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The plethora and availability of digital tools and practices have transformed the ways art is created, perceived and disseminated. This had a distinct impact on how research is conducted across the arts and humanities as a whole from practice-led to process-focused and people-centred research. Airea’s first issue “Computational tools and digital methods in creative practices” germinated from a series of research focuses that began in 2016 when the research network (sIREN) was established by PhD students in Edinburgh College of Art, the University of Edinburgh. sIREN’s aim is to create a dialogue between several fields and promote new perceptions of research based on diverse methodological approaches. It seeks to form a platform of communication among arts and other disciplines, technologies and digital media, theory, practice and collaboration. For this, we organised a series seminars-workshops during the academic year 2016-2017 that brought together invited speakers from the University of Edinburgh (across Edinburgh College of Art, School of Education, School of Informatics, Edinburgh Centre for Robotics and School of Geosciences), the University of Warwick (Centre for Interdisciplinary Methodologies), the University of Newcastle (School of Architecture, Planning and Landscape) and the National Library of Scotland, followed by an international conference in May 2017, which included an interactive format of hands-on workshops, papers and a performance session.

“Computational tools and digital methods in creative practices” issue was developed as a highlight of the sIREN Conference 2017: Arts and Digital Practices, which set out to explore digital practices and their impact in contemporary artistic contexts. This issue investigates creative practices at the intersection of art and digital technology, and the role of the artist in blurring this discursive entanglement, by examining emergent forms of such practices. The selected papers in this issue reflect on key practical and philosophical challenges that contribute to the broader discussion of what it means to use digital tools as a form of artistic inquiry. These include the themes of computation and the creative process, data analysis in art practice and the intersection of art and science.

Panourgia et al. investigate the role of computer technology in forming and mediating a hybrid creative practice. Barahona Rios et al. survey artistic methods that rely upon the production or mapping of data-sets in their approach for identifying patterns in creative processes and in shaping this data into material form. Williams explores hybrid media installations and generative, participatory performance projects, which centre on embodied thought processes by creating open-ended connections among object, image, archive, digital process and textual material. Tenuta and Testa focus on how the boundaries between scientific method, artistic experimentation and creative process are increasingly interwoven in the contemporary scene. Stals examines ideas of design for devices and services based on a study of urban Human-Computer Interaction that centres on people’s experiences and emotions connected to personally significant places. Bogers and Jonsson look at the development of artistic work through an under-data perspective, rather representing it, bringing together digital artefacts, the body and their

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role in the construction of new data-driven health governance models.

Computation and creative processes theme addresses the role of computer technology as mediator and as an interface for artistic practices. Data analysis theme concerns artistic methods that rely upon the production or mapping of data-sets including systems, tools and approaches for identifying patterns in creative processes and shaping this data into material form. The theme of data analysis involves aspects of “digital urbanism” and investigates how digital arts form part of the political dynamics of urban space and contribute in digital place-making. Practices that bridge art and science examine the role of the artist in blurring this discursive separation. In this issue’s theme we showcase emergent forms of such interdisciplinary practice.

Making sense of data and digital processes in creative practice is rendered through various narratives developed by the authors in the first issue of the journal. Content so far has illustrated the flexibility of the discursive separation between art and science, doing some work to illuminate the rich area of contemporary practice that is born from this interstice. Moving forward, we wonder how the gaps between these disciplines will continue to shift in response to technological development. In particular, we ask how spaces, methods, practitioners and audiences will adapt to increased technological mediation, as we look to document practices that emerge from our interdisciplinary condition of creative processes.