Workshop Proposal: Artifacts in Design: Representation, Ideation, and Process

Motivation
What is a design artifact and how do we represent them? How do artifacts inspire us during design? Can artifacts be used to guide the process of design?

Design is a process of creation, and artifacts are leveraged in various ways throughout the process of design. These artifacts exist in various forms; some are used as prompts for design research, while others act as artificial organizational schema imposed as constraints to help the designer manage complexity. Still others are used to manage both the design process itself and the various thoughts and reflections that occur during design.

What is an artifact?
Fundamentally, artifacts are representations that express characteristics such as the properties of the object itself or captured information such as design constraints. They can emerge naturally during the design process or be created and distributed to others to help inspire new design. As such, artifacts can serve as an ongoing record of what can be and is created through design.
Sharing and Learning Artifact-Based Methods
This workshop is intended for designers and researchers who use, build, or study the use of artifacts in the process of design. The goal of the workshop is to gain common experiences with artifact-centric design tools from industry and academia—such as IDEO’s Method cards, Friedman’s design cards, and methods submitted or cited by participants—toward reflecting on definitions and representations for artifacts and on characteristics of processes and tools that are useful to designers. There is a need to identify the characteristics of artifacts and their usage that contribute to how designers think, represent, and manage early design efforts.

Workshop Proposal
The workshop will be a combination of hands-on experience with diverse artifact-based design methods, sharing of research, and development of common issues. Therefore, we want to limit the workshop to no more than 20 participants.

Intended Participants
This workshop is geared toward those who are interested in the role various kinds of artifacts can play in early design activities. It is expected that participants will come to the workshop with expertise in one or more of the key areas of: definition and representation of artifacts, the role of artifacts in design ideation, and artifact-centric processes and tools for design. Participants are expected to share their approaches and try out the approaches of others during the workshop in order to promote discussion of issues.

As mentioned in our call that will be placed on our website, all participants will submit a 2 to 4 page position paper outlining the artifacts, techniques and/or tools they are working with. We will try to acquire enough submissions for each of the three key areas to ensure we have a range of ideas.

Content
We will select candidate techniques for the workshop from among the ones submitted for each key area. Since only a limited subset of methods (no more than 3 or 4) can be tried in a short period of time, we will base our selection on practicality of execution in the workshop context and diversity of approaches.

Organization
Preliminary Agenda
09.00-09.30 Introduction of the topic and of participants (No Slides!)
09.30-10.30 Definition and artifact representation
10.30-11.00 Coffee Break
11.00-12.30 Artifacts and ideation
12.30-13.30 Lunch
13.30-15.00 Artifact-centric processes and tools
15.00-15.30 Coffee Break
15.30-17.00 Discussion of hand-on activities and poster

Experiencing the methods
We will structure our schedule around our three key areas of focus. Participants will be divided into groups of 3 or 4 to try the various hands-on activities. For the sake of time, we may run different techniques belonging to the same key area simultaneously for maximum exposure and discussion. At the end of each hands-on session, we will ask the participants to provide thoughts on a poster, to be finalized at the end.
Discussion topics

- How does artifact-use differ in the context of an applied design problem (in a consultancy) as compared to in a research problem (in an academic research context)?
- What are the advantages and disadvantages of using certain kinds of artifacts?
- What types of artifacts lead to increased ideation, either in quantity or quality?
- How do designers find and learn about artifacts?
- How can designers create novel artifacts out of existing ones?
- How can artifacts be interpreted, especially those that are being reused, in creative ways?
- What kinds of artifacts can be combined together into a design representation?
- What collaborative design activities can benefit from the use of artifacts?
- How can tools and online repositories of artifacts be best structured to facilitate design?

Workshop Outcomes

There are several intended outcomes of this workshop:

1. To identify and bring together researchers interested in exploring the use of artifacts and their utility in early design work.
2. To author a highly visible article or special issue of a widely dispersed magazine (e.g., *interactions*), toward promoting ways to capture and use artifacts in emerging design environments.
3. To foster further collaboration on among researchers in academia and industry engaged in artifact-based design.

Organizers

D. Scott McCrickard is an Associate Professor of Computer Science at Virginia Tech. His interests include design reuse and methods for interface design.

Michael E. Atwood is a Professor in the College of Information Science and Technology at Drexel University. His interests include collaborative design and knowledge management systems.

Gayle Curtis is an independent design consultant. He is affiliated with the Stanford d.school and most recently was Principal Interaction Designer at Yahoo! His interests include strategic ideation and design methods.

Steve Harrison, previously at Xerox PARC, is a faculty member in Computer Science at Virginia Tech. His interests include design methods.

Jon Kolko is an Associate Creative Director at frog design and is the editor-in-chief of *interactions* magazine. His interests include design synthesis.

Erik Stolterman is a Professor of Informatics at Indiana University at Bloomington. His interests include information systems design and use and the philosophy of design.

Shahtab Wahid is a Ph.D. student in Computer Science at Virginia Tech. His research interests include design reuse and rationale capture for design.