

Susan Ashdown

Web Bio

Information

Biography

Biographical Statement

Susan Ashdown joined the Cornell faculty in 1991 on completion of her Ph.D research in perception of apparel fit at the University of Minnesota. Previous to this she completed her MA degree at Cornell, where her research was in functional apparel design. Overall the questions that inform her research and teaching focus on the interactions between apparel design and technology, and the changes that are occurring in the way that apparel is designed, produced, and distributed using new and developing technologies.

More specifically, her research and teaching are in the field of technical apparel design, with a concentration on sizing and fit of both fashion and functional apparel, and the use of full body three-dimensional scanning in the apparel industry. Issues in patternmaking, automated custom fit, judging apparel fit in research and industry settings, virtual fit, anthropometric measures, anthropometry of the active body, mass customization, interactions of materials and design, and functional apparel design are addressed in her research program. She is also investigating the use of half scale dress forms developed from body scans in academia and the apparel industry.

Teaching

Teaching and Advising Statement

Susan Ashdown teaches technical apparel classes, with an emphasis on the conceptual basis for understanding interactions among the body, materials, shape and silhouette, and the environment (both physical and social) in which clothes are worn. The design of apparel is a creative activity unlike any other, and she attempts in her classes to reflect both the craft and the concepts behind the multitude of decisions made throughout the design process.

Advising students is also a creative activity. Her focus in advising is to try to understand the place a student is coming from, and to talk about the diverse paths forward and the choices available for that particular student.

Professional

Current Professional Activities

Member of the Editorial Advisory Board of *Fashion Practice; The Journal of Design, Creative Process & the Fashion Industry*

Objective 1 leader, NC-170 Regional Research Group

Member, International Textile and Apparel Association

Research

Current Research Activities

The focus of current work includes sizing and fit of apparel and the use of three-dimensional body scanning in the apparel industry, apparel sizing systems for target markets based on anthropometric data, hand anthropometry and changes in surface measurements in active positions, functional glove design, the fit of clothing in active positions, and the use of scanning in virtual fit initiatives. Other issues being investigated include the use of 3D data for visualizing and judging the fit of apparel, virtual fit of apparel for the consumer, the use of half scale dress forms developed from scan data in the apparel industry, and the design, sizing, fit, and function of protective clothing.

Extension

Education

Education

- Ph.D. 1991 - University of Minnesota, Apparel Design
- M.A. 1989 - Cornell University, Textiles: Apparel Design
- B.A. 1971 - Grinnell College, Theater Arts

Courses

Courses Taught

- FSAD 2640 - Draping
- FSAD 4010 - Empirical Research
- FSAD 6640 - Human Factors: Anthropometrics and Apparel
- co-instructor for FSAD 3770

Websites

Related Websites

www.bodyscan.human.cornell.edu

Body Scan Research: Description of the work of the Cornell Body Scan Research Group (with Suzanne Loker), 2002

www.sizingsystems.human.cornell.edu

Apparel Sizing: Reference list of publications on sizing and fit of apparel, 2001

<http://fit.cit.cornell.edu/textiles>

Draping Instruction: Teaching support for apparel patternmaking/draping (with Richard MacPike), 2004

<http://halfscale.human.cornell.edu>

Site under development; a site for interaction of apparel professionals

Administration

Publications

Selected Publications

Song, H. K., & Ashdown, S. P. (2013). Female apparel consumers' understanding of body size and shape: Relationships among body measurements, fit satisfaction, and body cathexis. *Clothing and Textiles Research Journal*, 31(3), 143 - 156. doi: 10.1177/0887302X13493127

Ashdown, S. P., (2013) 'Not craft, not couture, not 'home sewing': Teaching creative patternmaking to the iPod generation', *International Journal of Fashion Design, Technology and Education*, 6, (2), 112-120
<http://www.tandfonline.com/doi/full/10.1080/17543266.2013.793747>

Petrova, A. & Ashdown, S.P. (2012). Comparison of garment sizing systems. *Clothing and Textiles Research Journal* 30(4), pp 315-329.

Nam, J., Branson, D.H., Ashdown, S.P., Cao, H., & Carnrite, E. (2011, June). Analysis of cross sectional ease values for fit analysis from 3D body scan data taken in working position. *International Journal of Human Ecology*, 12(1). 87-99.

Song, H.K. & Ashdown, S.P. (2011), Categorization of Lower Body Shapes Based on Multiple View Analysis, *Textile Research Journal* 81,(9), pp 914-931.

Ashdown, S.P. (2011) 'Improving body movement comfort in apparel,' book chapter in *Comfort in Clothing*, editor Song, G., Woodhead Publishing Limited, Cambridge, UK.

Ashdown, S.P. & Loker, S., (2010) 'Mass customized target market sizing: Extending the sizing paradigm for improved apparel fit,' *Design Practice*, 2(2), pp. 147-173.

Ashdown, S.P., Editor. (2007) *Sizing in Clothing: Developing Effective Sizing Systems for Ready-To-Wear Clothing*, Woodhead Publishing Limited, Cambridge, England.

Ashdown, Susan P. (1998) An Investigation of the Structure of Sizing Systems: A comparison of three multidimensional optimized sizing systems generated from anthropometric data. *International Journal of Clothing Science and Technology*.

Vol. 10, #5, pp 324-341.

Ashdown, Susan P. and Susan M. Watkins. (1996) Concurrent engineering in the design of protective clothing: Interfacing with equipment design. In *Performance of Protective Clothing: Fifth Volume*, American Society of Testing and Materials STP 1237.