or characteristics measured, theory of measurement, operation of the

instrument, and analysis of data. The tapes will be used in the original instruction process and for self study in a resource center within the department. Tapes will be available for use by January 1980. They will be made available by the New York State College of Human Ecology Educational Television Center, directed by David Watkins.

Students Assist in Instructional Television Production

Esther Meacham, Ohio State University, Columbus

Instructional Television has been in use for Clothing I courses for more than fifteen years. Thus, learning via television is nothing new for textiles and clothing majors and other home economics students at The Ohio State University. What is new is the increased student involvement in the Instructional Television phases that occur prior to classroom viewing.

Five undergraduate students and one graduate student assisted in the planning and production of the 1976 television tape revisions. The experimental study was so successful that it immediately became a part of the overall scheme and is offered concurrently with each production schedule. The students work with the television teacher in planning the content and in preparing materials to be used on the prerecorded lessons. They meet weekly as a seminar group to engage in open discussion and exchange of ideas. They also assist in production at the television studio when lessons are recorded. Each student takes responsibility for one specific lesson or part of a lesson and as a member of the team is enrolled in Individual Studies to receive academic credit. In planning for the new recordings, the students review cassettes of the lessons to be revised or replaced. Most students assisting with production have been enrolled previously in Clothing I and have an understanding of the course's content and philosophy.

At the end of the 1976 production schedule, students rated their experience as television production assistants as interesting and meaningful. The television teacher considered their contribution as invaluable in terms of the finished product. Plans are now taking shape for 1979 production that will expand the course content to include apparel fit for men and women.

Conservation of Textiles

Margaret Ordonez, Kansas State University, Manhattan

The desire to expose textile conservation class students to experiences involving a variety of costume and textile collections has promoted some unusual activities at Kansas State University. Working solely with a university collection limits the students' view of maintenance, storage, and display problems arising in large museums and individually owned keepsake collections.

Three distinct situations are available to students providing unique variations due to individuals involved, equipment and supplies available, emotional attachment to items, and reasons for collecting and conserving. First, the KSU historic textile and costume collection is used by Margaret Ordonez's class for practical experience in pre-conservation analysis, cleaning, and repair. Second, visits are made to several museums' storage and conservation facilities. Third, individual collectors are contacted through a free university class. These experiences show the differences between museum and private collections.

In addition to learning basic theory, the class is helping several local organizations prepare and hang a quilt exhibition at the local library. Students also are working to solve transportation and display problems related to a traveling fashion show of historic garments that will be shown on hanging supports.

Utilization of Primary Documents to Date Costumes

Virginia Gunn, University of Akron, Ohio

Undergraduates in Historic Costume help to date and document items in the University of Akron's costume collection. They utilize primary documents available in the library to obtain at least three pieces of visual evidence to support a chosen characteristic date. Copies or microfilm of *Godey's Lady's Book*, *Harper's Bazaar*, *Vogue*, *McCall's* and *The Ladies Home Journal* gave fashion coverage for research from 1830 to present. Analytical line drawings, descriptive text, and analytical text also are part of the documentation. Final reports are kept permanently on file in the department. Records over a three year period show that 60% of undergraduates are capable of turning out documentation that would require no further research to substantiate the characteristic date given. This means that 20 to 25 garments in the collection are documented each year with supporting pictorial evidence from primary sources. Students find the project interesting, challenging, and feel good about contributing positively to the department's collection.

Current Research **

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***Altseimer-Tilson, Wendy V. and R. Gates.** Wasco and Warm Springs Indian Clothing for Six Periods Between 1805 and 1976. Dean's Research Award, Oregon State University, Corvallis.

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- ***Baritelle, Aleta Lynn and Leila Old.** Shadow Weave Technique Adapted to the Classical Weave Structures of Summer-Winter and Crackle. University of Idaho.
- ***Benziger, L. A. and Melvin Hurwitz.** Relationship of Body Contours and Apparel Sizing. University of North Carolina, Greensboro.
- Boles, Joann, Judy Zaccagnini Flynn, and Lois E. Dickey.** Gibbins' Aspiration Model of Fashion: A Replication at Three Universities. Virginia Polytechnic Institute and State University, Blacksburg; Framingham State College, Massachusetts; and Ohio State University, Columbus.
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- Bresee, Randy.** An Investigation into the Suitability of Small-Angle Light Scattering for the Forensic Analysis of Single Fibers. Kansas State University Faculty Research Award, Kansas State University, Manhattan.
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- Briggs, Janice.** Survey of Laundry Practices and Problems of Oklahoma Families. Oklahoma State University, Stillwater.
- Bryant, Nancy O.** Theater Costuming. Joint funding with Speech Communications, Oregon State University, Corvallis.
- ***Burke, Melinda W. and Naomi Reich.** The Clothing Satisfaction and Dissatisfactions of Physically Handicapped Students Age 6 to 16, Enrolled in Public Schools. University of Arizona, Tucson.
- Caddel, Kay.** Anthropometrics, Apparel Design and Textile Products for Impaired Older Persons. Textile Research Center funding. Texas Tech University, Lubbock.
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- ***Campbell, Fred and Melvin Hurwitz.** Attitudes Toward Rayon as Expressed by the Department and Apparel Specialty Store Resident Apparel Buyers in North and South Carolina. University of North Carolina, Greensboro.
- ***Carney, Kathleen.** A Comparison of Costing Systems to Establish a Price Scale for Custom-Made Clothing. University of Wisconsin-Stout, Menomonie.
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- Cary, Richard and Julie Zylla.** Consumer Satisfaction with Fabric Stores. Department of Home Economics funding. Arizona State University, Tempe.
- ***Cheng, Annie.** Analysis of Gases Emitted From Pyrolyzed Nylon and Olefin Carpet Assemblies. Kansas State University, Manhattan.
- ***Clifton, Corinne.** Assessment of Attitudes and Values Towards Used Clothing by Selected Parents of Pre-school Children. University of Nevada, Reno.
- ***Cowan, Sarah and Melvin D. Hurwitz.** Removal of Cellulose Crosslinks under Nonacidic Conditions. University of North Carolina, Greensboro.
- ***Cross, Charlotte and L. Thiel.** Women's Clothing Practices for Specific Occasions at Age 65 or Older as Compared with Recall of Their Practices in Their 40's. Oregon State University, Corvallis.
- ***Davis, Barbara Ann and A. Koester.** Analysis of the Fabric Salespersons' Answers to Specific Consumer Questions. Oregon State University, Corvallis.
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- Dickerson, Kitty, Susan T. Warner, and D. Clowes.** A Survey of Clothing- and Textiles-Related Programs in Community Colleges. Virginia Polytechnic Institute and State University, Blacksburg.
- ***Dickson, Carol Ann.** Patterns of an Industry: A History of the Paper Garment Pattern Industry in America to 1976. Ohio State University, Columbus.
- ***Dunn, Laura.** Clothing Laboratory Management Problems of Oklahoma Vocational Homemaking Teachers. Oklahoma State University, Stillwater.
- Edgeworth, Galor.** Care of Clothing—1830 to 1900 as Seen in Selected Printed Material. Florida State University, Tallahassee.
- ***Edgeworth, Galor, Karen Norman, and Ernabeth Ray.** Historical Undergarments—19th and 20th Century. Florida State University, Tallahassee.
- Farrell, Jane.** Clothing of Central Iowa Townspeople: 1870-79. Emphasis is on work clothing of laboring class. University research grant, Iowa State University, Ames.
- ***Flynn, Judy Zaccagnini.** Dress of Older Italian-American Women: Documentation of Dress and the Influence of Socio-Cultural Factors. Ohio State University, Columbus.

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***Forbes, Joan C.** Development and Evaluation of Individualized Instructional Media for Draping on the Dress Form. University of Arizona, Tucson.

***Foster, Shirley-Ann Girod and Holly Schrank.** Analysis of Factors Associated with Success of Graduates of Clothing, Textiles, and Related Arts in Obtaining First Positions. Oregon State University, Corvallis.

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***Holder, Sharon.** Clothing Knowledge of Selected Vocational Rehabilitation Counselors in Oklahoma. Oklahoma State University, Stillwater.

Horridge, Patricia and Carmyn Morrow. Humidity Has Its Effect on Clothing Comfort. Texas Tech University, Lubbock.

***James, Nancy Brown and Holly Schrank.** Characteristics of Retail Personnel and Positions. Oregon State University, Corvallis.

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***Kent, Margarita.** Analysis of Hispano-Moorish Textiles of the 15th Century. Ohio State University, Columbus.

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***Kim, Minja and Holly Schrank.** Fashion Leadership Among Korean College Women. Oregon State University, Corvallis.

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***Lisenby, Sherrie.** Development of an Item Pool for Advanced Standing Examinations in Basic Clothing Construction. Oklahoma State University, Stillwater.

- Littrell, Mary and John Littrell.** The Effects of Counselor Attire on Potential Counselor and Student Interactions, Part I: Caucasians; Part II: American Indians. Funding: Part I: University of North Dakota Faculty Research Grant; Part II: NDSU Home Economics Research and Development Fund, North Dakota State University, Fargo.
- ***Loveday, Rita Thompson.** Profiling the Nebraska Consumer's Textile Practices and Problems. University of Nebraska, Lincoln.
- Lundberg, Helen and Patricia Weeden.** Research and Development of Clothing Items for the Elderly and the Handicapped. University of Rhode Island, Kingston.
- Manford, LaRue Cook.** Intrapersonal Characteristics of Fashion Innovators. Southwest Texas State University, San Marcos.
- Margerum, B. Jean.** Wear and Fashion Life of Men's New and Used Business Suits/Sports Coats in Relation to Cost and Psychological Factors. Hatch funds. University of Nevada, Reno.
- Matern, Lavonne.** Identification of Clothing Needs of Physically Handicapped Adults. Oklahoma State University, Stillwater.
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- ***McCauley, Lynda and A. Koester.** Consumers' Attitude Toward Metric Conversion for Clothing Sizes Related to Selected Variables. Oregon State University, Corvallis.
- McCullough, Elizabeth A.** Evaluation and Comparison of Synthetic Suede Fabrics. Faculty Research Award, Agricultural Experiment Station grant, Consumers Union grant, Kansas State University, Manhattan.
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- ***Moir, Lorna Lou.** A Comparison of Visual Fit in Women's Pants Between Two Different Alteration Methods. Indiana University, Bloomington.
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- Peterson, Mary Don.** Comparison of Construction Techniques for Synthetic Suede Fabrics. Kansas State University, Manhattan.
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- ***Pruitt, Amelia.** Likes and Dislikes of High School Males in Regard to Clothing Units in Vocational Homemaking Programs. Oklahoma State University, Stillwater.
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- ***Rolow, Ann.** Microwave Sanitization of Selected Textiles. Kansas State University, Manhattan.
- ***Rose, Adrienne.** Testing the Effectiveness of Teacher Demonstration and Written Manual in Teaching Basic Clothing Construction. University of Arizona, Tucson.
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*student research.

**All inquiries should be made to authors and appropriate institutions.