The Editor's Spotlight: TOCHI Issue 23:5

This month I write to you having just survived another year, another rush and crush of the annual CHI conference deadline.

But now that I have a moment to reflect, it also strikes me that lost in that rush and crush is the type of contribution that needs more space to breathe and that takes a prolonged effort of fits and starts and changes of direction over a longer arc of research.

The type of contribution that is perfect for TOCHI.

Now of course, we also at times publish one-off studies that we believe are particularly impactful, or foray into emerging areas that are still relatively unexplored. But above all else we like to see a broad scope of contribution and depth of thought that goes well past what one can cram in to a typical 10-page conference paper.

So I earnestly hope—as the conference-deadline mindset fades from memory—that many of you will now contemplate the major themes of your research in the past few years.

And then, perhaps in combination with some capstone results, craft substantial new contributions that can find future homes in the pages of TOCHI.

A New Special Issue Call: Re-imagining Participatory Design

I'm also excited to announce the second special issue of my tenure.

In recent years, it seems that Participatory Design has become synonymous with a more neutral form of “user-centered” design, often merely aimed at a sort of token involvement of users in design, but in its deep roots—and hopefully in its re-imagined future to come—Participatory Design empowered intervention upon situations of conflict through developing more democratic processes.

Rather than a sort of corporate memo that has lost its verve by being Xerox-copied one time too many in service of bland and generalized “information technology” needs, this *Re-imagining* encourages a return to Participatory Design's vibrant roots in giving voice to oft-marginalized and under-represented classes of users.

With this perspective in mind, TOCHI extends an invitation for the community to think boldly about the future of Participatory Design.

To get involved, check out the following website:

<http://tochi.acm.org/re-imagining-participatory-design/>.

And we hope to see your submission in January 2017.

As I struggle to catch up after letting almost everything drop (except TOCHI!) for a month—if not longer—by necessity, then, I'll keep my remarks short and sharp for the six articles that grace the pages of the October/November issue of TOCHI.

Examining the Role of Smart TVs and VR HMDs in Synchronous At-A-Distance Media Consumption. This article makes an impressive study of the possibilities for synchronous, at-a-distance media consumption in a pair of field studies.

The first deploys a system known as CastAway, which allows a couple to share synchronous television viewing or music playing while remote from one another. This can heighten communication and a sense of togetherness, while at times also having the bittersweet effect of making the absence of one's partner felt more poignantly as well.

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In this sense, the work has as much to say about “tele-absence,” and how it perhaps makes the heart grow fonder, as it does about the potential benefits of tele-presence.

A second deployment looks at similar phenomena in the context of head-mounted displays, where a sort of shared virtual environment can bring together persons who are physically apart.

The overall result is a *tour-de-force* analysis of the behaviors involved, and the issues that arise, in the synchronous consumption of media at-a-distance—comprising a sound foundation for this emerging class of user experience.

(<http://dx.doi.org/10.1145/2983530>).

Design of a GPS Monitoring System for Dementia Care and its Challenges in an Academia-Industry Project. In a research field that—despite our desire to focus on the humans involved—revolves around “computers” and “technology” as much as anything, technologically minded researchers often take things like location-sensing via GPS tracking for granted.

Yet, as this article so poignantly illustrates, when one delves into what is actually needed to make that technology serve the needs of stakeholders ranging from nurses and caretakers to the over-arching family-units and organizational structures—and (most critically) the patients themselves, where dementia often manifests in neuro-degenerative disorders that pose ever-shifting challenges for everyone involved—what seemingly should be a “simple” step of location-tracking in the “turn to practice” is fraught with technological, social, and ethical challenges.

Add to that the challenges of academia–industry collaboration mandated by funding structures, and the project-management issues become very complex indeed.

(<http://dx.doi.org/10.1145/2963095>).

Fall Prevention for Older Adults: Qualitative Results from a Long-Term Field Study. Falls are one of the chief causes of serious injury among older adults, often ultimately resulting in reduced quality of life and a transition away from independent living.

This work deploys a sensing system with an interesting set of exergames aimed at early intervention through improved physical fitness and regular assessment of the risk of falls. While many challenges were encountered in deploying the system, and the user population was necessarily limited to relatively able-bodied individuals due to ethical and safety concerns, a six-month deployment with older adults in their homes as well as in community-dwelling situations showed great promise in empowering individuals to monitor and control their own fitness, health, and fall risk. Making this an enjoyable and entertaining activity that older adults can weave into their daily routines could be instrumental in effecting long-term use with sustainable health benefits.

(<http://dx.doi.org/10.1145/2967102>).

Investigating Expressive Tactile Interaction Design in Artistic Graphical Representations. This article is a wonderful example of something that unfortunately we don’t see come through our submissions queue as often as I would like: namely, a design-research-centric TOCHI contribution.

In particular, this article explores how tactile feedback can be employed in a multi-sensory context to augment works of visual art. Here, the focus is not on metrics such as bandwidth and speed-accuracy tradeoffs—as are traditional concerns in the use of tactile feedback to augment pointing devices (for example)—but rather largely unexplored questions of expressiveness and new interaction potentials rise to the fore. The result, in addition to a richly illustrated contribution, is a set of affordances for

expressive visuotactile interactions, as well as an intriguing design space for tactile augmentation that points the way to new user experiences.

(<http://dx.doi.org/10.1145/2957756>).

Applying the Norman 1986 User-Centered Model to Post-WIMP UIs. This work takes Norman's classic notion of "cognitive engineering" and updates it to the modern context of touch-based and tangible interfaces.

As the authors demonstrate for the particular case of a 3D object rotation task, Norman's model still has a great deal of explanatory power for such a task and may continue to give insights into interaction methods and techniques that barely existed as research prototypes when his work was first conceived.

If indeed human beings think with their hands every bit as much (and perhaps even more so) than they do abstractly with reason, then perhaps in this era of the post-WIMP (Windows-Icons-Menus-Pointers) interface, our tools for thought have come very far indeed.

(<http://dx.doi.org/10.1145/2983531>).

HCI for Reconciling Everyday Food and Sustainability. This article is a moving example of how HCI has the potential to tackle some of the biggest problems facing the globe by framing these challenges as socio-technical design problems that must be met at the social, cultural, individual, and yes, technological levels.

At present, most people's food practices are mundane and often routine, but as particularly the "food pioneers" probed by this study demonstrate, there are ample insights to be gained from existing practices that could inform the "user experience" of obtaining and preparing sustainable food. And indeed, what "sustainable food" itself entails is a complex interplay of ideas and concerns about what we eat and where it comes from. This is a complex design problem that encompasses everything from the in-store experience, packaging design, online shopping, social and family pressures, and awareness of the provenance of food, to name just a few issues unpacked by this far-ranging investigation.

(<http://dx.doi.org/10.1145/2970817>).

So that's all the great stuff that awaits eager eyes in Issue 23:5 of *Transactions on Computer-Human Interaction*.

Yet even as I type these words, the December issue is starting to fill up as well, and it will soon be time to select the TOCHI Best Paper Award for 2016. So if any articles in Volume 23 have caught your eye, please do nominate them by sending a quick note to tochi@acm.org. Nominations can come from anyone, so please let your voice be heard, and don't be shy.

And then right out the chute after that will be the first issue of 2017; our highly anticipated Special Issue on *End-User Development in the Internet of Things*, which arrives in February. The articles for that issue are nearing the end of our pipeline, and I can hardly wait to dig in and see in detail what exciting new developments the special issue has in store.

Until then, I shall await the results of my CHI submissions, chewing my fingernails down to the nubs just like everyone else as I nervously await the temperamental judgment of the much-dreaded "R2" who always seems to have a keen eye for any paper's limitations and shortcomings.

And I wish you all the best of luck as well—and of course, I will most certainly be reviewing a number of CHI papers myself. But rest assured, since I try to complete my

reviews early, I'm always the benign and understanding "R1" who's arguing for your paper to be accepted. Or at least *almost* always (grin).

And if not, perhaps it's just one of those papers that's much better suited to journal publication. . . and if so, please do send it our way.

Ken Hinckley

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Redmond, Washington

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