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The *Interactions* website (interactions.acm.org) hosts a stable of bloggers who share insights and observations on HCI, often challenging current practices. Each issue we'll publish selected posts from some of the leading voices in the field.

The Wicked Problem of Making SIGCHI Accessible

About 15 percent of people worldwide have a disability [1] and the likelihood of experiencing disability naturally increases with age. SIGCHI can attract new members, and make current members feel welcome, by making its events and resources more inclusive to those with disabilities. This in turn will enrich SIGCHI, helping it live up to the ideal of inclusiveness central to the concept of user-centered design. It will also help to drive innovation, as accessibility efforts often drive more general technology advances (an example is speech recognition, which has many applications outside of accessibility today).

Inclusion of individuals with disabilities and accessibility have long been foci of the community of scholars and practitioners affiliated with SIGCHI, starting in 1994, when SIGCHI's flagship conference CHI had an accessibility chair. The CHI conference has a large number of papers dealing with accessibility (9 percent of papers in CHI 2015 were accessibility or disability related [2]). The inclusion of researchers and participants with disabilities within the SIGCHI community has led to advances in general technologies [3] and in research practices (e.g., ability-based design [4]).

However, written works about the accessibility of our scientific processes [5] and outputs [6], as well as reports and experiences from members of our community with disabilities, have revealed a gap in the accessibility of conferences, research papers, and other aspects of SIGCHI. This spurred the efforts by the SIGCHI

Executive Committee, which in turn encouraged the formation of the SIGCHI Accessibility Community [7], so that people with disabilities would have an avenue for helping to improve things. The mission of the Accessibility Community is to improve the accessibility of SIGCHI conferences and meetings (which includes awards ceremonies, program committee meetings, conferences, and so on) and the digital accessibility of SIGCHI websites and publications.

The first action of the Accessibility Community was to create an Accessibility Report [8] intended to support informed decisions in the future and set goals that are responsive to the best practices and biggest problems facing our community, specifically SIGCHI's physical services (conferences and meetings) and digital services (websites, videos, papers, etc.), as well as its overall inclusiveness for people with disabilities. Our findings were based on input from the community at large, survey data from CHI attendees, and a survey of 17 SIGCHI conferences (only four of which had accessibility chairs in 2014). They show that many conferences and other SIGCHI resources do not adequately address accessibility. The report also sets out (hopefully) achievable goals for addressing them.

While the report began as a well-

intentioned data-collection effort, it has sparked a variety of positive and negative responses over recent months from the people it was meant to help (SIGCHI members who face accessibility challenges) and the people it impacts (SIGCHI leaders, conference organizers, and so on). Everyone appreciates the effort that went into the report, yet it has functioned almost like a straw man in drawing out issues and facts that were not available (or that we did not have the insight to go after) when we were writing it.

Some of these include:

- The inability of such a report to provide any sort of concrete handle by which disabled conference attendees (or conference organizers) can get real resources applied to problems of accessibility. This is a hot-button issue that includes a range of wishes and concerns, from legal action against inaccessible conferences to the financial bottom line of conference chairs, who frequently fear a budget deficit up until the conference is over.
- The lack of communication between the accessibility community in general (and disabled conference attendees in particular) and SIGCHI's/ACM's leadership. It turns out SIGCHI is putting money toward video captioning, ACM has been working toward universal accessibility of papers for some time (and has the beginnings of a plan in place), and more is possible (but only if communication channels are open).

- The varied problems faced by conference chairs running conferences of different sizes were not represented at all in our report (something we hope to rectify in this year's data-collection efforts). These are complex and multifaceted, and include trade-offs that are easy to ignore when a

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single advocacy goal is in place (as by the accessibility community) but impossible to ignore when running a conference.

These are just some examples, and to a disabled attendee whose career depends on successful conference networking, they probably seem irrelevant to their basic right for equal treatment. However, when it comes to the more ambiguous problem of enacting accessibility, they are primary concerns that must be addressed.

Which raises my HCI and interaction design antennae sky high. This is a wicked problem [9], with all of the difficulties inherent in attempting to modify a complex multi-stakeholder system. In addition,

one solution will never fit all the varied contexts in which accessibility needs to be enacted. Worse, to the extent that the “designer” here is the accessibility community, it’s not clear that our conceptual understanding matches that of the “user” we are designing around (conference organizers). Value-sensitive design, mental model mismatches (between different stakeholders affected by changes intended to increase accessibility), multi-stakeholder analyses, service design—all of these frames may help with the task of making SIGCHI as inclusive as I believe we would all like it to be.

So unsatisfying a conclusion to reach when the people who are differentially

affected deserve a straightforward solution that directly addresses their needs and their right to access. Yet well-meaning change is not enough. Well-designed change is the bar we should strive to reach.

This post was originally published on Interactions’ website as “Thoughts on the SIGCHI Accessibility Report”; <http://interactions.acm.org/blog/view/thoughts-on-the-sigchi-accessibility-report>

ENDNOTES

1. <http://www.un.org/disabilities/default.asp?default.asp?id=18>
2. 34 of 379 papers, listed here: <http://cs.rochester.edu/u/brady/chi2015accessibility.html>
3. For example, speech synthesis and OCR have early roots in the Kurzweil Reader, a reading tool for people with visual impairments.
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5. Brady, E., Zhong, Y., and Bigham, J.P. Creating accessible PDFs for conference proceedings. *Proc. of the 12th Web for All Conference*. ACM, New York, 2015, 34; <http://dl.acm.org/citation.cfm?id=2746665>
6. Kirkham, R., Vines, J., and Olivier, P. Being reasonable: A manifesto for improving the inclusion of disabled people in SIGCHI conferences. *Proc. of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems*. ACM, New York, 2015, 601–612; <http://doi.acm.org/10.1145/2702613.2732497>
7. <http://www.sigchi.org/communities/access>
8. SIGCHI Accessibility Report; <https://docs.google.com/document/d/1XBUV9kIS5D430wZJf70d4EvQWR7AIfJ7nQQ3zX26bjw/edit?usp=sharing>
9. Rittel, H.W. and Webber, M.M. Dilemmas in a general theory of planning. *Policy Sciences* 4, 2 (1973), 155–169.

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