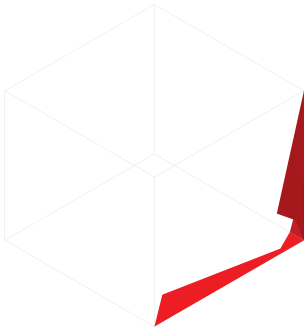


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VISUAL / TEXTUAL: DOCUMENTING THE REALITIES
OF RESEARCH THROUGH DESIGN PRACTICE.

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Editorial

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STUDIES IN MATERIAL THINKING

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'Research through design' as a practice-based form of inquiry is now widely adopted in humanities-based research cultures and beyond. However, questions as to how this form of inquiry is understood, validated, and disseminated are of current debate. In an attempt to progress this debate, a new international conference series called Research through Design (RTD) was created to support the dissemination of practice-based design research through a novel and experimental format. The inaugural RTD conference was held in 2013 at the BALTIC Centre for Contemporary Art, Gateshead, UK under the rubric of *Praxis + Poetics: Research through Design*. Following its success, RTD has been established as a biennial series and the second conference has just taken place at the new European lab of Microsoft Research in the centre of Cambridge, UK in March 2015.

The original aim of RTD was to foreground the materiality of design research, placing the artefacts of research practice centre stage. A second aim has been to create an environment that is purposefully and synergistically positioned for the presentation and discussion of 'research through design' practice. To this end a novel format foregrounding the research artefact through both exhibition and dialogical round-table discussion sessions in 'Rooms of Interest' was devised. The discussions and critical reflections arising during and following the conference demonstrate how this format offers a more synergistic approach for the dissemination of 'research through design' (Wallace, Yee & Durrant, 2014) than many traditional formats permit, and raises key practical and philosophical challenges therein, contributing to a broader discussion of what it means to practice research through design (RtD)¹ as a form of inquiry.

We sought to build on this entwining of the verbal, textual, physical and visual within the description and discussion of practice-based research that had occurred at the RTD conference through this special volume by taking the theme of *Visual/Textual: documenting the realities of research through design practice*. Our call and the papers in this volume are aimed at opening up the debate to a wider audience and enabling deeper engagement with the issues and challenges arising from the conference. One of the current burning

debates in Design disciplines is how to document the realities of research through design practice more analogously. Whilst the traditional conference paper, journal or essay format provides valuable and valid space (we are not disputing this), we also acknowledge that something more multi-layered and dialogical would offer greater potential to reflect the genuine nature of the practice and afford clearer description of the research findings and processes. The format of dissemination is, of course, only one of a number of considerations—there are significant challenges to how new formats (that incorporate visual argumentation and/or an exhibition component) are reviewed and accessed within academic communities. There continues to be tension in general terms—and as borne out in our experiences of RTD—between well-written research accompanied by a less well-made artefact, and vice versa. Entwined herein is another key issue; that of the wide-ranging roles that the artefact may take within research and how an author communicates this.

This special issue, *Visual/Textual*, came out of our experience and observations of the first RTD conference during September 2013. Many of the contributors to *Visual/Textual* originally participated and presented their research at this conference and were invited to develop it in response to the issue's main theme. The novel format and the reorientation of the role of the artefact in research process, documentation and communication raised additional complexities and challenges for the editorial team that are not often associated with traditional research conference formats. A number of issues emerged from the process of reviewing and selection of papers for the conference, not least around the issues of how different forms, modes and purposes of RtD practice are represented and the role(s) of the artefact in the development and subsequent dissemination. We were also keen to invite reflections on the challenges of conceiving, conducting and communicating research through design. This includes reflection on how design practitioners may be transitioning into design research, what opportunities for expression are offered by the RtD process, and the role of the artefact in this transition.

1 / We have tried to differentiate the conference series (RTD) with the practice (RtD) by the changing of the case of the letters.

True to the overall philosophy of the RTD conference, this special issue signals a constructive break from conventional journal format

In addition to having a special issue dedicated to the exploration of RtD issues, we were also keen to challenge the normative format of academic research publishing that has always favoured textual over visual communication. True to the overall philosophy of the RTD conference, this special issue signals a constructive break from conventional journal format by explicitly encouraging submissions that firstly reflect new and alternative conceptualisations of practice-based research; and secondly challenge the expected mechanisms for communicating and translating research to broader audiences. During the SI submissions process, we actively encouraged authors to utilise and leverage the potential communicative power of combining and interweaving visual and textual elements of their work, whilst at the same time echoing the conversational dynamic of the RTD conference philosophy. This is the main reason for the departure from the 'house style' in this issue to one that is more eclectic and individualistic to each of the contributions. Due to an equal importance awarded to the visual and textual elements, reviewers were asked not only to evaluate the submissions based on the quality of the intellectual content but also on the persuasiveness of the visual elements of the submission and how the authors creatively exploited opportunities to leverage visual argumentation using a visual/textual format.

Visual/Textual not only extends discussions and themes emergent in the new RTD conference series, it has also created an opportunity to bring the discussion about supporting the dissemination of research through design to a wider audience. SMT offers a different communication modality, a platform that is significantly different from the face to face, conversational and artefact-focused experience of the RTD conference event. The format of RTD with the intimate Rooms of Interest (around 30 people per room) and a maximum of three tracks makes it difficult to scale. Indeed, one of the insights we have gained to date as a conference steering committee is that RTD should not be scaled up, but instead be kept fairly small in size. However, this raises the potential issue of dissemination, of how to 'reach' interested audiences and how to extend the community of practice. The opportunity to curate a special issue in a well-established and open access journal is, for us, a perfect way to create better visibility and to enhance international readership. It will also create a significant additional opportunity for academic impact for the RTD authors.

The authors contributing to this special issue come from a broad disciplinary spectrum and include well-established researchers as well as design practitioners at the start of their research career. Although the contributions predominately reflect design perspectives from visual communication, product design, jewellery, interaction and 3D visualisation, we also have cross-disciplinary contributions from the humanities and sociology. The tone and content of contributions also varies, ranging from the theoretical underpinning of how we interpret visual communication pieces (Veronika Kelly), to personal reflective pieces that reveal the challenges of doing Research through Design (for example Rachele Riley) or find new ways to articulate practice in hybrid spaces (Michael Shorter). We also have contributions that describe and share new research methods derived from creative processes (Julia Keyte), whilst Jacqueline Lorber Kasunic and Kate Sweetapple discuss how visual mapping methods are adopted by historians in order to find new ways to interpret historical text through visualisation.

A striking feature of this collection is the variety of ways in which RtD practice, process and outcomes have been interpreted, applied and communicated. There are many compelling exemplars of RtD practices. Rachele Riley, for example, offers a personal yet critical narrative on a research project that investigates the ways design creates experiences that allow for critical engagement with difficult subjects by using the principles of interaction and the explorative nature of maps. Her project, 'The Evolution of Silence,' is a web-based archive and interpretation map of the Yucca Flat valley based in the Nevada Test site, which has been the site for forty-one years of post-WWII nuclear testing. The online archive is a result of her on-going research into the impact of nuclear testing in the United States and continues to change throughout her research journey. It provides visual evidence of the test sites in the form of photographs, and offers additional information through visual and textual details linked to each detonation site.

Julia Keyte's piece describes a creative method for engaging audiences in active reflection on their practices of keeping home possessions. It is an original work that attends to the relationship between visual and textual in doing 'research through design' about a subject area that remains under-explored. She brings together co-creation methods that incorporate elements of production, display, exchange, curation and audience contribution, and discusses how it develops an existing form of contemporary jewellery practice—the making of wearable memories. She employs a jewellery practice (brooch making) to reallocate the memories and feelings associated with unwanted possessions—and in this way makes a contribution to new knowledge. She also uses the paper to discuss the role of the artefact (in the form of the brooches) and how it acts as a catalyst for disseminating research, with the potential to create new connections between people and artefacts.

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Work by Holly Robbins and her colleagues offers a similarly engaging description of a practice-based project looking to inform material-oriented design in the field of HCI. The authors outline a research process for facilitating the design of connected objects that deliberately use material traces as texture for communication and interaction. Their initial findings have generated new understanding about how materials are perceived as 'mature' with use and how design concepts can be informed through this research process. Like anthropologists, they collected, analysed, and categorised 133 images of objects that had visible traces of their use. Fifteen traced types were chosen and used to study and understand what type of traces were perceived as aesthetically acceptable, and why. The results of this research were then used to inform the design exploration of the next stage, which resulted in an exploratory prototype that would enable people to intentionally create material traces as a means to inscribe and grow stories onto ordinary objects.

Whilst Riley, Keyte and Robbin's projects can be used as exemplars of RtD practice, for many of the other contributors, RtD is simply a means to an end—the end being the creation of new knowledge. Indeed, this is what sets RtD apart from the general creative design practice. For Michael Shorter, his design practice has enabled him to explore and to come to define his professional identity as a craft technologist. In his multi-narrative piece, Shorter attempts to trace his progression from his origin as a product designer to a practitioner who employs technology, craft and design in his current research practice. In working with materials, processes and technologies that are not confined to any one discipline, he found his practice difficult to define—not only to himself, but also in how he could articulate where his practice sits to others. Shorter's paper highlights not only the disciplinary breadth of many contemporary designer maker's practice, but also the different tensions and pulls that arise from hybrid practice. Equally concerned with unpicking practice to understand dynamics at play, although from a different motivation and positioning, Veronika

Kelly's piece draws on the complex interwoven relationship between communication and design and the various roles that human, object, rhetoric and idea play therein. Her communication design practice model uses the concept of resonance as a way to 'cut through' and enable a memorable and rich engagement between the reader and the designer. Through this deep engagement with the notion of resonance from both theory and reflective conversation with other designers, she has sought to refocus our attention to the detailed dynamics of how impactful and purposeful forms of communication design function.

Fionagh Thomson and John McGhee's paper brings to the fore a number of valid and complex issues concerning the role of the designer or artist and their resulting work within medical research collaborations. Thomson takes the lead to write of and around the work of McGhee, a 3D CGI artist researcher, within the context of his collaborations with medical professionals focused on the improvement of the realism of existing MRI images. The paper draws together a number of tensions that arise around the lack of the somatic body in medical diagnosis, fragmentation of information in patient consultation, issues of authority and ownership of knowledge in medical contexts, perceptions of authenticity of image, and the role of the artist in relation to both medical professional and patient. The role of the designer and the impact of their methods on other disciplines are of equal interest for Jacqueline Lorber Kasunic and Kate Sweetapple. Their work compellingly uses design visualisation approaches to reveal the semantic potential of text-based data in previously unseen ways. They describe a collaboration, between designers and historians focused on analyzing a historical text, within which Lorber Kasunic and Sweetapple used design strategies to reconfigure the text to create new 'ways in' to viewing and reading. By subverting conventions of reading and 'making strange' something that is familiar they enabled their collaborators to derive new insights from the data. Their work and that of Thomson and McGhee are exemplars of how design approaches and methodologies can enable new ways of viewing (quite literally)—and evidence the potential richness and complexities arising from the resulting artefacts and their interpretation by other disciplines.

The variety and richness of the papers in this special issue are testament to an exciting and rapidly developing community of practice around the RTD conference series. In closing, we suggest that the examples of work captured herein offer a contribution to an advancing academic discourse on design epistemology that gives serious attention to the forms of research understanding that may be generated through design practice.

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Dr Jayne Wallace is Reader in Craft Futures at Northumbria University, UK. Her work spans digital craft, interaction design and Human-Computer Interaction—focusing on co-creative design practice and the development of physical-digital devices that have social and personal meaning to support wellbeing and sense of self. She makes digital jewellery to explore how we can make things that are personal, beautiful and digitally enabled to give us new ways to understand ourselves and others—a long fascination being the ways in which our bodies and the objects that we associate with them (such as jewellery) represent different things about who we are and our relationships with other people. In recent years, a key focus has been sense of self in dementia and she has worked closely with people who are living with dementia as well as specialist adult mental health units in the National Health Service, UK. She is co-founder (with Joyce Yee) of *Praxis and Poetics: Research Through Design*—an experimental, discursive conference format physically foregrounding the artefacts stemming from design research.

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Dr Joyce Yee is a Senior Lecturer at Northumbria University Design School, UK. She holds a BFA in Graphic Design, an MA in Visual Communication and a PhD in Design. Her research is divided into two main strands: one focusing on the impact and value of design in social spaces and the other on the epistemological and methodological implications of research through design. She co-founded the inaugural *Research Through Design* conference with Jayne Wallace as an experimental platform for disseminating practice-based design research. Joyce has recently (in 2013) published *Design Transitions* with Emma Jefferies and Lauren Tan—a book about how design is changing around the world. She was also involved in co-editing *The Routledge Companion to Design Research* (2014), featuring 39 original and high quality design research chapters from contributors around the world.

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Dr Abigail Durrant is a Leverhulme Fellow at Newcastle University, UK. She is a creative design practitioner and researcher, with an interdisciplinary career spanning the arts and sciences and a longstanding curiosity in the design-led study of human-computer interaction from social and cultural perspectives. Her research in recent years has explored how the development of digital photography and social media may enable or constrain expressions of identity in different contexts and domains, by different communities and cultures. Through her fellowship, her current work explores the role of creative design practice in knowledge generation and communicative exchange within interdisciplinary research project teams grappling with possible technological futures. Abigail is a passionate advocate of dissemination platforms supporting ‘research through design’—being on the organizing committee for *Praxis and Poetics: Research Through Design* in 2013 and General Chair (with Dr John Vines, Newcastle University) of *Research Through Design* (RTD) 2015, and therefore centrally involved in establishing RTD as a biennial conference series.