

Analyzing Design Review Conversations

Call for Declarations of Interest (due 5th January 2014)

10th Design Thinking Research Symposium

12th – 15th October 2014

Purdue University, West Lafayette Indiana USA

Understanding the nature and the nurture of expert performance in design has been a central mission of the *Design Thinking Research Symposium* (DTRS) [series](#). The first DTRS was held in 1991 at Delft University of Technology and involved a small, international group of pioneering design researchers spanning such disciplines as architecture, art, cognitive science, engineering, product design, and philosophy. To date there have been nine DTRS meetings, resulting in a substantial set of influential and field-shaping publications in books and journals.

The formats of DTRS meetings are unique in their approach to fostering an international community of design thinking scholars, sharing and synthesizing cross-disciplinary work, and identifying and promoting necessary further research. One format has been the creation of a shared research dataset in which design researchers are invited to apply their expertise to “design thinking” data and share their insights at the symposium to further advance an understanding of the particular knowledge designers (in any discipline) possess, the nature of design learning and inquiry, and how designers synthesize ideas from seemingly disparate fragments, develop ambidextrous mindsets for innovation, and co-design with others to find “life-centered” approaches to current and future needs.

The 10th DTRS will be held October 12-15, 2014 at Purdue University. This DTRS will involve sharing a common research dataset of **design review conversations**: digital videos of conversations between those who give and those who receive feedback, guidance or critique during a design review event. To catalyze conversations before, during, and after the symposium there will be:

- A dynamic art exhibition to visually and interactively represent “design review conversations” and the symposium experience.
- A Research-to-Practice workshop to develop teaching materials and resources based on the shared research dataset and symposium conversations.
- A cyberinfrastructure system to support socially networked collaborations across the globe.
- An edited book and special issues of such journals as *Design Studies* and *CoDesign*.

The following paragraphs list key deadlines, describe the shared research dataset and project timeline, and identify the organizing committee. A copy of this file is located at this [link](#).

DEADLINES

6 th January 2014	Formal declaration of interest
15 th February 2014	Commitment to Symposium via research brief
30 th April 2014	Submission of research proposal
15 th July 2014	Submission of draft paper
7 th September 2014	Submission of final paper
12 th – 15 th October 2014	Design Thinking Research Symposium

DESIGN REVIEW CONVERSATIONS DATASET

Design review conversations are a common and prevalent practice for helping designers develop design thinking expertise, although the structure and content of these reviews may vary significantly. They make the design thinking of design coaches (instructors, experts, peers, and community and industry stakeholders) and design students visible. During a design review, coaches notice problematic and promising aspects of a designer’s work – drawing on repertoires from similar situations to anticipate problems designers may encounter and ways to help them work through these problems, pointing out features of a design that could be wrong or improved, pushing designers to justify their ideas about “good design” more clearly and thoroughly, prodding designers to reveal the thought processes that led to the current design, connecting a design feature to historical and cultural precedent, and praising design work pointing to particular insights and choices. In this way, design students are supported in revisiting and critically evaluating their design rationales, and making sense of a design review experience in ways that allow them to construct their design thinking repertoire and evolving design identity.

The DTRS shared research dataset provides multiple entry points into a generative space for advancing a cross-disciplinary synthesis of design thinking and learning. These multiple entry points include variations in:

- Design review structures (desk critique, informal, formal, juried) and modalities (text, speech, objects, gestures)
- Design review stages (early concept to final review)
- Interactions (individual/group, face to face/virtual, global)
- Longitudinal (initial to final reviews) and comparative data
- Disciplinary and interdisciplinary cultures (choreography, entrepreneurial design, industrial design, mechanical engineering, service learning design, systems of systems design)
- Design principles (aesthetic, functional, technical, entrepreneurial, human-centered, complexity, “simple” design)

Digital video recordings were made with a single camera in natural settings. Data files will include (1) digital video recordings, (2) time-stamped and line-numbered transcripts, (3) copies of work documents, when available, and (4) an overview of the data (course schedule highlighting design review timeline and data collection schedules).

TIMELINE

	2013					2014												2015			
	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	
Data Collection	■	■	■	■	■																
Data Distribution						■	■														
Registration										■	■	■	■								
Declare Interest					■																
Research						■	■	■	■	■	■	■	■								
Submission													■	■							
Symposium																■					
Research-to-Practice																■					

Workshop																				
Publication																				...

DATA COLLECTION PHASE

August – December 2013 / January 2014: During the data collection phase the workshop organizers will collect digital video recordings of a series of “design review conversations” between design coaches (instructors, experts, peers, and community and industry stakeholders) and design students (undergraduate and graduate level) who are working on disciplinary and interdisciplinary projects or teams. These conversations will span one-on-one and group level desk critiques that occur semi-formally or spontaneously in student workspaces to more formalized scheduled presentations of work-in-progress or final work, some including expert juries.

During this phase participants are invited to **formally declare their interest in the project** by providing a brief summary sent to rsadams@purdue.edu of how their research to date might inform the analysis of the data and a list of potential research collaborators. The deadline for this is the **6th of January 2014**. Those who submit a formal declaration of interest will be required to sign a data sharing agreement to gain access to the data.

DATA DISTRIBUTION PHASE

January - February 2014: Data files will reside on a secure (password protected) Purdue University Research Repository (PURR). Data will be formatted using globally preferred formats (e.g., .txt, .pdf, .mov) so participants may access and download the data for use on their own computers. The PURR site will be linked to a symposium website that will have announcements and information on registration and housing.

During this phase participants are required to **formally commit to the symposium** by providing a research brief indicating collaborators and initial plans for analyzing the data including which parts of the data will be used and how the project will be informed by previous research. This will allow the organizers to ensure synergy between research analyses. The deadline for this is the **15th of February 2014**.

Because the Symposium will be immediately followed by a Research-to-Practice workshop, the organizers encourage including collaborators involved with design teaching or coaching in academic or workplace settings.

RESEARCH PHASE

February - July 2014: During the research phase participants will analyze the data they have selected. As there will be upwards of 25 hours of data this will be quite an intense period for research groups.

During this phase participants will be required to produce a **research proposal** outlining their research plan. The deadline for this proposal is the **30th of April 2014**. Individual comments on proposals will not be provided, rather a summary of proposals will be produced in early June as a way of communicating the overall shape of the symposium. Participants should not feel limited by this first initial proposal; it is likely that research plans will evolve as participants delve more deeply into the data.

SUBMISSION PHASE

July - September 2014: Following the end of the research phase, participants will submit a **draft paper** due the **15th of July 2014**. This will be reviewed by two members of the organizing committee and will focus on quality, clarity and organization, formatting requirements, paper length, and synergies between papers. At this stage, themes may become apparent for the symposium and reviewer comments will seek to reinforce these themes. While we do not expect to reject papers at this stage, we do reserve the right to reject papers that clearly do not engage with the data or the overall spirit of the symposium.

By the **7th of September 2014**, participants are required to submit a **final paper** for presentation at the symposium. Pre-prints for the symposium will be produced from these papers.

WORKSHOP

May – August 2014: Registration for the symposium. A website will provide travel information and manage the registration process.

October 2014: The workshop will be held from the 12th to the 15th of October. The Symposium will begin with an evening reception and art installation on the 12th followed by sessions on the 13th and 14th. An emphasis will be placed on creating a single-track format with multiple opportunities for discussion and interaction. Immediately following the symposium will be a one-day Research-to-Practice workshop where participants are encouraged to draw on the research and discussions during the symposium to identify actionable plans for using the research in design teaching or coaching.

PUBLICATION PHASE

November 2014 – July 2015: Following the symposium, research groups will be asked to revise their papers according to the discussions of the symposium and the themes that emerged (which also provides an opportunity to reference other's papers). The proofs for the edited book, which will be published by Purdue University Press, will be due at the end of July 2015.

During this period, a selection of papers will be made for publication in special issues in such journals as *Design Studies* and *CoDesign*.

ORGANIZING COMMITTEE

- Robin Adams, Associate Professor, Engineering Education (Host)
- Andrew Brightman, Professor and Assistant School Head, Biomedical Engineering
- Patrice Buzzanell, Professor, Brian Lamb School of Communication
- Nathalie Duval-Couetil, Director of Certificate in Entrepreneurship and Innovation Program, Associate Professor in Department of Technology Leadership and Innovation
- Michael Fosmire, Professor, Library Science
- Holly Jaycox, Continuing Lecturer, Dance
- Shannon McMullen, Assistant Professor, Art and Design, American Studies
- David Radcliffe, Epistemology Professor, Kamyar Haghighi Head, Engineering Education
- Senay Purzer, Assistant Professor, Engineering Education
- Fu Zhao, Associate Professor, Mechanical Engineering

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