Focused Issue on the Future: Introduction to Part II

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Everything you can imagine is real.
—Pablo Picasso

How will we dress in the future? How will we teach in the future? How will we design in the future? A special focused issue on the future in a field such as ours necessarily encompasses a broad range of approaches to the concept of "futuring." In this issue, the second part of a two-part focused look at the future, seven articles explore what the future might hold for the multiple dimensions of our subject matter. Each describes how, from production to distribution and consumption, textiles and apparel will undoubtedly remain central to the lives of individuals and to society at large well into the future. As in the first part of the special issue, the articles of the second part discuss how changes happening today might determine where we will be tomorrow and consider the ways innovation can be used as a starting point for envisioning what that tomorrow will look like.

As Burton (2005) writes, "While only the prophet . . . claims to see the unknown . . . futurists aim to understand, and cope with, the long-term forces of change, as they affect both people and the planet" (p. 69). In the following articles, authors ask readers to contemplate what the future holds, given the changes and innovations that are occurring right now. The authors invite the reader to enter into the creative process and envision with them the innovations that will shape the products, stores, and consumers of the future. They prompt the reader to consider the implications of the innovations discussed here for teaching, learning, and meaning making related to textiles and apparel. Whether such innovations will surface in a future that is just around the corner or one that is far on the horizon, it is a given that individuals and society will be affected. Forecasting potential scenarios for the future, the authors pose questions about how our programs and curricula will prepare graduates to deal with a future wherein change is the only certainty.

The Authors' Contributions
Anticipating how social change will manifest itself in the future is a challenging task, but even more challenging is to conceptualize how it will be reflected in dress. Annette Ames applied long-range forecasting techniques to address this topic in the form of a design problem. Illustrating how futuring is inherently a creative process, Ames pulls from a variety of sources to develop a scenario of the future that considers the ideals, social groups, and cultural trends that could dominate in the long term and therefore emerge within the clothing styles people may

wear. Ames takes the reader through the processes of both forecasting and design, revealing the strong connection between the two when the final product is used to dress the body. Addressing the issue of how crossover can occur between couture design and everyday dress, Ames provides a framework helpful to designers of today as well as of the future. An evaluation of the design as both scenario and solution is provided.

Noël Palomo-Lovinski examines the applicability of an emerging textile technology to the future of dress. Assuming that this technology will continue to evolve, PalomoLovinski develops the concept of "extensible dress" by approaching the question of how people will dress in the future with as few boundaries to creativity as possible. PalomoLovinski posits that dress will continue to act as a corporeal crossroads, merging an individual's desires for uniqueness with the group expectations of social meanings as communicated through dress. A useful example of futuring for students in both its approach and its final product, the author provides a framework for extrapolating how the technology of the future could, in turn, help to create the dress of the future. Projections as to possible limitations to extensible dress as well as the potential of this technology for customization of dress are explored.

Lynn Boorady and Jana Hawley show us how the application of existing technology can in the future revolutionize not only the style of dress worn but also how dress is made. They provide an analysis of methods currently used to teach pattern-making techniques and the applicability of technological advancements such as animation, holograms, and virtual reality to facilitate student learning in the future. As the authors show us, students of the future will be able to more actively participate in the process of learning to produce dress, while faculty of the future will be able to more fully expand their range of teaching methods. Implications for teaching the entire production process using such technology—including its applicability for helping students learn to move back and forth between two and three dimensions—are explored. We have already seen a revolution in how computer-based technology can be used in the classroom; yet as the authors prove, we have clearly just scratched the surface of its potential as a teaching and learning tool.

Hyunjoo Oh, So-Yeon Yoon, and Chi- Ren Shyu delve deeply into an examination of virtual reality and its potential to shape our consumption practices in the future. Applying current Internet-based virtual reality technology, they studied the impact of this technology on how consumers shop for furniture. An example of how current technology can be applied as a means of keeping up with rapidly changing markets and consumer needs, the authors examine the differences between consumer uses of virtual reality and two-dimensional formats to design and create aspects of our near environment. The future of virtual reality technology and particularly its relation to on-line shopping are explored, as are implications of this future for retailers.

An invited piece by Suzanne Loker, Susan Ashdown, and Erica Carnrite takes into account the myriad of technological advances being made in the production of dress and discusses their uses relative to consumers. Focusing on the concept of interactivity, the authors contend that body scanning can be as much a tool for achieving custom clothing fit as it can for facilitating new types of interactions between consumers and their clothing. Virtual try-ons, virtual fit, and virtual reality applications are examined relative to the ways that consumers use interactive, Internet-based technology today. Proposing uses of body scans similar to on-line simulations, the authors discuss the ways that consumers can become more comfortable with seeing themselves in three

dimensions. Limitations of the technology at present, as well as the potential for its application in the future, are discussed in light of the benefits that can come from the widespread use of three-dimensional body imaging and interactivity. But the authors also pose such questions as the following: What implications will this interactivity have for our relationship with dress? What will the impact of these technologies be on our privacy or our body image?

In an invited article, Ann Marie Fiore examines the concept of the digital consumer. Given how much technology enters into the everyday life of the consumer, she discusses how consumers, already heavily invested in the digital age, can become partners in the development and production of textile and apparel products through further use of technology. She argues the need for the industry to better understand the potential of emerging technologies for business–consumer relationships. Listening to consumers to develop products is certainly not a new idea, but listening to consumers to cultivate an understanding of how they use technology, such as Web sites and body scans, is new. The future, according to Fiore, will necessarily involve understanding the high-tech savvy consumer. It will be up to product designers and developers to meet consumers head on through the entire production and consumption process and accept consumer engagement at the design stage of the process.

How do we assist both consumers and businesses in adapting to rapid technological developments and their potential future applications? To address this question, we asked Eun-Young Rhee to share a presentation she gave at the 30th annual meeting of the Korean Society of Clothing and Textiles. Providing an overview of the development of curricula in postsecondary textiles and apparel programs, Rhee develops a trajectory along which the knowledge and skills necessary to ensure professional success can be taught to textiles and apparel students well into the future. Rhee discusses the importance of integrating competencies necessary for graduates to work as partners in a global industry environment supported by high technology. The author considers program competencies from concept all the way through to the consumer, pointing to the need for textiles and apparel programs to consider the role of retailing as well as man-ufacturing within curriculum design. Rhee contends that continued collaboration between academia and industry will ensure a future workforce and industry that can readily adapt to a changing marketplace.

The Importance of Vision
Humans have long pondered what the future might hold, whether for our own lives as individuals (starting with this question: What do you want to be when you grow up?) or for society at large (Slaughter, 2004). Thinking about what we will wear, where and how we will shop, how we will learn, and what our lifestyles will be like in 20 or 120 years can prompt an exercise in futuring that is both irresistible and intriguing. When we travel to the moon on vacation in the summer of 2026 (Cordell, 2006), will we don styles made of metallics and satins as frequently proposed in the original Star Trek television series? Or will we wear smart fabrics that allow us to withstand the trials of space travel as they tone our muscles and prevent space and time lag? Will these seemingly far-off endeavors eventually provide the foundation for our sartorial future (Coates, 2003)? Considering the dreams of those such as the Wright brothers, we now know that the future often reveals similarly wild notions to be more probable than improbable. Of course, what seems wild today will not necessarily seem unusual at all as the future unfolds. And what is

remarkable about all of these articles is that portions of the authors' imaginings are likely to be parts of the present reality in not-too-many years.

Technology is a concept of critical importance within all of the articles in this issue. Indeed, so much so that it begs the question: Can we even conceive of a future that does not include at least some increased level of reliance on technology? Probably not. One thing we can be sure of is that technology will continue to develop in ways unimaginable to us today (Smyre, 2007). The future, therefore, will be shaped in large part by how we choose to use technology. Will we use it to develop the utopias Charlotte Perkins Gilman and other 19th-century writers envisioned? Or will our choices take us in the direction of the dystopias, the likes of which were described by writers like George Orwell? Visioning the future is an exercise in both emotion and cognition, shaped by creativity and critical thought. We hope that by facilitating this exploration into the future, we have provided a catalyst for dialogue that engages both the heart and the mind, prompting us to think broadly about what the future might hold and to constantly ask ourselves how we can make it better than the present. The authors in the two issues on the future provide us with many ideas and possibilities that we can start to pursue now if we see them as desirable futures.

References
Burton, L. E. (2005). The fascinating future: Futures studies—Past, present, and future. *Futures Research Quarterly, 21*(1), 69-74.
Coates, V. T. (2003). Around the world: Technological glimpses of the future. *Futures Research Quarterly, 19*(3), 61-62.
Cordell, B. (2006). 21st century waves: Forecasting technology booms and human expansion into the cosmos. *Futures Research Quarterly, 22*(3), 21-41.
Slaughter, R. (2004). *Futures beyond dystopia: Creating social foresight.* New York: Routledge Falmer.
Smyre, R. (2007, September). *Adapting to a new world: Becoming leaders of transformatio*n. Consumer, Apparel, and Retail Studies Symposium conducted at the University of North Carolina at Greensboro.