Editorial: Inclusive design SIG. A wider context and reflections on theory and education

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Inclusive design is centred around people; this is well reflected in the papers featured in the InclusiveSIG section of DRS2020. People are not only users of products or services, but also actors of decision making, sense making, change making and future creation. Their physical, sensory, cognitive, affective, and environmental factors need to be considered in the design process, together with a wider technological, social, political, economic, legal and cultural context in which they interact with things, other people, and the world. Individuals can be excluded/included from the society culturally, socially, economically or politically, and these aspects have been illustrated in the papers with topics ranging from personal mobility aids and public transport systems to museums and smart cities.

The review of the paediatric mobility product design in the last 50 years written by Cara O’Sullivan and Farnaz Nickpour (paper 275), has highlighted that paediatric mobility design “embodies and reflects not only the state of technology and healthcare, but also social, political, economic, legal and environmental states.”

The public transportation system study (paper 239) by Jing-Ting Yu et al. has taken a service design perspective to involve various stakeholders, aiming to improve the service users’ riding experience, providers’ service quality and the administrators’ efficiency.

Qi Wen and Sandy NG (paper 268) point out the shifts of the museum paradigm from the “isolated, elitism and collection-centered tradition” to a “more diverse, inclusive, communicating, educational and visitor-orientated institution”. They see inclusive museums as “a synergist of design since it is an open platform that connects design and the public.”

The role of participatory design activities in the appropriation of urban technology is explored by Julieta Matos-Castaño, Anouk Geenen and Mascha van der Voort (paper 133), and they find that ‘visibilizing’, ‘reframing’, and ‘imagining’ are key characteristics of participatory design in supporting sense-making of future smart cities.
In addition to the discussion on the wider context of inclusive design, reflections were made on the relevant theory and practice.

The theoretical paper by Prithi Yadav (paper 340) proposes ‘perception’ as an alternative construct for understanding users in human-centred design, recognising the limitations of empathy. The proposed ‘perceptive design’ has integrated three predominant approaches of social cognition, i.e. Theory Theory, Simulation Theory and Interaction Theory. Perception allows “the designer to retain their consciousness, while considering the user’s consciousness, allowing for a plurality of consciousness to better inform design processes” which would facilitate “mutual creative understanding” and “balance in power”. The taxonomy of the four degrees of perception were proposed: ‘recognize’, ‘resonate’, ‘relate’ and ‘realise’, and the commonly used user-centred design methods were mapped to the four levels of perception, which has turned the taxonomy into a useful analytical tool.

The educational paper by Daniel Charny et al. (paper 325) is focused on ‘Fixperts’, a learner-centred, creative-problem-solving and project-based learning programme. It serves as an experiential hands-on introduction to “human-centred design, maker culture, and design-based thinking”. Many elements from established design methods and approaches have been incorporated into ‘Fixperts’, for example, “user-centred design, universal design, design ethnography, participatory design, design thinking, action research, co-design, design activism”. Different universities have adopted the ‘Fixperts’ learning framework, and developed a variety of models, i.e. Primary Model, Partnership Model, Community Model, and Public Model, representing the evolution of the Fixperts framework to better enable the development of students as confident and empathetic socially-led designers. The ‘Fixperts’ framework is currently being adapted to facilitate the Newton Fund sponsored UK-Turkey research link project on ‘sustaining inclusive design through co-design platforms’.

The wider context of inclusive design requires a holistic approach involving many stakeholders, utilising appropriate methods, and addressing various factors of exclusion, while reflections will help consolidate learning and development.

With rapid advances in technology and the increasing awareness of equality, diversity and inclusion issues in society, inclusive design researchers are facing new challenges and opportunities. A people-centred, context-aware approach with critical reflection will help move the field forward.

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For more information on the Inclusive Design SIG, please visit the SIG’s webpage at http://drs.silkstart.com/cpages/inclusive-sig. To find out whether the SIG is organising a satellite event to the DRS2020 conference, or just to get in touch with members and see news on the SIG, please visit the SIG webpage.