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**From the Editors in Chief****WE SHAPE OUR TOOLS, AND THEREAFTER  
OUR TOOLS SHAPE US**

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The quote in the title above, by Marshall McLuhan's contemporary John M. Culkin (1967, p. 70), reflects the fundamental viewpoint of *Human Technology*. We are interested in—if not fascinated by—the two-way relationship between humans and technology. Humans create inspiring and empowering technologies but also are influenced, augmented, manipulated, and even imprisoned by technology, depending on the situation and the interpreter. Culkin continued, in a McLuhanesque vein, that, through technology, “These extensions of our senses begin to interact with our senses. These media become a massage” (p. 70). Indeed, most media—and technology in general—have become “a massage,” that is, more than mediators of messages. Technologies pertain not only to making everyday lives more efficient, safe, or healthy but also to entertaining people. For example, the Internet, originally developed for military purposes, nowadays functions as a tool for information and a platform for a plethora of applications helping people in their everyday lives. However, many people use the Net mostly for entertainment purposes and, to paraphrase William Gibson (1996), the science fiction writer who coined the term “cyberspace,” that's exactly what is so great about it. The complex development of the human–technology relationship has given people new avenues for enjoyment and communication while also boosting the efficiency of societies. From all this, grave concerns may ensue but also utopian enthusiasm. *Human Technology* is interested in both, and everything in between.

Currently, it is estimated that 50 billion Web pages are available on the Internet, most of them accessible to anyone (Internet World Stats, 2017). The ethical stand of *Human Technology* has been for openness since the journal's inception in 2005, when the first editorial team and publisher decided to publish peer-reviewed scholarly manuscripts open access and Web-based only. At that time, open access publishing was a small but growing philosophy, but they believed—and we, the next-generation editorial team, continue to believe—that “information wants



to be free,” as Stewart Brand, editor of the *Whole Earth Catalog* famously told Steve Wozniak, the co-founder of Apple Inc., about 20 years earlier at the first Hackers Conference (Brand, 1984; Gans, 2015). Today, that perspective is more important than ever: Open access is much like an academic creed connecting like-minded content publishers, authors, and audiences around the world. Not surprisingly, open-access publishing is visibly gaining in popularity (Hurme 2015).

Universities and funding organizations increasingly favor open access publications, encouraging and even demanding researchers to use open access channels for publishing their grant-based research dissemination. Sometimes, the commercial model of major publishing houses, where access to research requires a subscription, seems to defy the idea that research is in the service of the public. When the work of authors, reviewers, and editors is used for making profit, the new knowledge generated in research tends to remain exclusive in nature, and accessible only to those who can climb over a paywall.

The publisher of *Human Technology*, the Open Science Centre of the University of Jyväskylä, is a pioneer in making research of all kinds available to anyone. The Jyväskylä University Digital Archive presents a good example of an institutional repository that provides free and easy access to content created by the university’s academic community.

Academic journals such as *Human Technology* assure the quality of articles they publish by employing a transparent procedure, providing detailed instructions to authors, using external reviewers for evaluating the submissions, and drawing on an international board of advisors. They also rely on the services of external assessors in verifying their goal of quality scholarly publishing (Hurme & Crawford, 2017). *Human Technology* has been awarded the peer-review label of the Federation of Finnish Learned Societies to indicate that the journal fulfills the Societies’ requirement in its peer-review process. Our journal also is fully indexed by the Directory of Open Access Journals. And, since 2016, *Human Technology* has been indexed by Scopus, which is a major milestone for any journal.

The last 3 years, during which Dr. Pertti Hurme has served as editor in chief, *Human Technology* has published articles across a gamut of topics. Some of the articles are theoretically oriented, focused on, for instance, immersion and presence, affective and persuasive technologies, and embodied interaction. The majority of articles are empirically based addressing a diversity of topics such as the history of computer programming, games and learning, technology for helping the elderly, social media in crisis and emergency management, memes in virtual communities, and movement-based interaction design. In the 3-year period, two special issues of *Human Technology* have been edited by guest editors. These issues have presented research on human–technology choreographies, that is, the relationships of body, movement, and space. The articles discussed the relationship of technology and choreography in a novel way from perspectives such as movement, space, walking, dance, music, interaction, biomonitoring, multimodality, and embodiment. Two additional thematic issues are in preparation, one focusing on the interaction of art and semiotics in the design experience and technology and the other presenting research into the experiential component of the design of interactive systems for the work environment.

The present issue of *Human Technology* has three articles and our biennial acknowledgment of our reviewers. The first paper focuses on the self in human–computer interaction, the second on health information technologies and evidence-based health care, and the third on reading skills and digital learning games.

**Henrik Åhman** examines the self, first in human–computer interaction (HCI) research literature, where his qualitative content analysis shows that the self is time and again presented as a relatively stable, coherent, and individual entity. The second part of his article contrasts these findings with an in-depth analysis of philosophers’ views on the self, specifically Friedrich Nietzsche, Michel Foucault, Jacques Derrida, and Mark C. Taylor. Their thoughts lead to considering the self as a malleable construct. Åhman’s conclusions may have a far-reaching impact on HCI research.

Many countries are undertaking intense efforts toward improving their health-care systems and, in this work, information and communication technologies play a vital role. In particular, the growing emphasis on evidence-based health care (EBHC) demands the use of technologies to assure quality decisions by health-care providers. **Kamran Sedig, Anthony Naimi and Nicole Haggerty** examine this challenging area. The authors focus on joint cognition systems as a means to integrate better health information technologies (HITs) into EBHC processes. Their goal is to bridge the gap between stakeholders, HITs, and EBHC in support of quality outcomes for health-care practitioners and, ultimately, patients. For that purpose, they present an extensive analytical framework, DETECT, to assist in designing, deploying, and evaluating the integration of HITs into EBHC activities and settings.

In their article, **Anne Puolakanaho and Juha-Matti Latvala** embark upon an exploration of a means of assessing reading skills via an online learning platform. The lack of reading skills can lead to marginalization, whereas good reading skills improve the possibilities for learning and personal growth and provide a wider range of options for finding one’s place in society. Based on empirical data, the authors compare the power of the GraphoLearn digital learning platform in predicting reading skills to those of traditional pencil-and-paper tests. Their conclusion is that digital tasks are as efficient as traditional tests in predicting reading outcomes. The article adds to the large body of evidence on the advantages of the GraphoLearn (formerly GraphoGame) learning environment published in this journal and elsewhere. Together the three articles in this issue of *Human Technology* address timely questions of the relationship between human beings and technology.

Finally, all scholarly journals that uphold ethical standards for quality rely fundamentally on a process of peer review. Throughout the years, editors of *Human Technology* have invited experts from a diversity of fields to review manuscripts of possible publishable quality related to their expertise area. In this way, the editors assure that the papers published in this journal meet the standard of quality prior to publication. So, every second year, we publish a list of these scholars who volunteer their time and knowledge in evaluating the manuscripts and in recommending ways in which the research reporting can be improved. No matter what the ultimate decision on a manuscript, we editors and the publisher of *Human Technology* remain indebted to the contributions that these scholars make to quality publishing and the advancement of the field of human–technology.

In January 2018, a new editor in chief, Dr. Jukka Jouhki, will assume the reigns of *Human Technology*. Jouhki is an anthropologist who has studied technology as a cultural phenomenon from various aspects, for example, mobile technology in rural India, information society visions in urban South Korea, and online gambling in Finland. Under his guidance, the human aspect of human–technology interaction will be further emphasized within the meanings, values, and experiences of technology. Dr. Jouhki will be joined by an associate editor, Dr. Sakari Taipale,

a social scientist with extensive experience in technology research, such as mobile telephony and social robots. We also welcome a social media editor, Tanja Väälisalo, M.A., who will facilitate an improvement in the journal's online presence. And our long-time managing editor, Barbara Crawford, M.A., will continue her dedicated work.

As *Human Technology* moves into future, the editorial team is open to expanding our traditional interest in the mainstream issues of humans and their technologies to include explorations of the more controversial and perhaps even ethically challenging issues in human–technology research and activity. Our approach to these and other topics is being formulated at the moment, but we look forward to broadening the discourse of the human component of technology use in *Human Technology* in 2018 and beyond.

## REFERENCES

- Brand, S. (1984, November 1). Filmed address at the Hackers Conference, Sausalito, California. Palmdale, CA, USA: Video West Productions. Available at Getty Images, [www.gettyimages.in/detail/video/at-the-first-hackers-conference-in-1984-steve-wozniak-and-news-footage/146496695](http://www.gettyimages.in/detail/video/at-the-first-hackers-conference-in-1984-steve-wozniak-and-news-footage/146496695)
- Culkin, J. (1967, March 18). A schoolman's guide to Marshall McLuhan. *Saturday Review*, 51–53, 70–72.
- Gans, J. (2015, October 25). "Information wants to be free": The history of that quote. Digitopoly: Competition in the Digital Age [Web log post]. Retrieved November 20, 2017, from <https://digitopoly.org/2015/10/25/information-wants-to-be-free-the-history-of-that-quote/>
- Gibson, W. (1996, July 14). The net is a waste of time. *The New York Times Magazine*, p. 31.
- Hurme, P. (2015). Academic journal publishing and open access. *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments*, 11(2), 94–99.
- Hurme, P., & Crawford, B. J. (2017). External assessors as "reviewers" for quality assurance of open access journals. *Human Technology*, 13(1), 1–5.
- Internet World Stats: Usage and Population Statistics. (2017). Retrieved November 20, 2017, from [www.internetworldstats.com](http://www.internetworldstats.com)

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