

Proposal for Ph.D. Degree in Apparel Design in the Field of Textiles at Cornell University

Abstract

The proposed Ph.D in Apparel Design will extend and complement the BS, MS, and MA qualifications that are currently offered in the HEGIS Discipline number 0201, Textiles. The Ph.D program will establish the first Ph.D program within the United States dedicated to the study of Apparel Design and will address the need in academia, industry, and research for a terminal degree in this subject area.

Apparel Design is a broad subject that is underpinned by a theoretical knowledge base in the areas of design, dress and human behavior, and apparel technology. Apparel Design examines and offers solutions to issues that affect the creation, distribution, and use of apparel by means of technological innovation, cultural transmission, innovation by designers and consumers, functional attributes, human factors, and geopolitical change. The multidisciplinary composition of Apparel Design could include minor concentrations in visual studies, media studies, production and distribution systems, aesthetics, human factors and ergonomics, history, literature, anthropology, and social psychology, among others.

Existing faculty, staff, and funding support of the Department of Textiles and Apparel in the New York State College of Human Ecology and other departments within Cornell University will provide the foundation for offering this degree. The department has a strength and depth in faculty knowledge and research specializations which include the creative design of apparel, and the science of textiles through the structure, fabrication, and color to offer graduate study in both functional and creative design.

The faculty recognizes distinctions between masters and Ph.D level and emphasizes program aims and objectives accordingly.

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I. Goals

We propose the addition of a Ph.D. degree in Apparel Design to the Textiles Field. This will result in two subject areas, that of Fiber Science and Apparel Design, offered under one field, Textiles. The Ph.D. in Apparel Design would be an addition to the current graduate degrees: the PhD and MS in Fiber Sciences and MA in Apparel Design, in the HEGIS Discipline Number 0201, Textiles.

The proposed PhD degree will extend the offerings in the Textiles field, complementing the current teaching, research, and outreach programs at Cornell with expertise in textiles and apparel. The Ph.D. degree in Apparel Design uses existing faculty in the field of Textiles and complements and draws upon the Fiber Science and Apparel Design subject areas. The uniqueness of this program from others offered is its emphasis on both science and design.

Apparel Design is a specialization that integrates principles in the application of design, technology, physical sciences, the humanities, and social sciences to meet basic human needs for clothing. Apparel Design is an applied science with a theoretical base of knowledge in three areas:

- A) Apparel design; the functional and fashion design processes,
- B) Dress and human behavior; the meaning of dress, aesthetics, and fashion, and
- C) Apparel technology; the technology, materials, and product interface with the consumer.

The proposal combines the strengths of the faculty in the creative design of apparel and the science of textiles through structure, fabrication, and color to offer graduate study in both functional and fashion apparel design. The Apparel Design concentration will emphasize product design, the science of the product, and the product-user interface. We have made distinctions between the mastery levels of knowledge and research at masters and Ph.D. as follows:

- Creative process
- Focus on theory and its applications
- Depth and breadth of knowledge of the literature
- Extent and originality of contribution to the field
- Development of an unique expertise defined by dissertation research
- Breadth and independence of data collection and analysis

II. Planning Implications: Placement of and Demand for Apparel Design Ph.D. Graduates

Graduates of the program will meet the need for professors to teach and conduct research at colleges and universities as well as research and development for industry and government, such as [TC]², Clemson Apparel Research Center, TAIX, NASA, and Natick Army Labs.

A count of apparel programs in the U.S. reveals 162 four year colleges and universities that offer some apparel coursework (graduate or undergraduate). There are 24 Ph.D. programs (see Appendix A) in the U.S. that offer courses in apparel design and include some faculty with apparel design specializations, but there are no PhD degrees specifically named Apparel Design (although there are Universities that offer an apparel design concentration under another named degree). Cornell's Textiles and Apparel Department has a focused apparel design program in which five faculty members have apparel design backgrounds, four of whom are graduate faculty members (see Appendix B). Cornell is unique in having an entire curriculum oriented toward the apparel designer that concentrates on both fashion and function. This strong design program is also unique in that it is linked within the department to an internationally respected fiber science program that will offer graduate students the opportunity to merge classic apparel design methods with cutting edge technological research in textile materials. In addition, proximity and outreach have created strong links with the apparel industry in New York, the acknowledged center of the fashion industry. These factors create an ideal environment to create the first focused PhD program in Apparel Design in the country.

Currently there is a national need in the field for apparel design Ph.D. graduates. All departments teaching apparel need Ph.D. level apparel designers on their faculties. Based on membership in the International Textile and Apparel Association (ITAA), a professional organization with majority membership, there are 175 U.S. two- and four-year institutions offering apparel courses that have faculty members in ITAA and approximately 300 faculty memberships in

ITAA from U.S. institutions. In addition, while there is evidence that older faculty are delaying retirement, it is undeniable that in the next decade substantial numbers of retirements will occur and that this pattern will continue for some time. A 1999 briefing paper published by the Association of American Colleges and Universities reported that 32% of all full-time faculty were 55 or older, an increase from the 1989 level of 24%. Also the number of faculty below the age of 45 had dropped from the 1989 level of 41% to 34%. Based on an analysis of job announcements of faculty positions in apparel, there were 10-12 apparel design positions advertised each year in the last 10 years. The current lack of focused apparel design Ph.D. programs certainly makes it difficult to find qualified candidates for the vacancies that occur.

It should be emphasized that in spite of the well publicized movement of textile and apparel manufacturing offshore, this does not mean that the need for trained textile and apparel professionals is disappearing; the needs are simply changing.

Current national and international concerns regarding innovative product development, sustainable design to prevent environmental degradation, industry technological innovations, OSHA workplace issues, homeland security, and international military activity are likely to increase the demand for highly qualified apparel design researchers able to engineer the sophisticated apparel design needed in today's world. New materials, technologies and market conditions require a generation of designers capable of conducting research and development for these new circumstances.

Cornell's Department of Textiles and Apparel is uniquely positioned to meet this need, and has already contributed trained designers at the undergraduate and masters levels (see Appendix C for a list of MA Theses completed) that have pursued careers in this direction. Ph.D. level training will better position the researcher in this increasingly sophisticated field.

III. Curriculum

Coursework:

Requirements for Ph.D. in Apparel Design. The program of study for the Ph.D. degree will consist of a major in apparel design plus two minor subjects. Some examples of suitable minor subjects are design and environmental analysis and human factors, art history, communication, anthropology, history, and industrial and labor relations.

Graduate students in the Ph.D. program are expected to meet the general requirements set forth by the Cornell Graduate School in the Code of Legislation of the Graduate Faculty with respect to residence, selection of Special Committee, examinations, and thesis. All students will be expected to either have a Master's degree upon admission or to earn a MA degree during graduate study at Cornell University.

Residence. Study in residence at Cornell University is essential to attain the breadth of knowledge for scholarly work. Residency provides persistent and continuing interactions with others engaged in similar research and scholarly pursuits as well as providing for attendance at lectures, seminars, and other academic meetings and usage of libraries, laboratories, computers, and other physical facilities.

Special Committee. A student entering the Ph.D. program will select a Special Committee made up of a chairman representing the apparel design major and two minor committee members. A fourth member will be appointed by the Director of Graduate Studies in the Field of Textiles. The student and his/her Special Committee will determine the precise program of study to meet the needs of the student.

Preparation upon entry.

Students will be expected to enter the program with an adequate level of apparel and textiles content knowledge. Outstanding candidates entering from another field may be required to make up a limited amount of apparel and textiles background work after admission to the program in addition to the course and research expectations of the PhD degree. This basic knowledge level is represented in the content of the following Department of Textiles and Apparel undergraduate courses offered in three broad areas: Textiles, Apparel Design, and Apparel Technology:

Textiles

- TXA 237 Structural Fabric Design
- TXA 335 Fiber Science
- TXA 370 Principles of Color and Design in Textiles

Apparel Design

- TXA 125 Art, Design and Visual Thinking
- TXA 264 Draping
- TXA 265 Apparel Pattern Making
- TXA 369 Style, Fashion, and the Apparel Industry

Apparel Technology

- TXA 114 Introduction to Computer-Aided Design
- TXA 266 Apparel Design: Product Development

Appendix D lists references that provide a foundation from the literature for the field of Apparel Design. Students will also be expected to be familiar with this body of work.

Dissertation. Original research by the candidate is an essential requirement for the Ph.D. degree. The research must provide a substantive demonstration of the candidate's ability to perform as an independent investigator. The topic of research may be in any apparel design subject included in the areas defined by this proposal. The preparation and final defense of the thesis will be in accordance with the regulations established by the Graduate School. The Special Committee will provide academic guidance and will make final approval of the thesis and thesis defense.

Courses.

Recommended coursework for the Apparel Design subject area will be drawn from the following TXA course offerings. In addition, all students must complete three courses in statistics (e.g. ILR 510 and 511) and/or research methods (e.g. DEA 656 Research Methods in Human-Environment Relations or ANTH 652 Evidence: Ethnography and Historical Method).

- TXA 431 Apparel Production and Management
- TXA 432 Product Quality Assessment
- TXA 466 Textiles, Apparel and Innovation
- TXA 470 Fashion Presentation: Portfolio Development
- TXA 637 Research Seminar in Apparel Design
- TXA 664 Human Factors: Anthropometrics and Apparel
- TXA 675 Aesthetics and Meaning in World Dress
- TXA 670 Fashion Theory and Practice
- TXA 999 Doctoral Thesis and Research

Minor Subject Areas. Other courses available for this program to support the two required minor subject areas are currently offered many different departments across the university. With the guidance of the Special Committee, the student will select courses for the major and minor subjects. Possible sets of minor courses are listed below:

Design and Environmental Analysis

| | |
|---------|--|
| DEA 645 | Dancing Mind/Thinking Heart: Creative Problem-Solving Theory |
| DEA 656 | Human Factors: Ergonomics-Anthropometrics |
| DEA 652 | Human Factors: The Ambient Environment |
| DEA 660 | The Environment and Social Behavior |
| DEA 668 | Design Theory Seminar |

Art History

| | |
|-----------|-----------------------------------|
| ART H 570 | Theory Seminar II: Representation |
| ART H 571 | Theory Seminar III: Mimesis |
| ART H 407 | The Museum and the Object |
| ART H 490 | Art and Collecting: East and West |

Communication

| | |
|----------|--|
| COMM 510 | Organizational Communication: Theory and Practice |
| COMM 540 | Impact of Information Technology |
| COMM 626 | Impact of Communication Technologies |
| COMM 640 | Computer Mediated Communication: Theory and Research |

Anthropology

| | |
|----------|--|
| ANTH 601 | Proseminar: Social Organization |
| ANTH 613 | Cultural Production of the Person |
| ANTH 621 | Sex and Gender in Cross-Cultural Perspective |
| ANTH 679 | Technocracy: Anthropological Approaches |

History

| | |
|------------------|--|
| HIST 709 | Introduction to the Graduate Study of History |
| HIST 617/618/621 | Seminar in American Cultural History |
| HIST 678 | Seminar in Modern European Social History |
| HIST 711 | Introduction to Science and Technology Studies |

Feminist, Gender & Sexuality Studies

| | |
|-----------|---|
| WOMNS 613 | The Political Economy of Gender and Work |
| WOMNS 626 | Graduate Seminar in the History of American Women[HIST 626] |
| WOMNS 671 | Feminist Methods [R SOC 671] |

Industrial And Labor Relations

| | |
|-----------|---|
| ILRIC 635 | Labor Markets and Income Distribution in Developing Countries |
| ILRIC 636 | Comparative History Women and Work |
| ILRIC 638 | Labor, Free Trade & Economic Integration in the Americas |
| ILROB 520 | Organizational Behavior and Analysis |
| ILROB 622 | Sociology of Markets |
| ILROB 626 | Organization and Social Inequality |

New Courses. No new courses are necessary for this new degree (though new courses will be developed as appropriate in the future within the resources available). The TXA Department has just completed an evaluation and revision of its current apparel design offerings to reorganize and accommodate the higher degree program as well as the BS and MA degrees. The new degree will complement the Ph.D. in fiber science and draw on its faculty resources and courses to strengthen the functional design aspects of the program. The TXA 999 course number will be used for Doctoral Thesis and Research

Seminar Programs. An active, weekly textile field seminar program provides a forum for discussion of a broad range of problem areas and basic theory and for exposure to a variety of current topics in textiles, both fiber science and apparel design (see Appendix E for sample seminars from the past on apparel design topics). This seminar series serves as an important component of graduate training. Students, faculty, and visiting speakers actively participate in the preparations, presentations, and discussions. About one-half of the seminars over an academic year are given by invited speakers from outside of the University, while the other half are offered by faculty and graduate student speakers across Cornell.

A weekly, one-credit seminar for Apparel Design students is offered under the TXA 637 number. It provides a forum for students to present preliminary research ideas and practice delivery as well as to discuss opportunities and challenges that are shared by apparel design graduate students and strategies to address these.

IV. StudentsRequirements for Admission

Admission Standards. A student who wishes to enroll in the Ph.D. program in apparel design must apply to and be accepted by the field of Textiles. Prospective graduate students will apply for admission to the Field of Textiles with a subject area in Apparel Design. All applicants must present scores from the Graduate Record Examinations, including the writing evaluation now integrated in the GRE. Students holding a master's degree may use previous examination scores to satisfy this requirement. Students whose native language is not English must present scores for the TOEFL examination, if they have not studied at least two years or received a degree in a country where English is the native language. Where relevant, students will also be asked to submit a portfolio. Applications will be reviewed by the members of the graduate field. Only students with outstanding records will be admitted to the program.

For admission to the graduate program the student shall:

- (1) hold a baccalaureate degree or its equivalent from a university of recognized standing;
- (2) have preparation in apparel design, or in related areas.
- (3) have command of the English language, which means a TOEFL score of at least 600 for applicants that are required to submit this score
- (4) provide evidence of potential for advanced study, which in general means a combined score of approximately 1200 or above in the verbal and quantitative aptitude tests of the GRE, grade point averages of 3.0 (B) or above, and rank within the top third of the baccalaureate class.

Academic Preparation

Outstanding students with a B.S. or B. A. degree in textiles and apparel or related areas such as industrial design, interior design or architecture, engineering, computer science, art history, anthropology, or history may be admitted into an M.A./Ph.D. program depending on the relevance of their background to the research specialty they will pursue. Since apparel design is a highly interdisciplinary field, decisions will be made on a case by case basis.

Requirements for Graduation

Residence Credit: All candidates must remain in residence at Cornell University for a minimum of six "residence units" of post baccalaureate study. One semester of full time study at an acceptable level of academic performance earns one residence unit. No more than seven years may intervene between the first registration and the granting

of a Ph.D. degree, although it is possible to petition the General Committee of the Cornell Graduate School for an extension.

Examinations: Two examinations are required for a Ph.D. degree.

1.

A Examination for Admission to Ph.D. Candidacy. The A exam is a comprehensive written and oral examination that will certify that the student is eligible to present a dissertation to the Graduate Faculty and will cover subject matter content in apparel design as defined on page 4. It may be taken after successful completion of one year of study and must be taken before the beginning of the fourth year or before beginning the seventh unit of residence. Two units of residence credit must be accumulated after passing the Admission to Candidacy Examination before the Final Examination is taken. The determination of pass or fail rests exclusively with the Special Committee, and all members of the Committee must approve. If a student fails the examination, reexamination is allowed, upon approval by the Special Committee, three months or more after the failure.

2.

B Examination for Ph.D. Candidate. The B exam is an oral examination that covers the subject of the dissertation. This final examination must be passed within four years after completing the required residence units, or seven years after the first registration in the Graduate School, whichever is sooner.

Graduate faculty members other than the Special Committee members may attend either of these examinations.

Dissertation. A research topic will be chosen that represents a basic problem in apparel design and requires application of fundamental principles in its solution. The thesis will be an accurate, complete presentation reporting the research. The thesis must constitute a creative and original contribution to knowledge in apparel design that is worthy of publication in the appropriate literature.

IV. Enrollment. (Enrollment in the MA degree program in Apparel Design for the past ten years is indicated below.) Enrollment has been slowly increased to five students as funding support has been acquired through external sources.

Applications, admissions, and graduation rates for MA degree program in Apparel Design for the past ten years are indicated below. We expect our application rate to increase as both MA and Ph.D. degrees are offered. It is quite typical in our field for students to complete both degrees at the same institution. We have many requests for a Ph.D. degree in Apparel Design each year.

Enrollment in the Ph.D., M.A., and M.S., Programs in the Textiles Field

| Year | Applied | Admitted | Matriculated |
|-------------|---------------|--------------|--------------|
| 1995 | 45 (6)* | 11 (2) | 2 (2) |
| 1996 | 61 (3) | 17 (2) | 3 (2) |
| 1997 | 54 (9) | 17 (2) | 2 (1) |
| 1998 | 28 (5) | 11 (2) | 6 (2) |
| 1999 | 26 (2) | 11 (2) | 5 (2) |
| 2000 | 35 (8) | 13 (4) | 6 (3) |
| 2001 | 29 (3) | 10 (2) | 4 (2) |
| 2002 | 45 (15) | 21 (8) | 6 (4) |
| 2003 | 33 (8) | 6 (2) | 6 (2) |

*(numbers in parentheses are M.A. students in Apparel Design)

Enrollment in the Ph.D.Program in the Textile Field

| Year | Total | Female | Male | US Citizenship | Foreign Citizenship |
|------|-------|--------|------|-------------------|------------------------|
| 1995 | 10 | 6 | 4 | 4 | 6 |
| 1996 | 13 | 7 | 6 | 5 | 8 |
| 1997 | 9 | 5 | 4 | 3 | 6 |
| 1998 | 8 | 3 | 5 | 1 | 7 |
| 1999 | 6 | 3 | 3 | 0 | 6 |
| 2000 | 6 | 4 | 2 | 0 | 6 |
| 2001 | 5 | 2 | 3 | 0 | 5 |
| 2002 | 6 | 2 | 4 | 0 | 6 |
| 2003 | 11 | 6 | 5 | 1 | 10 |
| | | | | | |

Enrollment in M.A. and M.S. Programs in the Textiles field

| Year | Total | Female | Male | US Citizenship | Foreign Citizenship | Underrepresented Minorities | Minorities |
|------|--------|--------|-------|-------------------|------------------------|--------------------------------|------------|
| 1995 | 8 (4)* | 5 (4) | 3 | 6 (3) | 2 (1) | 1 | 1 |
| 1996 | 5 (3) | 4 (3) | 1 | 4 (3) | 1 | 0 | 0 |
| 1997 | 5 (3) | 3 (2) | 2 (1) | 3 (3) | 2 | 0 | 0 |
| 1998 | 7 (3) | 3(2) | 4 (1) | 4 (3) | 3 | 0 | 1 |
| 1999 | 10(5) | 8 (5) | 2 | 6 (4) | 4 (1) | 1 | 2 (1) |
| 2000 | 8 (6) | 6 (4) | 2 (2) | 4 (3) | 4 (3) | 1 | 1 |
| 2001 | 8 (5) | 5 (3) | 3 (2) | 2 (1) | 7 (4) | 0 | 0 |
| 2002 | (6) | (5) | (1) | (2) | (3) | 0 | (1) |
| 2003 | (6) | (5) | (1) | (4) | (2) | 0 | (1) |
| | | | | | | | |

*(M.A. in Apparel Design)

All Degrees Awarded at Cornell in the Field of Textiles

| Year | Total | Ph.D. | M.A. and M.S. |
|---------|--------|-------|---------------|
| 1995-96 | 9 (2)* | 2 | 7 (2) |
| 1996-97 | 5 (2) | 1 | 3 (2) |
| 1997-98 | 6 (1) | 4 | 2 (1) |
| 1998-99 | 7 (3) | 2 | 4 (3) |
| 1999-00 | 9 (1) | 4 | 4 (1) |
| 2000-01 | 4 (1) | 0 | 4 (1) |
| 2001-02 | 5 (4) | 0 | 5 (4) |
| 2002-03 | 2(2) | 0 | 0 (2) |
| | | | |

*(M.A. in Apparel Design)

| | 2004-5 | 2005-6 | 2006-7 | 2007-8 | 2008-9 | 2009-10 | 2010-11 | Estimates for enrollment in the current MA and the new Ph.D. programs in Apparel Design, the Graduate School and Cornell University for the rest of the decade are indicated |
|--------------------|--------|--------|--------|--------|--------|---------|---------|--|
| M.A. | 5 | 4 | 4 | 4 | 4 | 4 | 4 | |
| Ph.D. | 0 | 1 | 2 | 2 | 3 | 3 | 4 | |
| Total | 5 | 5 | 6 | 6 | 7 | 7 | 8 | |
| Graduate School | 4,700 | 4,700 | 4,700 | 4,700 | 4,700 | 4,700 | 4,700 | |
| Cornell University | 20,225 | 20,225 | 20,225 | 20,225 | 20,225 | 20,225 | 20,225 | |

below: (each column represents cumulative enrollment minus students who graduate)

Estimates of enrollment in current MA and proposed Ph.D in Apparel Design

These numbers are based on the following assumptions:

- the number of master's students will remain constant, after the first year
- the addition of new Ph.D. students will initially come from existing MA students. It is predicted that MA students will remain constant at four while Ph.D. students will increase every two years until a total of eight MA and Ph.D. students are enrolled each year
- Cornell University anticipates maintaining a steady state enrollment around 20,225 and the Graduate School enrollment is projected to be stable with a total enrollment of about 4700.

The increase of 2 to 3 students over the next decade represents no significant change in enrollment for the Department of Textiles and Apparel or the Graduate School.

V. Faculty

Faculty Resources. The current faculty members are well recognized in their areas of specialization as illustrated by their publications and presentations. The graduate faculty in the Field of Textiles are listed below. The Apparel Design faculty within the Textiles Field have provided their curriculum vitae in Appendix B. (See Appendix B-Faculty Curriculum Vitae)

Current Graduate Faculty In Textiles Field (2004)

| Rank | Number |
|---------------------|--------|
| Professor | 7 |
| Associate Professor | 2 |
| Assistant Professor | 2 |
| Total | 11 |

No additional faculty positions are required to initiate this degree program.

VI. Facilities, Costume and Textiles Collection, and Libraries

Facilities

The department of Textiles and Apparel has well-equipped apparel labs which are used for graduate and undergraduate teaching and research.

Many levels of graphic design and drafting software are available in the College's CAD classrooms and labs as well as in other computer facilities within the department and across campus. The advanced apparel CAD lab within the three apparel design studios contains industry-standard computer stations (Lectra, Adobe Photoshop and Illustrator, U4ia) for pattern making, grading, marker making, custom fitting of patterns, product development, and illustration. Students also have access to a 3-D body scanner, and industrial production equipment for construction of both woven and knit garments.

Graduate students have access to computers in a graduate student cluster, in a shared design graduate student office, and in several labs and research facilities. An environmentally controlled laboratory houses sophisticated textile testing equipment. The super computer in Cornell's renowned Theory Center and other specialized equipment on campus is available to graduate students for research use.

Other facilities available in the College of Human Ecology include the Human Factors lab in the Department of Design and Environmental Analysis. Examples of the tools in this lab that would be useful to apparel research include a video motion analysis system and a thermographic camera.

Students also have access to the Metabolic Lab in the Division of Nutrition. Students can use this lab to measure physiological changes both in a resting state and while exercising.

Cornell Costume and Textiles Collection

The Cornell Costume and Textile Collection is housed in the Department of Textiles and Apparel and is used regularly for teaching and research. The 9,000+ items include:

Fashion collection including material from 18th century to the present

Textile holdings including Coptic textiles, European examples from the Renaissance and after

Lace collection supported by a major documentary archive in Mann Library on lace

Ethnographic collection including rare examples from all over the world.

The catalogue of the Collection is on line and searchable from any networked computer via the Internet. It can be reached via the Textiles and Apparel home page at <http://www.human.cornell.edu/txa>

There are other artifact collections on campus such as the Anthropology Department Collection which contains many rare items, including a number of Pre Columbian textiles.

The Johnson Museum of Fine Art houses not only art works but also some exceptional examples of ethnographic and historic textiles and costume. The Cornell Costume Collection and the Johnson have collaborated in planning and installing joint costume and textile exhibitions.

Libraries

Cornell University Library is one of the largest academic research libraries in the U.S.

19 separate libraries

Over 6 million printed volumes

More than 60,000 journals

Over 1,000 networked resources

Major libraries in the system include:

Albert R. Mann Library serving the land grant units

Olin Library, the graduate research library

Kroch Library house the Far Eastern Collections

Rare Books and Manuscripts Collections with many documents related to textiles and apparel.

The Industrial and Labor Relations Library houses the archives of the International Ladies Garment Workers Union (ILGWU) and other materials relevant to the textile and apparel industry past and present
The Africana Library contains material relevant to the study of textiles and dress.

VII. Financial Implications

Active programs of research in Apparel Design are ongoing at Cornell. Currently, the four apparel design graduate faculty members are involved in over ten research projects and several funded educational or outreach projects. These are supported by internal funding from the New York State College of Human Ecology, Entrepreneurship and Personal Enterprise endowment, Instructional Technology Grants program and by external funds from the National Textile Center, U.S. Dept. of Agriculture, New York Department of Labor, and other federal agencies, and industry. The total budget for funded apparel research was almost \$300,000 in FY 2003-4. Appendix F lists the funded research of the Apparel Design graduate faculty for the past several years.

The Department of Textiles and Apparel has administered an average of 12-15 graduate teaching and research assistantships over the past five years. Four or five graduate teaching assistantships have been designated for Apparel Design students over this time. In addition, one graduate research assistantship has been funded consistently for three years and two more have been funded a semester at a time. Graduate students are encouraged to apply for college grants to support their Thesis research. Almost all MA students have been successful in receiving funding of \$1100. This college grant program will be available to support Ph.D. research for up to \$1500 for each student.

We expect internal funding resources to remain constant so that special efforts to acquire additional external funding to sponsor graduate students will be necessary. Appropriate RFP's for new projects will be identified and proposals prepared that complement current faculty research and hold the potential for funding graduate research assistantships, research operating costs, and equipment. Foundations interested in our subject matter will also be pursued. Through the Cornell Cooperative Extension program, Apparel Industry Outreach, additional strategies will be developed to solicit contracts from industry to support graduate student research projects. We will also work with the Human Ecology Development office to clarify our needs for graduate student endowment sponsorship, especially for students conducting research using the Cornell Costume and Textile Collection and the 3D body scanner.

Appendix A

162 four year US Colleges and Universities have some course offerings in Apparel 24 of these have comprehensive Ph.D. programs that cover textiles and apparel

- Auburn University
- University of Arizona
- University of California at Irvine
- University of California at Davis
- Florida State University
- University of Georgia
- Southern Illinois University
- University of Illinois
- Iowa State University
- Kansas State University
- Purdue University
- Louisiana State University
- Michigan State University
- University of Minnesota
- University of Missouri
- University of Nebraska
- North Carolina State University, Greensboro
- University of North Carolina
- Ohio State University
- Oklahoma State University
- Oregon State University
- University of Tennessee
- Texas Woman's University
- Virginia Tech

13 two year US Colleges and Universities have course offerings in apparel

80 four year international Colleges and Universities have course offerings in apparel

Twenty-eight of these offer PhD's

- University of Alberta-Canada
- University of Central England
- University of Manchester-England
- University of Helsinki-Finland
- University Pantheon-Assas-France
- Hong Kong Polytechnic University
- Naruto University of Education-Japan
- Tokyo Gakugei University-Japan
- University of Otago-New Zealand
- Girls College of Ed/Home Economics and Art-Saudi Arabia
- Potchefstroom University-South Africa
- University of Pretoria-South Africa
- University of Stellenbosch-South Africa
- Chonnam National University-South Korea
- Chungnam National University-South Korea
- Ewha Womans University-South Korea

- Hanyang University-South Korea
- Hongik University-South Korea
- Keimyung University-South Korea
- Kyung Hee University-South Korea
- Kyung Pook National University-South Korea
- Mokpo National University-South Korea
- Sang Myung University-South Korea
- Seoul National University-South Korea
- Sungshin Woman's University/Seongbuk-Gu-South Korea
- Yeungnam University-South Korea
- Yonsei University-South Korea
- National Taiwan Normal University-Taiwan

6 two year international Colleges and Universities have course offerings in apparel

Appendix B-Faculty Curriculum Vitae

Susan P. Ashdown
Associate Professor, Department of Textiles and Apparel, Cornell University

Education

Ph.D. in Apparel, University of Minnesota, Minneapolis, MN, 1991.
M.A. in Textiles, Apparel Design, Cornell University, Ithaca, NY, 1989.
B.A. in Theater Arts, Grinnell College, Grinnell, IA, 1971.

Employment

1997-present - Associate Professor, Dept. of Textiles and Clothing, Cornell University
1991-1997 - Assistant Professor, Dept. of Textiles and Clothing, Cornell University
1990-1991 - U. of Minnesota - Teaching Assistant, Design, Housing, and Apparel
1989-1990 - U. of Minnesota - Research Assistant, Design, Housing, and Apparel
1987-1988 - Cornell University - Teaching Assistant, Textiles and Apparel
1980-1988 - Cornell University - Lecturer in Costume Technology, Costume Shop Manager, Theater Arts
1975-1980 - Milwaukee Repertory Theatre: 1978-80 Costume Shop Manager; 1977-78 Assistant Designer;
1975-77 Costume Assistant
1974-1975 - Berman Buckskin - Production Assistant
1971-1973 - University of Minnesota - Teaching Assistant, Theater Arts

Professional Activities

Invited co-presentation: "Fit and Finish", Annual conference of the Textile and Needle Trades division of the American Society for Quality, with David Brunner of the Textile/Clothing Technology Center [TC]²
Invited lecture: "What is a Size 10?" Sonia Wolf Wilson Lectureship in Human Ecology at the University of Texas in Austin, October 27, 2000.
Invited Presentation: "Introduction to Sizing and Fit Research" FIT 2000, The Fit Symposium, May 19-20, Clemson University, Clemson, SC

Service to Department, College, and University

Search Committees: Apparel Extension, Apparel Design (chair), Textile Science positions
Design Curriculum Review Committee
Apparel PhD Development Committee
Mentoring committees for junior faculty (2)
College of Human Ecology Computer Lab Governance Committee

List of Publications (Selected)

Young,
C., Jirousek, C., and Ashdown, S.P. (in press). Undesigned: A study in sustainable design of apparel using post-consumer recycled clothing. In Technology, Technique, and the Tradition of Design and Aesthetics. [A clothing and Textiles Research Journal Focused Issue, 2003-4].
Toney, A., Dunne, L., Thomas, B.H., and Ashdown, S. P., (2003) A shoulder pad insert vibrotactile display. 7th IEEE International Symposium on Wearable Computers, New York, October 21-23.
Dunne, L., McDonald, E., and Ashdown, S. P. (2002) 'Smart systems': Wearable integration of intelligent technology". International Center for Excellence in Wearable Computing and Smart Fashion Products, Gottbus, Germany, Dec. 9-11, 2002.
Choi, M. S. and Ashdown, S. P. (2002). The design and testing of work clothing for female pear workers.

Clothing and Textiles Research Journal, Volume 20 # 4, pp 253-263.

Ashdown, S. P. and Paal, B. (1999). An investigation of the structure of sizing systems: a comparison of four multidimensional optimized sizing systems generated from anthropometric data with the ASTM standard D5585-94. *International Journal of Clothing Science and Technology*, Vol. 10, #5, pp. 324-341.

McCulloch, C. E., Paal, B., and Ashdown, S. P. (1998). An optimization approach to apparel sizing. *Journal of the Operational Research Society*, 49, pp 1-8.

Kohn, I., and Ashdown, S. P. (1998). Use of video capture and image analysis to quantify the fit of apparel. *Textile Research Journal*, Volume 68, #1, pp 17-26.

Ashdown, S. P. and Watkins, S.M. (1996). Concurrent engineering in the design of protective clothing: interfacing with equipment design. *Performance of Protective Clothing: Fifth Volume*, American Society of Testing and Materials STP 1237, J.S. Johnson and S.Z. Mansdorf, Eds.

Ashdown, S. P. and DeLong, M. R. (1995). Perception testing of apparel ease variation. *Applied Ergonomics*, Volume 26, #1, pp 47-54.

DeLong, M. R., Ashdown, S.P., Butterfield, L., and Turnbladh, K.F. (1993) Data specification needed for apparel production using computers, *Clothing and Textiles Research Journal*, Volume 11 #3, pp 1-7.

Ashdown, S. P. and Watkins, S.M., Movement analysis as the basis for the development and evaluation of a protective coverall design for asbestos abatement. In McBriarty, J.P. and Henry, N. W., Eds., *Performance of Protective Clothing*, 4th Volume, ASTM STP 1133. Philadelphia, PA: American Society for Testing and Materials.

In Press:

Ashdown, S.P., Petrova, A., Loker, S., and Cowie, L. 2004. 'Development of protocols for objective fit analysis using body scan data'. *International Journal of Clothing Science and Technology*, Volume 16, #3.

Loker, S., Cowie, L., S., Ashdown, S., & Lewis, V. D. 2004. 'Consumer reactions to body scanning'. *Clothing and Textiles Research Journal*, Volume 22, #3.

**CHARLOTTE JIROUSEK Associate Professor
Department of Textiles and Apparel
Cornell University**

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**Ithaca, New York 14853
607/255-8064 (office) 607/255-1093 (fax)
caj7@cornell.edu
<http://costume.cornell.edu:8080/>**

AREAS OF RESPONSIBILITY

August 1992 to present: 12 month, tenure track, 45% teaching, 30% research, and 25% curator of the Cornell Costume and Textile Collection.

EDUCATION

Ph.D., Design, Housing and Apparel, University of Minnesota, 1988
M.A., Applied Design, University of Minnesota, June 1982
B.A., Sociology, Hamline University, June 1960

PUBLICATIONS (Since 1992)

Articles in refereed journals

Young, C., Jirousek, C., and Ashdown, S.P. 2004. 'Undesigned: A study in sustainable design of apparel using post-consumer recycled clothing.' *Clothing and Textiles Research Journal*, Volume 22, #1/2, pp 61-68

Jirousek, Charlotte. "The End of the Silk Road: the Decline of Sericulture in Twentieth Century Turkey." *Textile History* 29, No. 2 (1998), 201-225.

Jirousek, Charlotte. "From 'Traditional' to 'Mass Fashion System' Dress Among Men in a Rural Turkish Village." *Clothing and Textiles Research Journal* 15, no. 4 (1997); 203-215.

Jirousek, Charlotte. "Dress and Social Policy: Change in Women's Dress in a Southwestern Turkish Village." *Dress* 23 (1997); 3-18.

Jirousek, Charlotte. "Superstars, Superheroes and the Male Body Image: Some Visual Implications of Football Uniforms." *Journal of American Culture* 19, no. 2 (1996); 1-11.

Jirousek, Charlotte. "An Interactive Electronic Design Textbook on the World Wide Web." *Computer Applications to Textiles and Apparel*, ITAA Monograph #8 (1996); 63-70.

Jirousek, Charlotte. "More Than Oriental Splendor: A comparison of Gothic and Ottoman Headgear." *Dress* 22 (1995); 22-33.

Chapters and Articles in Books (refereed)

Jirousek, Charlotte. "Clothing." In *Encyclopedia of Islam and the Muslim World*. Vol. 1. Edited by Richard C. Martin. New York: Macmillan Reference USA, 2004.

Jirousek, Charlotte. "The Transition to Mass Fashion System Dress in the Later Ottoman Empire." In *Consumption Studies and the History of the Ottoman Empire, 1550-1922*. Donald Quataert, ed. Albany: State University of New York Press, 2000.

Articles in Proceedings

Jirousek, Charlotte. "The Gaziantep Cloth Trade: a Study of a Putting-out System of Cloth Production in Southeastern Turkey." *Proceedings, Seventh Biennial Symposium of the Textile Society of America*, September 2000.

Jirousek, Charlotte. "Market Effects Upon the Design and Construction of Carpets in the Milas Region of Southwestern Turkey, 1964-1994." *Contact, Crossover, Continuity: Proceedings, Textile Society of America*, 1994.

Jirousek, Charlotte and

Lee W. Rahe. *Alabama's Woven Counterpanes: The Other Coverlet*. *Ars Textrina*, 1992, Volume xvii, pp. 167-192.

Jirousek, Charlotte. *Indigenous Textile Craft Materials in Jamaica: Survivals of Early Dye and Straw Work Industries*. *Ars Textrina* 1992, Volume xvii, pp. 87-108.

In Press

Young, Carol; Charlotte. Jirousek;
S. Ashdown. "Undesigned: A Study in Sustainable Design of Apparel Using Post-Consumer Recycled Clothing." In Technology, Technique, and the Tradition of Design and Aesthetics. [in CTRJ Focused Issue , 2003-4].

"Ottoman Influences in Western Fashion." Costumes and Identity in the Ottoman Empire
[Boğaziçi University, Istanbul; spring 2004]

[The following chapters for inclusion in a refereed book, The Culture of Turkish Textiles and Dress, spring 2004]

Jirousek, Charlotte. "Carry it close to your heart: Exchanges of textiles associated with courtship and marriage."

Jirousek, Charlotte. "Finding the Cloth for the Clothes: Traditional Weaving Technologies in Anatolian Turkey."

Erdoğan, Zeynep and Jirousek, Charlotte. "Ankara (Angora) goat hair: The Turkish Mohair Tradition." (C. Jirousek, translation)

Kayabaşı, Nuran. "Turkish Natural Dyeing Traditions." (C. Jirousek, translation)

Tağı, Sema Özkan. (C. Jirousek, Translator) "Traditional Dress in the Black Sea Region of Turkey."

Tansuğ, Sabiha. (C. Jirousek, Translator) The Turkish Culture of flowers.

In Review

Jirousek, Charlotte. "Women, Gender and Constituting the Female body: Ottoman." In The Encyclopedia of Women and Islamic Cultures." [Brill Publications, Leiden, The Netherlands, 2004]

Jirousek, Charlotte. "Islamic Textiles." In Encyclopedia of Clothing and Fashion, Valerie Steele, ed. [Scribners, New York, no date]

Conference presentations:

Jirousek, Charlotte. "Yorgan: Quilts and Quilting in Turkey." Quilts and Beyond, Symposium, Old Deerfield Village Museum, Deerfield MA, September 2003. (Invited presentation)

Ning Fangjun, Bao Mingxin and Charlotte Jirousek. The Credibility Of Costume Figures in Some Of The Murals In The Dunhuang Caves. Costume Society of America Annual Symposium, June 2003.

Jirousek, Charlotte; Warner, Patricia. Imaginary Dress? Invented Drapery? Timeless Costume? Studio Props? Try Turkish. Costume Society of America Annual Symposium, June 2003.

Graduate Committee membership outside of Textiles and Apparel:

Ozbek, Nadir.

Committee member, Department of History (Ottoman History), Binghamton State University, NY. 2000, Ph.D.

Seidman, Lisa Schwartz. Committee member, Department of Policy Analysis and Management, Cornell University. An Economic analysis of Women in the Turkish Textile Industry. Ph.D., on leave.

Robinson, Elizabeth. Ph. D. Committee member, Department of Art History, Cornell University. A Study of Textile-related Art. Course work in progress, A Exam scheduled for May 2004.

Van Dyk Lewis
Assistant Professor, Department of Textiles and Apparel, Cornell University

Education

Ph.D., University of Central England, 2002
M.A. in Fashion /Textiles (Distinction), University of Central England, 1993
Post Graduate Diploma in Fashion / Textiles, University of Central England, 1992
Further Education Teaching Certificate, University of Salford, 1985
B.A. (Hons), Fashion Middlesex Polytechnic, 1983

Employment

2001 - Present - Assistant Professor in Apparel Design, Cornell University
1997 - 2001 - Head of Fashion, University of Salford
1986 - 1997 - Senior Lecturer in Fashion Design, University of Salford
1984 - 1985 - Lecturer in Fashion Illustration, University of Derby

Professional Activities and Recent Honors

1999 - 2001 - Program assessor at; De Montford University, England
1997 - 2001 - University College Northampton, England

Invited Presentations -

1996 - Fashion Trends: BBC Radio, Manchester
1999 - The work of Yinka Shonibare, Ikon Gallery, Birmingham

List of Publications (Selected)

“Dilemmas in the African Fashion Diaspora”, Fashion Theory, 2004. (publication pending).
S. Loker, S. Ashdown, S. Cowie, V. Lewis. “Consumer Reactions to being Scanned”, Clothing and Textile Research Journal, 2004. 4, 22: 1-9.
V. Lewis. “Jamaican Fashion: A Struggle for Inclusion”, Journal of Fashion Marketing and Management: Manchester Metropolitan University, 1995.

Suzanne Loker
Professor, Department of Textiles and Apparel, Cornell University
J. Thomas Clark Professor of Entrepreneurship and Personal Enterprise

Education

Ph.D. in Educational Psychology, Kansas State University, 1981.
M.A. in Clothing and Textiles, Syracuse University, 1973.
B.S. in Apparel Design, University of Wisconsin - Madison, 1970.
Visiting Student in Apparel Design, Fashion Institute of Technology, 1968-1969.

Employment

1998-Present - Professor, Textiles and Apparel Department, Cornell University
1993-1997 - Professor and Director, School of Family & Consumer Sciences, University of Idaho, Moscow, ID
1987-1993 - Associate Professor, Department of Merchandising, Consumer Studies and Design, University of Vermont, Burlington, VT
1981-1987 - Assistant Professor, Department of Merchandising, Consumer Studies and Design, University of Vermont, Burlington, VT
1982-1991 - Chairperson, Department of Merchandising, Consumer Studies and Design, University of Vermont, Burlington, VT
1977-1981 - Instructor, Department of Clothing, Textiles and Interior Design, Kansas State University
1974-1977 - Assistant Professor and Graduate Assistant, Department of Clothing, Interior Design and Textiles, Washington State University
1974 - Instructor, Spring semester, Department of Home Economics, Queens College of CUNY

Professional Activities and Recent Honors

2002 – Use of Body Scan Data, Best in Show Poster, National Textile Center
2000-2003 - J. Thomas Clark Professor of Entrepreneurship and Personal Enterprise
1996-2001 - Associate Editor for International, Business, and Industry Research, Clothing and Textiles Research Journal

Service to Department, College, and University

2001 - University Land Grant Panel on Technology Transfer
2002-Present - Department Extension Leader
2001-Present - Human Ecology Grants Committee
1998-Present - Graduate Faculty Member,
2000-Present - Entrepreneurship and Personal Enterprise Faculty,

Major Outreach/Extension Projects

The Cutting Edge Guide to Apparel Business: An electronic guide for business start-ups in apparel and sewn products
Entrepreneurship and Family Business Team for Cornell Cooperative Extension
Topstitch, a biannual newsletter for the apparel and sewn products industry
Work Skill Standards for High Performance Apparel Manufacturing

List of Publications (Selected)

Books, Book Chapters, and Monographs -

Hennon, C.B., Loker, S., & Walker, R. (Eds.). (2000). Gender and Home-Based Employment. Westport, CT: Auburn House.

Loker, S. (2000). Interweaving home and work spheres: Gender and the Vermont knitters. In Hennon, C.B., Loker, S., & Walker, R. (Eds.). (2000). Gender and Home-Based Employment. Westport, CT: Auburn House.

Hennon, C.B. & Loker, S. (2000). Gender and home-based employment in a global economy. In Hennon, C.B., Loker, S., & Walker, R. (Eds.). (2000). Gender and Home-Based Employment. Westport, CT: Auburn

House.

Conway, M. & Loker, S. (1999). Garment Industry Development Corporation: A case study of a sectoral employment development approach. Washington, DC: The Aspen Institute.

Loker, S., Good L. & Huddleston, P. (Eds.). (1998). Softgoods to the world. Monument, CO: International Textile and Apparel Association.

Loker, S., Owen, A.J., and Stafford, K. (1995). The community connection. In R. K. Z. Heck, and A. J. Owen, & B. R. Rowe, (eds.), Home-based employment and family life (pp. 135-166). New York: Auburn House.

Loker, S., Hennon, C.B., & Heck, R.K.Z. (1995). Three years later. In R. K. Z. Heck, A. J. Owen, & B. R. Rowe, (eds.), Home-based employment and family life. (pp. 167-192). New York: Auburn House.

Refereed Journal Articles -

Loker, S., Cowie, L. S., Ashdown, S., & Lewis, V. D. (2004). Consumer reactions to body scanning. Clothing and Textiles Research Journal, 22, (2), 1-9.

Ashdown, S., Petrova, A., Loker, S., & Couric, L.S., (2004) Protocols for Body Scan Research. International Journal of Clothing Science.

Loker, S., Stark, L. S., & Sasser-Watkins, J. (2003) The role of catalyst organizations in small business networks. Journal of Small Business Strategy, 14(1), 1-18.

Choy, R., & Loker, S. (2004). Mass customization of wedding gowns: Design involvement for prospective brides on the Internet. Clothing and Textiles Research Journal, 22(1), 1-9.

W.R. Coffman, J.E. Alexander, D.J. BenDaniel, P.L. Carey, H.G. Craighead, C.R. Fay, P.A. Gould, J.S. Gross, J.E. Hunter, W.H. Lesser, S. Loker, J.N. MacLeod, J.J. Mingle, N.R. Scott, and A.F. Krattiger (2003). The Future of Technology Transfer at a Major Land Grant University: Report of the Cornell University Land Grant Panel on Technology Transfer. IP Strategy Today, No. 6-2003, 1-44.
<http://biodevelopments.org/ip/index.htm>

Loker, S. & Oh, Y.J. (2002). Technology, customization, and time-based performance in the apparel and sewn products. Journal of Textile and Apparel, Technology and Management, 2(4).
<http://www.tx.ncsu.edu/jtatm>

Kamali, N. N. & Loker, S. (2002).

Mass customization: On-line consumer involvement in product design. Journal of Computer Mediated Communication, 7 (4). <http://www.ascusc.org/jcmc/vol7/issue4/loker.html>

Loker, S. (2002). People and technology management in flexible manufacturing: An apparel industry case study. Clothing and Textiles Research Journal, 20, 26-32.

Loker, S. (1998). KRAS-HAKA: A Czech apparel manufacturer's transition to a market economy. In S. Loker, L. Good & P. Huddleston (Eds.). Softgoods to the world. Monument, CO: International Textile and Apparel Association.

Loker, S. (1995). Jitex: A case study of apparel marketing in the Czech Republic. International Marketing Review, 12(5), 60-71.

Loker, S., Good, L., and Huddleston, P. (1994). East European markets: Lessons from K-mart. Journal of Retailing and Consumer Sciences, 1(2), 101-106.

Appendix C-Master's Theses 1990-2003

Master's Theses for Apparel Design 1990-2003

Thesis TX295 1990 D166 Damran, Janine Louise. Study of apparel manufacturer/supplier relationships 1990

Thesis TX295 1990 M527 Melnichuk, Pawalpat. Chasing the rising sun : a study of Thai garment companies exporting to Japan and the United States 1990

Thesis TX295 1992 K49 Kim, Sung Soo, 1967- Temperature analysis as the basis for designing a vest equipped with supplementary heating system to prevent cold 1992

Thesis TX295 1993 C518 Chen, Bijian, 1964- Fabric property as control factor for flexible apparel production systems / by Bijian Chen. 1993

Thesis TX295 1994 A398 Aliani, Shahbano. From fields to factories : a case study of garment workers in the Dhaka Export Processing Zone 1994

Thesis TX295 1994 G812 Greene, Susan Wiese, 1942- Printed dress fabrics : 1800-1860 / by Susan Wiese Greene. 1994

Thesis TX295 1994 S675 Snyder, Susan M. Apparel to enhance upright posture in the elderly / by Susan M. Snyder. 1994

Thesis TX295 1995 C518 Chen, Bijian, 1964- Physically based model of fabric drape / by Bijian Chen. 1995

Thesis TX295 1996 S683 Sokolowski, Susan L., 1968- Aircrew arm coverage designs for the prevention of arm pain in high performance tactical flight based on pressure 1996

Thesis TX295 1997 F148 Faerber, Erin M. (Erin Maureen) Analysis of costume collection accessibility on the internet / by Erin M. Faerber. 1997

Thesis TX295 1997 P113 Paal, Beatrix. Creating efficient apparel sizing systems: an optimization approach / by Beatrix Paal. 1997

Thesis TX295 1998 E67 Eriksen, Julie Marie.
Use of a heat/compression handwear system for rheumatoid arthritis-caused symptom relief / by Julie Marie Erikse 1998

Thesis TX295 1998 V645 Voellinger, Julia Greve. Incorporating three-dimensional body scan data into apparel pattern development : exploring a new methodology / 1998

Thesis TXA295 1998 Sherwin, Sara Kate. The Tent of Meeting: An Exploration of how Symbolism can Enhance Surface and Structural Design. 1998

Thesis TX295 2000 A374 Ahrens, Sean Frederick. Optimization of fit for mass customized apparel ordering using fit preference and self measurement 2000

Thesis TX295 2000 D463 Demarest, Nathan. Evaluation of inflatable fabric cylinders for use in an elbow orthotic / by Nathan Demarest. 2000

Thesis TX295 2001 K336 Kaan, Melissa Michelle, 1970- New York City apparel contractors use of social network structures to improve marketing competence 2001

Thesis TX295 2001 K363 Kamali, Narges Niki, 1979- Mass customization, apparel design, and the Internet / by Narges Niki Kamali. 2001

Thesis TX295 2001 Y686 Young, Carol H. Undesigned : a study using post-consumer recycled clothing & materials in the apparel design process. 2001

Thesis TX295 2002 L836 Luan, Nan. Body cathexis, general satisfaction with garment fit, and exposure to western culture of Chinese and Chinese Americans 2002

Thesis TX295 2002 Y66 Yoo, Jeong-Ju. Married couples' clothing choices and appearance management / by Jeong-Ju Yoo. 2002

Thesis TXA295 2002 Singer, Daphne Poppy. Engaging Learning: Experiments in Sharing Power with Students in a Hands-on Design Lab. 2002

Thesis TX295 2003 M394 Mayer, Kirk M. (Kirk Michael), 1975- Relation of insulation type and coverage to dexterity and tactility in alpine cold weather hand gear / by Kirk M 2003

Thesis TXA295 2003 Kim, Heejung. A Study of Apparel design process: Integrating Korean aesthetics for American Consumers. 2003

Thesis TXA295 2003 Petrova, Adriana. Analysis of body scan data for best fit of pants. 2003

Thesis TXA295 2003 Gao, Jinghong. Fashion design in New York City's Nolita district. 2003

Thesis TXA295 1998 Sherwin, Sara Kate. The Tent of Meeting: An Exploration of how Symbolism can Enhance Surface and Structural Design. 1998

Appendix D-Texts for Apparel Professionals

PhD Program: Important texts for the educated apparel professional

Abernathy, F.H., Dunlop, J. T., Hammond, J. H., & Weil, D. (1999). *A Stitch in Time: Lean Retailing and Transformation of Manufacturing—Lessons from the Apparel and Textile Industries*. New York: Oxford University Press.

ASTM Standard tables relating to sizing, fit, PS 42-70, ISO Standards

Barthes. R., *Elements of Semiology*. Cape Editions, 1967.

Bhabha. K. H., *The Location of Culture*. Routledge, 1994.

Boucher, F. (1987). *20,000 Years of Fashion*. New York, Harry N. Abrams.

Bourdieu, P., *Distinction: A Social Critique of the Judgment of Taste*, Harvard University Press, 1984.

Braudel, F. (1982). *The Wheels of Commerce*. New York, Harper & Row.

Brockman, H. *Theory of Design*

Craik. J., *The Face of Fashion: Cultural Studies in Fashion*. Routledge, 1994. Station, 1971.

Croney, J. (1981). *Anthropometry for designers*. New York: Van Nostrand Reinhold Co.

Daniels, G. S., & Churchill, E. (1952). *The "average man"?* (Technical Note WCRD TN 53-7): Wright-Patterson Air Force Base, OH: Wright Air Force Development Center.

Davenport, M. (1965). *The Book of Costume*. New York, Crown Publishers. Flugel. J.C., *The Psychology of Clothes*. The Hogarth Press Ltd, 1950.

Davis. F., *Fashion, Culture, and Identity*. The University of Chicago Press, 1992.

Dickerson, K. J. (1999). *Textiles and Apparel in the Global Economy*. 3rd Ed. Upper Saddle River NJ: Prentice-Hall.

deVries, J. (1994). *"The Industrial Revolution and the Industrious Revolution."* *The Journal of Economic History* 54(2): 249-270

Glock, R. E. & Kunz, G. (2000). *Apparel Manufacturing: Sewn Product Analysis*. 3rd Ed. Upper Saddle River, NJ: Prentice-Hall.

Goffman. E., *The Presentation of Self in Every Day Life*. Penguin Books, 1959.

Goldratt, E. M. (1992). *The Goal*. 2nd Ed. North Barrington, MA: North River Press.

Haug. W, F., *Commodity Aesthetics, Ideology & Culture*. International General, 1987.

Hebdige. D., *Hiding in the Light*. Routledge, 1988

Hines, T, & Bruce, M. *Fashion Marketing: Contemporary Issues*. Butterworth-Heinemann, 2001.

(ed's), Hirschkop, K., and Shepherd, D., *Bakhtin and Cultural Theory*. Manchester University Press, 1989.

(ed), Hodder. I., *The Meanings of Things: Material Culture and Symbolic Expression*. Unwin Hyman Ltd, 1986.

Hollander, A. (1978). *Dress, Seeing Through Clothes* (pp. 311-349, 148-156): Penguin Books.

- Hudson, P. B. (1988). Guide to apparel manufacturing. Greensboro, NC: MEDIAppearl, Inc.
- Hunt, A. (1996). Governance of the Consuming Passions: A History of Sumptuary Law. New York, St. Martin's Press.
- Kadolph, S. J. (1998). Quality Assurance for Textiles and Apparel. New York: Fairchild.
- Kaiser, Susan B., The Social Psychology of Clothing, Fairchild Publications, 1997.
- Kidwell, C. B., & Christman, M.C. (1974). Suiting everyone: The democratization of clothing in America. (Vol. Publication No. 5176). Washington, DC: Smithsonian Institution Press.
- Kidwell, C. B. (1979). Cutting a fashionable Fit: Dressmaker's drafting systems in the United States. Washington, DC: Smithsonian Institution Press.
- Mathis, C. M., & Connor, H. V. (1993). The triumph of individual style. Timeless Editions.
- McCracken. G., Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities. Indiana University Press, 1990.
- Milbank, C. (1985). Couture, the Great Designers. New York:, Stewart, Tabori and Chang.
- Nystrom. P., The Economics of Fashion. Roland Press, 1928.
- Perna. R., Fashion Forecasting. Fairchild Publications,1987.
- Pine, J. (1993). Mass Customization. Boston: Harvard Business School Press.
- Price, J., & Zamkoff, B. (1996). Grading techniques for modern design, 2nd Edition. New York: Fairchild Publications, Inc.
- Renbourn, Edward Tobias,
Materials and clothing in health and disease: history, physiology and hygiene: medical and psychological aspects.
Published: London, H. K. Lewis, 1972.
- (ed)., Riggins. S.H., The Socialness of Things: Essays on the Social Semiotics of Objects.
Mouton de Gruyter,1994.
- Roach. M. E., & Eicher, J.B., Dress Adornment & Social Order.
John Wiley & Sons Inc., 1965.
- Roche, D. (1989). The culture of clothing: Dress and fashion in the ancient regime. New York, Cambridge University Press.
- Simmel. G., The Sociology of Georg Simmel, (ed and Trans.) Wolff, K.H.,
The Free Press,1950.
- Sproles. George, B.,Changing Appearances: Understanding Dress in Contemporary Society.
Fairchild Publications 1994.
- Tilke, M. (1990). Costume Patterns and Designs. New York, Rizzoli.
- Waldinger, R. D. (1986). Through the Eye of the Needle: Immigrants and Enterprise in New York's Garment Trades.
New York: New York Univeristy Press.
- Watkins, S. M. (1995). Clothing: The portable environment (Second ed.). Ames, Iowa: Iowa State University Press
- Williamson. J., Consuming Passion: the Dynamics of Popular Culture. 1986.
- Wilson. E., Adorned in Dreams: Fashion & Modernity.Virago Press, 1985.
- Wolff. J., The Social Production of Art. Macmillan, 1992.

Appendix E-Selected Seminar Speakers in Apparel

Selected Seminar Speakers in Apparel, 2001-2003

Donald Kloster, Smithsonian Museum

Development Of The Army Sizing System: Size Two

Dr. Edith Gazzulo, Clarity Fit

The Utilization of 3-D Body Scan Data for Apparel Fit and Sizing

Capt. Sean Ahrens, U. S. Army

Fit Preference and Self Measurement in an Internet Model for Ordering Mass Customized Apparel

Dr. Diane Scheurell, Kimberly-Clark Corp.

The Use of Quality Function Development in Textile and Apparel Product Development

Dr. Nancy Schofield, University of Wisconsin

Analysis of Sizing and Grading Practices to Determine the Basis of Sizing U.S. Women's Clothing for the Upper Torso

Professor Lance Compa, Industrial and Labor Relations

The Garment Industry and Human Rights: National and International Dimensions

Ms. Susan Greene, Cornell University

The Copp Family Textiles - Smithsonian Collection dated 1750-1850

Dr. Shelley Feldman, Dept. of Rural Sociology, Cornell University

Coats and Shirts: Garment Production in New York and Bangladesh

Mr. Onslo Carrington, Carrington Designs

Design 2001

Ms. Norma Rantisi, University of Toronto

How New Industrial Districts Revive Older Ones: Locating the Lower East Side in the NYC Garment District's Innovation System

Dr. Hongwei Hsaio, National Inst. for Occupational Safety and Health

3-D Applied Anthropometry: Cases and Methods

Mr. Gordon Leggett, Hunter Labs

Color and Appearance Measurement

Ms. Linda Norris, Riverhill

Exploring Identity through Upstate Local History Collections

Dr. Patricia Warner, University of Massachusetts

Not a Thing to Wear: the Precursors of the Sportswear Industry

Dr. Sundaresan Jayaraman, Georgia Tech

Smart Shirt Research

Dr. Susan Christopherson, City and Regional Planning, Cornell U.

Can Wal-mart be Stopped, Limits to Global Retailing

Ms. Susan Greene, Visiting Fellow, Cornell University
On the Trail of a Clemens Dress

Grace Meacham, Prof. Emeritus, Univ. of Cincinnati
Clothing for the Seated Figure

Prof. Virginia Keyder, Bilgi University, Istanbul
Design Law Revisited: Comparing the US and EU

Dr. Norma Rantisi, Concordia University, Montreal
Ascendance of New York Fashion

The

Prof. Andrew Dent, Material ConneXion
Better Living Through Material Innovations

James R. Campbell and Dr. Jean Parsons, Iowa State University
Collaborative Digital Textile and Apparel Design Research

Mary Brannon, VF Jeanswear
An Industry Perspective on the Advancement of Color

Prof. Sarah Bernstein, Dept of Theater, Film and Dance, Cornell Univ.
“Cap-a-pe”: Researching Costume and Character for the Theatre

Prof. Lenda Jo Connell, Dept. of Consumer Affairs, Auburn University
Body Shape Analysis for the Female Figure

Cheryl Gomes, Innovative Textile Solutions
Designing Military Uniforms with High Tech Materials

Betsy Dart, US ARMY, Natick
Designing the Air Warrior System for Optimized Human Performance

Dr. Janet Hethorn, University of Delaware
Observing Street Style: Methods and Ethics

Peter B. Hirtle & Kornelia Tancheva, Cornell Library
Digital Library Resources for Textile and Apparel Studies

Francine Gemperle, Carnegie Mellon University
Wearable Computing: Design for Interaction

Appendix F-Funded Research

S.P Ashdown
Funded Research

Ashdown, S. P. & Loker, S.

Use of body scan data to design sizing systems based on target markets. National Textile Center. 5/01/03 to 4/30/04 (\$211,135), 5/01/02 to 4/30/03 (\$183,724); 5/01/01 to 4/30/02 (\$163,462)

Ashdown, S. P. Occupational safety and health through the use of protective clothing. USDA Regional Research Project NC-170. 10/1/2002 to 9/30/2003 (\$15,000)

Ashdown, S. P. Computer-aided design software for apparel patternmaking, grading, and custom fit, 18 stations, online software support, Lectra, Inc. industry donation. 2002

Connell, L. J. and Ashdown, S. P. Methods and system development for body scan analysis of posture and body shape for reengineering women's patterns. National Textile Center, consultant. \$8,000, 5/1/01 to 4/30/02

Ashdown, S. P. Enhancing community development through successful merchandising, producing, and distribution of innovative textiles and sewn products. USDA Regional Research Project W-194. 10/1/1999 to 9/30/2002 (\$15,000 per year)

Ashdown, S. P. Apparel: Design for the Environment. Patagonia Lecture. Cornell Council for the Arts. Visiting Artist Grant. Spring 2001 (\$5,000)

Ashdown, S. P.
Three-dimensional body scanner for research in apparel sizing and fit. Rebecca Quinn Morgan Alumna Donation. 2001 (\$50,000)

Loker, S. and Ashdown, S. P. Apparel manufacturing knowledge portal site www.apparelkey.com 1/15/01 to 7/15/01 (\$10,758)

Ashdown, S. P. Development of sizing systems for mass customization of apparel. USDA (Hatch). 10/1/97 to 9/30/98 (\$10,000)

Ashdown, S. P. Physiological and perceptual relationships between textiles and human health. USDA Regional Research Project W-170. 10/1/92 to 9/30/1997 (\$12000/year).

Schwartz, P., Obendorf, K. and Ashdown, S. P. A program to develop test methods of microporous repellent materials to pathogenic fluids. Pallflex Products Corporation, 5/15/96 – 8/15/96 (\$5,297)

Ashdown, S. P. Body configuration as a factor in the fit and sizing of clothing for mature women. President's Council of Cornell Women. 6/1/96 – 8/15/96 (2,497)

Ashdown, S. P. Interactive apparel design: Collaborative learning through the internet. USDA Higher Education Challenge Grant. 8/19/95 – 9/14/98 (\$158,000)

Ashdown, S. P. Design development of a protective gown for the health care industry. Laivan Corporation. 6/2/93 – 7/23/93 (\$1276)

Ashdown, S. P. and Paal, B. Development of a statistical method of size categorization. U.S. Army Natick Research, Development, and Engineering Center. 11/22/93 (\$10,000)

Watkins, S. and Ashdown, S. P. Seaplane pilot survival vest. Hydroplane Services, Industrial Extension project. 5/18/92 – 6/15/92 (\$1,200)

Watkins, S. and Ashdown, S. P. Chemical protective suit design modifications and sizing', Chemfab, Industrial Extension project. 6/15/92 – 11/15/92 (\$14,246)

Ashdown, S. P. Computer analysis of video images as a means of assessing the fit of apparel on the human form. College of Human Ecology. 5/21/92 – 9/1/93 (\$5,500)Funded Research

S. Loker
Funded Research

(1990-present)

Ashdown, S. & Loker, S. Use of body scan data to design sizing systems based on target markets. National Textile Center. 2001-2002 (\$183,724); 2002-2003 (\$163,462), 2003-2004 (\$211,135)

Loker, S. Designers as Entrepreneurs project. J. Thomas Clark Professor Project. 2000-2003 (\$105,000), 2003-2005 (\$40,000)

Christopherson, S. & Loker, S. The Creative Economy. Cornell Agricultural Experiment Station Hatch Project, 2003-2006. (\$30,000 per year)

Dickson, M., Burns, L.D., Douglas, S., Eckman, S., Lennon, S., & Loker, S. Educators for Social Responsible Business research grant from USREES North Central Committee 65. (\$1500)

Loker, S. & Ashdown, S. Apparelkey.com: An apparel manufacturing knowledge portal site. The Hong Kong Polytechnic University, 2000-2001. (\$10,758)

Loker, S. Skill Standards for High Performance Manufacturing in the Apparel Industry. Garment Industry Development Corporation sub-contract for U.S. Dept. of Labor project, 1999-2001. (\$24,400)

Loker, S. Case Study of Sectoral Employment Development Approach: Garment Industry Development Corporation. Aspen Institute, 1999. (\$10,500)

Loker, S. Management of technological innovation in small and medium sized apparel manufacturing firms. Cornell Agricultural Experiment Station Hatch Project NYC-329404, 1999-2003. (\$10,000 per year)

Loker, S. Mass Customization: A Multimedia Tutorial. College of Human Ecology Faculty Grant, 1998-1999. (\$3,575)

Loker, S., Evenson, S., Kearney, K., Salusso, C., Meyer, D., Trayte, D., Jordan, C., Bryant, N., & Schactler, C. University and Industry Partnership: Pacific Northwest Apparel and Textile Consortium. USDA Higher Education challenge Grant, 1997-2000. (\$153,000)

Loker, S. Privatization and Market Development in the Czech Apparel/Textile Industry, International Research Exchange Board, 1995. (\$2,615)

Loker, S. Privatization and Market Development in the Czech Apparel/Textile Industry, The Limited Fellowship coordinated by the International Textiles and Apparel Association (ITAA), 1995-6. (\$1,000)

Loker, S. Marketing strategies for the transforming apparel/textile industry in the Czech Republic. University of Pittsburgh, Business and Economic Fellowships in East Europe, and Geiger, Inc, 1993. (\$4,200)

Loker, S. and Sullivan, P. Market structure and competitive advantage for apparel retail sales in Eastern

Europe. The Gap Faculty Development grant coordinated by the International Textiles and Apparel Association (ITAA), 1992-93. (\$1,000)

Loker, S., Pelsue, N., and Schmidt, F. E. Computer-assisted Telephone Interviewing (CATI) Equipment Grant. Funded by the UVM Graduate College Research Advisory Committee, 1990. (\$15,000)

C. Jirousek
Funded Research

2001 – Elizabeth Schmeck Brown Costume and Textile Gallery endowment. \$50,000.

1998 Institute of Turkish Studies Summer Travel Grant \$800

1997-Ankara University Research Grant.A proposal for field research on disappearing textile technologies in the Black Sea Region of Turkey. 1998-1999. Collaborative project with colleagues at Ankara University, Turkey. 350,000,000 Turkish Lira (approximately US \$5,000) Co-Principal Investigator with Ankara faculty.

1996- American Research Institute in Turkey Grant: Survivals of Traditional Textile Technologies in Turkey. to support summer travel and research in Turkey May - July, 1996. \$3,000. Principal investigator.

1995-College of Human Ecology Innovative Educational Development grant: Development of an interactive textbook on the World Wide Web for TXA 125 Art, Design and Visual Thinking. September 1995- December 1996. \$6,977. Independent project.

1995-College of Human Ecology, International Travel Award, to present paper at Ars Textrina Conference in Leeds, England, July 1995. \$1,000.

1993/94 -College of Human Ecology, College Grant: Islamic Influences in Western Dress. \$6,700. Extended to December, 1995. Principal investigator.

1993 - College of Human Ecology International Travel Award, Archival Research in London. \$1000. Research in Archives and Museums.