

What If HCI Became a Fashion-Driven Discipline?

Insights

- Fashion is becoming an integral part of interaction design practice.
- We should consider how HCI as a discipline would change if it became a fashion-driven discipline.
- HCI as a field needs to engage in a discussion about the role of fashion.

Today HCI research is quite established as an academic field, with its own conferences and journals. It is still a young research field that during its evolution has been strongly influenced by science-driven disciplines such as psychology, cognitive science, and computer science.

At the same time, aspects that can be seen as more difficult to research in a traditionally scientific way, such as user experience, aesthetics, design thinking, strategic thinking, and so on, have emerged and spread across the HCI academic and industry communities. Another such emerging thread can be captured with the notion of *fashion*. Recent research on fashion in relation to interaction design indicates that

fashion not only already has a place in HCI, but also has become an unavoidable force in influencing many of the decisions and judgments made by HCI practitioners and researchers [1]. More specifically, research indicates that the field is already at a stage where fashion affects interaction designers' design thinking when it comes to concerns such as functionality, appearance, user experience, and visual experience [2,3,4].

Another major change in HCI research during the past decade is that we have seen a strong shift toward design. HCI and interaction design are today understood by many as designerly practices and should be compared to, and understood in similar ways as, other design fields such as architecture,



automobile design, graphic design, and product design. This shift has opened up HCI research to elements of product design and development that are difficult to approach in a scientific way.

So, given these shifts in the HCI research community, our research is motivated by two research questions: What would it mean to HCI and interaction design if they became fashion-driven rather than science-driven disciplines or domains? And is there anything we as a field have to do or change if that happens?

We are *not* arguing for or against the benefits or dangers of HCI becoming a fashion-driven discipline. Neither are we trying to fully prove that this is actually happening, even though we

argue to some extent that it is. Instead, our purpose is to examine and explore what might happen if our field becomes a fashion-driven discipline.

WHAT DOES FASHION THINKING MEAN TO HCI?

There are many elaborate and diverse definitions of what fashion is and means. In our investigations, we have surveyed existing research on fashion from a range of disciplines, which we have reported on elsewhere [5]. We do not have space to discuss these findings here. However, we stay close to an everyday, intuitive understanding of fashion as people's choices when it comes to taste and style, or, as it is often defined, the "prevailing style or custom." We understand

fashion as concerned with a wide range of design and lifestyle choices and practices that operate at scale. Based on this, we will argue that it is possible to see how fashion could influence HCI in different ways.

First, the concept of fashion can be seen as affecting how the field understands, critiques, and creates new designs and products in the digital technology world. Second, there may be a form of fashion *within* the field of HCI itself. For instance, there might be certain methods and approaches that are seen as fashionable in comparison to others. Here we primarily focus on the first notion of fashion, that is, how fashion may influence the design of new products and services. We will also

briefly discuss how education in our discipline may change if the field takes fashion seriously.

FASHION AND INTERACTION DESIGN PRACTICE

HCI is to a large extent a human-centered field. A lot of research is devoted to the task of understanding the user, the problem space, and the opportunity space. There are numerous books, papers, and talks regarding what research methods to use, and when and how to use them. These research methods are based on previous research results and are commonly accepted as delivering trustworthy results. However, in most fashion fields (such as clothing, automobiles, branding and advertising), a good design is not fully (or at all) based on research, but rather on other factors, such as style, taste, popularity, and timing. A core fashion-design ability is to be sensitive to the *zeitgeist*, which can be understood simply as the spirit of the time or the overall cultural influence at a particular time. There are no clear research approaches aimed at capturing the *zeitgeist*; instead, it is usually seen as an individual ability of a fashion designer to have developed some sensibility of the *zeitgeist* and to be able to let that sensibility influence design choices. We argue that this happens in our field too. One notable example from the technology industry is Apple, which is commonly considered to be a company that makes fashionable products, and that not only captures the *zeitgeist* but also seems in part to shape it.

While the culture of HCI is traditionally grounded in research, looking for scientifically sound solutions, fashion is recognized as being more subjective, aesthetically oriented, and driven by creativity and opportunity in searching for taste and style that could appeal to people [6]. Fashion is also understood as leading and guiding the general design directions in a practical design field. For instance, in clothing design,

haute couture influences and shapes the more mundane design of everyday clothes. This also happens in HCI. One example may be “flat design,” the minimized and flattened aesthetic pioneered and typified by the work of the Bauhaus school. For the past decade, skeuomorphism, which encourages design cues coming from the physical world, had been Apple’s key design principle and had been dominant and emulated by many other UI designs. With flat design gaining popularity and becoming the new fashion, Apple changed its design principle and started to adopt flat design in its new operating system (iOS 7). These changes in practice are difficult to see as research-driven or based on scientific findings; instead, they are likely expressions of style or fashion (of course, often argued for as if evidence-based).

We are convinced that fashion is becoming increasingly important and crucial in interaction design practice. When the next smartphone is not about new functionality or modes of interaction, maybe the remaining design challenges will be about its fashion qualities (style, taste, brand, etc.). So, if it seems as if there are at least signs that the field of HCI is becoming more fashion oriented, what does it mean?

It is possible to see at least three potential answers to the claim that HCI is becoming more fashion-oriented:

- First, *I don’t believe it*. Some people will not believe that our field has been or will become a fashion-driven discipline. If this is the answer then we don’t need to do anything about it. As a field, we can just keep on doing what we already are doing.

- A second possible answer is *I believe it, but it is not good and has to be prevented*. This answer means that people believe that our field is moving toward fashion, but they hold negative attitudes toward fashion and think we should prevent it from happening. It is, however, not easy to imagine what could be done to prevent fashion from having more influence. Should the field embrace even

more research and scientific methods? Or are there any other responses?

- A third possible answer is *I believe that our field is moving toward fashion and it is something we as a field have to recognize and work with*. If this is the answer, what should the field do to critically embrace fashion and help our field to move forward?

We are convinced that the first two answers are not constructive and will only lead to a continuation and buildup of a conflict already present in the field. We would argue that there is enough evidence to make the third answer the most appropriate and something that the field has to work with in the years to come.

FASHION AND INTERACTIVE PRODUCTS

As we discussed earlier, HCI today is research-oriented. That is, there is a basic belief that the design of new interactive products should be a consequence of substantiated knowledge developed through research activities. Good design is seen as a result of consolidated research of contexts, users, problems, and needs. This is what can be expected of a research-driven discipline. If we instead see HCI as a fashion-driven discipline, other ways of reaching insights into what should constitute new designs become valid. In practice this could mean that HCI as a field should pay more attention to its history, as is done in architecture, graphic design, and product design, where a good understanding of historical styles is considered core to the profession. It could also mean that some aspects of interaction design are accepted and understood as a matter of fashion and style without pretending they are based on research and evidence. The question is of course what those aspects are and how they should be dealt with. And what would this mean for what is considered to be good interaction design?

FASHION AND HCI PRACTICES

We have shown in earlier research [1] that fashion plays a role not only when it comes to the outcome of interaction design, but also when it comes to which methods are used in interaction design and research. In our study, practitioners expressed that their design decisions are sometimes influenced by what is the current and most popular design or research method. At the same time, their design

When the next smartphone is not about new functionality or modes of interaction, maybe the remaining design challenges will be about its fashion qualities.

thinking seems to be highly influenced by those they see as lead designers in the field, such as fashion stars in the IT world like Jonathan Ive from Apple and Tim Brown from IDEO. Even in the HCI research world, it is possible to think in terms of research celebrities that may have a fashion-like influence. The practitioners report that by following or subscribing to lead designers' and researchers' blogs or social networks, they are able to learn about design and research skills and thoughts shared by these lead designers and researchers. It becomes a way of sensing the zeitgeist.

Considering this, we can see a number of questions for our field to reflect upon. For instance, when doing HCI research and practice, to what extent is the selection of methods based on whether they are fashionable? And does it matter? To what extent is the field following lead designers or researchers when doing design and research? And, again, does it matter?

FASHION AND HCI EDUCATION

In traditional HCI education, students take courses and learn about HCI theory, design, and research methods, interaction design skills, and so on. HCI curricula commonly focus on teaching students to be creative thinkers, thoughtful scholars, and skillful designers who can address real-world problems by creating and designing functional, intuitive, and delightful tools and experiences. In other design fields, such as apparel and fashion design, students also learn sets of skills, methods, and processes, but in general they are more focused on the fashion aspects of products. They study texture, color, materials, and lighting as basic elements of designing a piece of cloth. They study style and taste, including cultural, social, historical, and contemporary perspectives. They also focus on marketing and advertising, and they engage in analysis of how economic, political, sociocultural, and technological differences impact how people react to and appreciate fashion [7]. It is possible that HCI education can learn from fashion design education and make certain changes. Certainly, this is only if the ambition and purpose is to further develop HCI into a fashion field in a similar way as established fashion fields. It may be possible to move HCI

toward a fashion-driven discipline without copying existing fashion disciplines by going in other directions.

Based on this, we can ask another set of questions: Should we change the overall curriculum for interaction designers to be more aligned with what is offered in other fashion-oriented design fields? Should we, as an academic community, in our educational programs do more to support the industry to better utilize fashion in HCI design and research?

If we want any of this to happen, we need to better understand what other fashion-oriented design programs actually do. Things to learn from them might include what courses and design processes they are teaching their students, what skills they require students to have, what their design philosophy is, and so on. Of course, this raises a lot of extraordinarily difficult questions and potential conflicts, since we are dealing with significantly different scholarly and pedagogical traditions and cultures.

DISCUSSION

Fashion can be understood as a force in our society that targets change at great scale. Fashion influences the design, production, and consumption of products and services. It influences individuals, groups, and communities. It influences locally but impacts globally. Fashion is primarily seen as a social notion, something that exists between people, something that shapes and is shaped by individual experiences and behaviors but has consequences on a larger scale. It affects, and is a result of, social consensus, community practices, and social discourse. If HCI becomes a fashion-driven discipline, in what way will fashion have an impact on what is considered to be the purpose and core of HCI as a discipline? Another question is, to what extent is HCI already part of shaping what is considered fashionable in our society, not only when it comes to interactive artifacts but also in general, when it comes to human behaviors and our work and everyday environments?

If HCI becomes more fashion oriented, will it lead to a stronger separation between research and practice (industry)? And if so, what

would that mean and lead to? Will we see a similar development to what we have seen in other disciplines where scholarly research is separated from creative work (such as with creative writing and comparative literature)? It seems as if HCI is balancing somewhere in between fashion and science, at least for now. For instance, the CHI conference accepts both scholarly work as well as creative work, but will it expand to include work of fashion?

In this article we have presented some examples and thoughts on our field when it comes to the relation between fashion and science. We have also raised some questions and discussed some possible answers about what we could think about, do, or change if our field becomes a fashion-driven discipline. Obviously, we propose more questions than answers. However, we believe that these questions may serve as an inspiration and be seen as a starting point for the HCI community to think about fashion and its role in our field.

ENDNOTES

1. Pan, Y., Roedl, D., Blevis, E., and Thomas, J. Re-conceptualizing fashion in sustainable HCI. *Proc. of the Designing Interactive Systems Conference*. ACM, New York, 2012, 813–815.
2. Fletcher, K. Durability, fashion, sustainability: The processes and practices of use. *Fashion Practice: The Journal of Design, Creative Process & the Fashion* 4, 2 (2012), 221–238.
3. Pan, Y. and Blevis, E. Fashion thinking: lessons from fashion and sustainable interaction design, concepts and issues. *Proc. DIS '14*. ACM, New York, 2014, 1005–1014.
4. Kawamura, Y. *Fashion-ology: An Introduction to Fashion Studies*. Berg, 2005.
5. Pan, Y. *Fashion Thinking and Sustainable HCI*. Ph.D. Dissertation. Indiana University, Bloomington, 2014.
6. Barnard, M. *Fashion as Communication*. Psychology Press, 2002.
7. Lamb, J. and Kallal, M.J. A conceptual framework for apparel design. *Clothing and Textiles Research Journal* 10, 2 (Jan. 1992) 42–47.

👤 **Yue Pan** is a UX researcher at Citrix. She has a Ph.D. in HCI design from Indiana University, Bloomington.
→ panyueiu@gmail.com

👤 **Erik Stolterman** is a professor and chair of informatics at the School of Informatics and Computing, Indiana University, Bloomington.
→ estolter@indiana.edu