

## **Design Studies**

### *Editorial*

#### *Fifty years of design research*

The 50<sup>th</sup> anniversary of the Design Research Society fell in 2016 with the 50<sup>th</sup> anniversary DRS conference taking place in Brighton, UK last June. The Design Research Society was founded in 1966 following the *Conference on Design Methods* held at Imperial College London in 1962 (Jones and Thornley, 1963). In the lead up to DRS2016 we contacted the secretary to that conference, Peter Slann, who now lives in Scotland, and who sent us the original reel-to-reel audio tape recordings of the 1962 conference. Listening to those tapes it is striking not only how similar some of the discussions are about design and design research, but also how much has changed – in 1962 every voice is a clipped, male, British voice. One comment at the end of the conference stands out as significant. Thanking people for coming to the conference and looking towards the future at the end of the closing session, John Page, then Professor of Building Science at Sheffield University, asks the audience three questions (the quote is verbatim):

“if one agrees that there are bodies of knowledge that have been raised here, which need further exploration – particularly a case in point would be the terminology of design – is there any point in trying to get some kind of interdisciplinary working party going on these problems? In this question of disciplines, is there any machinery or any way of arranging for an interchange of information between specialists and people working at Universities? Lastly, is there any point in making the whole thing more of a formal entity, a society, or something of that kind?”

Fifty years later it is clear that there was a point. The DRS as it exists today can trace its origins to the affirmation of that last question in 1962, and the ‘some kind of interdisciplinary working party’ that design research has become owes its identity to that 1960’s future-focused thinking. It was fitting that John Chris Jones, one of the key organisers of the 1962 conference – and a major contributor to the field of design methods ever since – was able to come to the 50<sup>th</sup> Anniversary conference and speak<sup>1</sup>.

On the occasion of the 40<sup>th</sup> Anniversary of the DRS, Nigel Cross wrote a *Design Studies* editorial reflecting on the development of design research as a discipline which is well worth reading for those who aren't familiar with the historical development of the field (Cross, 2007)<sup>2</sup>. His conclusion that “design research is alive and well, and living in an increasing number of places” still holds today and, if anything, since 2006 has increased considerably in reach and depth. In the 10 years that have passed we have seen significant new journals launched, such as *The International Journal of Design, Design and Culture*, and latterly *She-Ji: Design, Economics and Innovation*, with publication in the field now a subject of study in itself (Gemser et al, 2012; Gemser and de Bont, 2016) a sure sign of good health. Design methods continue to be a staple of design research as new practices such as co-creation and design thinking have emerged and spread far beyond the traditional disciplines of designing. The increasing sophistication and speed of the internet has served to widen accessibility, and popularise design and design research, for example through initiatives such as the TED (Technology, Entertainment, and Design) conference series. The number of academic conferences related to design research continues to grow, with audiences increasingly diverse and often bridging research and practice in interesting ways (see for example the *Research Through Design* conference series (Durrant et al, 2015)). Perhaps fueling this growth are increasing numbers of PhD researchers who are often major contributors to conferences. Organisations like PhD by Design<sup>3</sup> are driving up research quality and ensuring that today's PhD Researchers will become tomorrow's design research leaders.

Conferences have been central both to the DRS and to the development of the design research field and since the 1962 conference many design research conferences have been held, with the DRS often as a key organiser (see list below). In common with other academic disciplines, defined sub-fields of research has originated from these conferences. *Design Participation* in 1971 (Cross, 1972) started the participative design movement that has grown into present day co-design. *Design for Need*, held in 1976 (Bicknell and Mcquiston, 1977), taking a global view of the population, started both sustainable and inclusive design, and *Design Policy* held in 1980 (Langdon and Cross, 1984) introduced a much needed social, political and international dimension to the design research field as design itself lurched into the consumerist 80s. From

almost every conference comes a thread that leads to the present day, so the 50th anniversary conference represented a point to gather those threads together and consider what kind of textile they might weave in the coming years.

The second aspect of design research conferences is less familiar in other research disciplines where the paper presentation dominates. This is the development of the conference form itself, in terms of the formats available to attendees for presentation, dialogue, and engagement. Design Participation in 1971 experimented with video:

“The proceedings in the main hall were video-taped, and also relayed by CCTV to the lounge. These facilities made it possible for participants to choose their own level of participation. The video recordings were made available to participants if they wanted to see a presentation again, or to catch up on one they had missed. Extra discussion rooms were also in use during each evening. One group took the opportunity to introduce a new participatory design-educational game called GRIPS (Gaming, Random Interfacing and Problem Structuring).” (Talbot, 1972)

While the 1973 Design Activities conference aimed at:

“the provision of an extension of media forms beyond the normal ‘verbalized’ media of the average conference with the idea that such extensions were significant contributions to dialectical form, and not just ‘entertainments’.”

The 2014 DRS conference, in Sweden (Lim et al, 2014)<sup>4</sup>, continued this tradition by introducing new formats for ‘Conversations’ and ‘Keynote Debates’ alongside the more traditional academic paper presentation, which allowed greater participation from people not able to submit papers but experienced in the design research field (Boess, 2015). It is entirely appropriate that the field of design research is at the forefront of conference design, using new technologies and platforms to develop more productive formats for discussion, engagement, networking, and presentation. And rightly so, because in an age when research papers and keynote presentations are available online we need to ask whether a conference, with all the travel, expense, and carbon involved, is still the most effective way of energizing and invigorating a

research field.

DRS2016 continued this conference prototyping activity designing a discursive conference leaning both towards the academic, in research papers, but also towards practice in Conversations<sup>5</sup> and Workshops<sup>6</sup>. The conference thus attempted to present existing research, projects, and discussions not as fixed end points, but as ongoing dialogue. To do that the online conference, an increasingly large part of the conference experience, was balanced with the offline one. This approach helps to provide a continued legacy for the conference, but it also helps to include as many people as possible in directing the dialogical flow of research activity.

As an organising committee we met in January 2015 to identify key questions, conference themes and conference design. From that discussion the three individual words of the DRS – Design, Research, and Society – were felt to define a promising area for an anniversary conference; one that was about the practice and *doing* of design but also about design's societal impact and the moderating role that research plays between the two. Design, research, and society represent a larger area than that of the Design Research Society, but as the proceedings<sup>7</sup> demonstrate there is clearly an appetite for design research to embrace ever-wider concerns.

The premise of the organizing committee was that 50 years of design research has provided us with a sound understanding of design and a solid foundation upon which to build. The interesting questions, then, appeared not so much in how we do more of the same – though that of course has its place – but in how we use what we now know. The overall theme was *Future-focused Thinking* which was underpinned by three questions:

- How can design research help frame and address the societal problems that face us?
- How can design research be a creative and active force for rethinking ideas about Design?
- How can design research shape our lives in more responsible, meaningful, and open ways?

The DRS now has nine established Special Interest Groups (SIGs: see list below) which the organising committee thought important to prioritise at the conference alongside additional emerging and complementary research themes. A call for additional themes in June 2015 resulted in 15 further themes (from 25 proposals) alongside the 9 themes represented by the Special Interest Groups. The idea of a ‘conference of conferences’ began to emerge, with theme papers managed by sub-chairs, but consistency of peer-review overseen by a central review committee across all themes.

The online systems currently available for managing paper submission, in the case of DRS2016 the excellent ConfTool system, now provide comprehensive integrative platforms to conduct sophisticated submission, peer-review, rebuttal, discussion, communication, and programming of papers, which means we can be more confident than ever about the academic quality of the final papers accepted for DRS2016 and published in the proceedings (Lloyd & Bohemia, 2016). In total we received just under 500 paper submissions, all of which were reviewed by two, and sometimes three reviewers, as well as being managed by theme chairs. In total 939 reviews were written by 290 reviewers with 200 papers being accepted, and a further 40 accepted following revision. This represents an acceptance rate of 49%.

In parallel with the paper submission process, and to mark the 50<sup>th</sup> Anniversary of the DRS, a number of bursaries were offered by the Society for researchers to explore aspects of DRS history, and an exhibition commissioned, *Design Research and its Participants*, which was curated by the Brighton Design Archives<sup>8</sup>. Of the three bursary projects that were selected<sup>9</sup> Darren Umney (Open University, UK) looked at how networks of design research and researchers have developed through the various DRS conferences that have been held, Alejandra Poblete (Universidad Tecnológica Metropolitana Santiago, Chile) looked at the thematic growth of the subject, and Søren Rosenbak (UMEA University, Sweden), taking the view that design is a process of learning from failure, asked design research leaders why design research had so far failed. This resulted in the ‘50 years of failure’ project that has since grown considerably<sup>10</sup>.

The conference itself was the biggest DRS conference to date. Almost 650 people from 35 countries registered with many others disappointed when the conference sold out some weeks prior to starting. The majority of attendees were academic researchers but a significant number were from industry or other organisations: IBM, Microsoft, and Philips sponsored the conference, while organisations such as IDEO, Google, SAP, Frog Design, and the Victoria & Albert Museum were all represented.

The 240 papers of the proceedings are grouped under 26 themes. Fittingly for a 50<sup>th</sup> Anniversary conference there was a strong historical thread of papers – the field of design research now becomes a subject of historical study in the themes of *Histories for Future-focused Thinking*, *50 Years of Design Research*, and *Design for Design: The Influence and Legacy of John Heskett*. This is a useful development, and evidences, once again, the current maturity of the field, with early work not just a familiar citation in reference lists, but now considered in a wider cultural and historical context. Of three notable papers in these themes, two looked back on influential figures in design research – Donald Schön (Beck and Chiapello, 2016) and Bruce Archer (Boyd Davis and Gristwood, 2016) – whilst one used the past to look forward to the future (Dorst, 2016).

Many of the new themes brought a more critical and speculative approach to design research, framing research questions and practices in ways other than what some see as more traditional, evidence-based approaches to research. These are papers that argue for a particular position or approach to understanding design or practice.

Examples of these themes include *Aesthetics, Cosmopolitics & Design*; *Design-ing and Creative Philosophies*, and *Reframing the Paradox: Evidence-based Design and Design for the Public Sector* with notable papers looking at ethnographies of design products (Gasparin, 2016) and design in a political context (Bailey and Lloyd, 2016; Umney et al, 2016).

The emerging area of Social Design was well represented in the areas of *Design Innovation for Society* and *The Politics of Commoning and Design* and shows the importance of Design Research in discussing and achieving concrete outcomes for social good. Two stand-out papers studied how designed artefacts could facilitate stakeholder dialogue (Durrant et al, 2016) and social problem solving (Cooney et al,

2016).

The idea and limits of design and design research were explored in many themes, but in particular *Objects, Experiences, Practices & Networks*; *Design and Translation*; and *Design for Tangible, Embedded and Networked Technologies* all took a more systemic view of design, placing it within a network of activities and technologies. Chan (2016), for example, explores design ethics from this perspective. In contrast to this other themes focused much more on the individual and collective experience of designers and others involved in the process of design, for example: *Experiential Knowledge*; *Embodied Making and Learning*; *Aesthetic Pleasure in Design*; and *Food and Eating Design*. Notable papers here include Leinikka et al (2016) studying the physiological aspects of drawing and making, and Mayer and Landwehr (2016) who find new ways of measuring product typicality.

There were themes that have been ever-present in DRS, and in other design research, conferences. Understanding design process and the nature of design knowledge are the subject of the *Design Process* and *Design Epistemology* themes with, for example, Pschetz et al (2016) using a practice-based approach to look at how the concept of time in the design process can be understood. The practical impacts that design can have on all types of organisations were explored in *Design Thinking* and *Design Innovation Management*. *Design Education and Learning*, now with its own large biennial conference series, was the most popular theme for DRS2016, with 28 papers accepted from 53 submissions. A paper that spanned all these themes was Radtke (2016) that used a design research approach to evaluating University living and learning spaces.

Finally, there was a set of well-developed themes, convened by DRS Special Interest Groups, that broadly explore the welfare of others, both in a small and large sense, embracing ideas of person-centredness, responsibility and ethics. These themes include *Design for Health, Wellbeing, and Happiness*; *Inclusive Design*; and finally *Sustainable Design*. Notable papers included a study of design for dementia (Treadaway et al, 2016) and a study of how value conflict can be managed in transitioning to more sustainable ways of living (Sze-Man Mok et al, 2016).

As in any research field the definitions between sub-areas often blur and overlap, and there were themes that contradicted and conflicted with one another, strongly arguing against a particular approach or theoretical grounding of another area. The DRS2016 keynote debates<sup>11</sup> were designed to explore some of these faultlines but again this should be taken as a sign of health and maturity. For many years we have heard that design research is a new field, still finding its feet, but the definition and extent of the themes and papers in the proceedings demonstrate precisely the opposite. In fifty years we have built a strong and diverse research field that is widely applicable, broadly inclusive and, in 2016, more relevant than ever.

There is a sense in which design research sits at the crux of a false dichotomy; between on the one hand research in a 'pure' form (which values objectivity, subjectivity, experiment, discourse, history, analysis) and on the other the active engagement in shaping future forms by suggestion, prototype, speculation, practice, and intervention at all levels, from the molecular to the political, from the anthropological to the computational. In an increasingly fragmented and atomised world, design research is a field that reveals the falsehood of the dichotomy. It is a field that links disciplines, audiences, and technologies in a critical but productive way. The design of a conference – with its implicit value systems, partiality to statistical analysis, but with an emergent structure and experience-centredness – is no bad example of a future-focused design research that shares what knowledge is known and explores what knowledge is possible.

On behalf of the conference organising committees I would like to thank all people – the local organisation, the international programme and review committee, and all the reviewers – involved in organising DRS2016 who have contributed to such a huge collective effort. The valuable time that has been given in helping to shape and deliver such a successful conference has been very much appreciated. Thanks should also go to the Design Research Society, for supporting the conference so effectively; to the Royal College of Art and Imperial College London for providing time and resources as partner Universities; and to the University of Brighton, particularly the College of Arts and Humanities, for enabling the early vision of a 50<sup>th</sup> Anniversary DRS conference to be fulfilled. We look forward to DRS2018 in Limerick, Ireland, and of course to the next 50 years of design research.

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General Chair of DRS2016

**Design Research Society and Associated Conferences**

1962 *Conference on Design Methods*, London, UK

1964 *The Teaching of Engineering Design*, Scarborough, UK

1965 *The Design Method*, Birmingham, UK

1967 *Design Methods in Architecture*, Portsmouth, UK

1971 *Design Participation*, Manchester, UK

1972 *Design and Behaviour*, Birmingham, UK

1973 *The Design Activity*, London, UK

1974 *Problem Identification for Design*, Manchester, UK

1976 *Design for Need*, London, UK

1976 *Changing Design*, Portsmouth, UK

1978 *Architectural Design*, Istanbul, Turkey

1980 *Design Science Method*, Portsmouth, UK

1982 *Design Policy*, London, UK

1984 *The Role of the Designer*, Bath, UK

1998 *Quantum Leap*, Birmingham, UK

1999 *CoDesigning*, Coventry, UK

2002 *Common Ground*, London, UK

2004 *Futureground*, Melbourne, Australia

2006 *Wonderground*, Lisbon, Portugal

2008 *Undisciplined!*, Sheffield, UK

2010 *Design And Complexity*, Montreal, Canada

2012 *Uncertainty, Contradiction and Value*, Bangkok, Thailand

2014 *Design's Big Debates*, Umea, Sweden

2016 *Future-focused Thinking*, Brighton, UK

## **DRS Special Interest Groups**

Experiential Knowledge

Design for Health, Wellbeing and Happiness

Design Pedagogy

Objects, Practices, Experiences, Networks

Inclusive Design

Sustainability

Design for Behaviour Change

Design Management

Design for Tangible, Embedded and Networked Technologies

## **References**

- Bayazit, N. (2004). Investigating design: A review of forty years of design research. *Design Issues*, 20(1), 16-29.
- Bailey, J., Lloyd, P. (2016). The Introduction of Design to Policymaking: Policy Lab and the UK government, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 9, pp 3619-3634.
- Beck, J. and Chiapello, L. (2016). Schön's Legacy: Examining Contemporary Citation Practices in DRS Publications, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 1, pp 17-30.
- Bicknell, J. & McQuiston, L. (1977). *Design for Need, The Social Contribution of Design*. Pergamon Press, Oxford, UK.
- Boess, S. (2016). DRS2014: Design's Big Debates: Design Research Society's Seventh Biennial International Conference, Umeå, Sweden, June 16–19, 2014 (conference review). *Design Issues*, 32(2), 91-94.
- Boyd Davis, S., Gristwood, S. (2016). The Structure of Design Processes: Ideal and Reality in Bruce Archer's 1968 Doctoral Thesis, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 7, pp 2593-2612.
- Chan, J. (2016). From Afterthought to Precondition: Re-engaging Design Ethics from Technology, Sustainability, and Responsibility, in: P. Lloyd & E. Bohemia,

- (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 9, pp 3539-3552.
- Cooney, R., Stewart, N., Ivanka, T., Hasle, N. (2016). Design and the Creation of Representational Artefacts for Interactive Social Problem Solving, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 6, pp 2203-2220.
- Cross, N. (ed.) (1972). *Design Participation: Proceedings of the Design Research Society's conference, Manchester, September 1971*. Academy Editions, London.
- Cross, N. (2007). Forty years of design research. *Design Studies*, 28(1), 1-4.
- Dorst, K. (2016). Design Practice and DesignResearch: Finally Together?, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 7, pp 2669-2678.
- Durrant, A., Vines, J., Wallace, J. & Yee, J. (2015). Developing a dialogical platform for disseminating research through design. *Constructivist Foundations*, 11(1), 8-41.
- Durrant, A., Moncur, W., Kirk, D., Trujillo Pisanty, D., Orzech, K. (2016). On Presenting a Rich Picture for Stakeholder Dialogue, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 6, pp 2183-2202.
- Gasparin M., Green, W. (2016). Framing Values in Design, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 3, pp 881-894.
- Gemser, G., de Bont, C., Hekkert, P. & Friedman, K. (2012). Quality perceptions of design journals: The design scholars' perspective. *Design Studies*, 33(1), 4-23.
- Gemser, G. & de Bont, C. (2016). Design-related and design-focused research: A study of publication patterns in design journals. *She Ji: The Journal of Design, Economics, and Innovation*, 2(1), 46-58.
- Jones, J. C. & Thornley, D. G. (eds.) (1963) *Conference on Design Methods*, Pergamon Press, Oxford, UK
- Langdon, R. & Cross, N. (eds.) (1984) *Design Policy*, Design Council.
- Leinikka, M., Huutilainen, M., Seitamaa-Hakkarainen, P., Groth, C., Rankanen, M., Mäkelä, M. (2016). Physiological Measurements of Drawing and Forming Activities, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 7, pp 2941-2958.
- Lim, Y.-K., Niedderer, K., Redström, J., Stolterman, E. & Valtonen, A. (eds.). (2014).

*Proceedings of DRS 2014: Design's Big Debates* Umeå, Sweden: Umeå Institute of Design, Umeå University.

Lloyd, P. & Bohemia, E. (eds.) (2016) *Design+Research+Society - Future-Focused Thinking: Proceedings of DRS2016*, 28-30<sup>th</sup> June, Brighton, UK, DRS Publications.

Mayer, S and Landwehr, J. (2016). Measuring Design Typicality: A Comparison of Objective and Subjective Approaches, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 1, pp 145-156.

Pschetz, L., Bastian, M., Speed, C. (2016). Temporal Design: Looking at Time as Social Coordination, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 5, pp 2109-2122.

Radtke, R. (2016). Evaluating Living and Learning on Campus: A Community Engaged Research Model, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 2, pp 685-704.

Sze-man Mok, L., Hyysalo, S., Väänänen, J. (2016) Designing for Sustainable Transition through Value Sensitive Design, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 10, pp 3889-3912.

Talbot, R. (1972) Foreword. In Cross, N. (ed.) (1972). *Design Participation: Proceedings of the Design Research Society's conference, Manchester, September 1971*. Academy Editions, London.

Treadaway, C., Prytherch, D., Kenning, G., Fennell, J. (2016). In the Moment: Designing for Late Stage Dementia, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 4, pp 1442-1457.

Umney, D., Earl, C. & Lloyd, P. (2016). Design as Analysis: Examining the Use of Precedents in Parliamentary Debate, in: P. Lloyd & E. Bohemia, (eds.), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, Volume 9, pp 3687-3704.

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## Notes

<sup>1</sup> A recording of John Chris Jones' presentation, along with many other materials and outcomes from

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the conference, including the conference proceedings, are available on the website: [drs2016.org](http://drs2016.org).

<sup>2</sup> See also Bayazit (2004) for a historical overview of the design research discipline.

<sup>3</sup> [www.phdbydesign.com](http://www.phdbydesign.com)

<sup>4</sup> See also the conference website at: [www.drs2014.org](http://www.drs2014.org)

<sup>5</sup> [www.drs2016.org/conversations](http://www.drs2016.org/conversations)

<sup>6</sup> [www.drs2016.org/workshops](http://www.drs2016.org/workshops)

<sup>7</sup> [www.drs2016.org/proceedings](http://www.drs2016.org/proceedings)

<sup>8</sup> [www.drs2016.org/exhibition](http://www.drs2016.org/exhibition)

<sup>9</sup> Descriptions of all three bursary projects can be found at: [www.drs2016.org/bursaries](http://www.drs2016.org/bursaries)

<sup>10</sup> An interactive website for the project can be accessed at: [www.designresearchfailures.com](http://www.designresearchfailures.com)

<sup>11</sup> See [www.drs2016.org/debates](http://www.drs2016.org/debates) for further details.