

DRAFT PROPOSAL

Verbalization of Design Thinking through Informal Peer Critique

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Abstract: TBD

Critique has long been considered a benchmark of design education, serving as both a structural mechanism with which to provide regular feedback (Cennamo, Brandt, & Scott, 2010), and as a high stakes assessment tool (Anthony, 1991). While critique can be seen in more or less formal positions in the pedagogy of the studio, ranging from an informal desk crit (Reimer & Douglas, 2003; Boling & Smith, 2010) to a formal critique attended by multiple faculty comprising a “design jury” (Anthony, 1991).

The role of self-reflection with a design artifact or problem is widely acknowledged as an important factor leading to developing as a designer (Schön, 1985; Cross, 2007). This self-reflection can take many forms, including internal dialogue (Schön, 1985), sketching (Do & Gross, 1996), and a community of practice surrounding the designer (Cennamo, et al, 2010). Within the studio environment, I propose informal peer critique as a natural extension of these existing forms, engaging the practice community (Cennamo, et al, 2010) in *reflection-in-action* due to the natural physical co-location of the studio environment.

Purpose of Study

The purpose of this study is to gain greater understand of the pedagogical role of informal critique in shaping design thinking and judgment. While critique has long been considered a vital part of the design studio pedagogy, formal critique is often emphasized, with a strong delineation between an expert and novice within that domain.

1. What role does informal critique play in a designer's understanding of their work?
2. How does informal peer critique encourage verbalization of design decisions?

Method

The methodology of this study is informed by a critical theory perspective, and uses a combination of interview and design protocol techniques in the process of data collection. A critical theory perspective allows the researcher to elicit responses for which the participants have tacit awareness (Carspecken, 1996), and serves as an exploratory vehicle in understanding initial patterns of design thinking and critique, and in performing stimulated recall to make sense of that participant's responses during the critique dyad. Protocol studies have a long history in the field of design research (Cross, Christiaans, Dorst, 1996), and although no explicit design problem is provided in this study, a somewhat contrived informal critique is constructed, in which the participants interact in a semi-structured design discourse.

Setting

The study will be conducted at a large midwestern university, focusing on students and faculty in two graduate design programs in the School of Informatics and School of Education. Need more descriptive text here about the programs and their unique implementation of a design studio pedagogy.

Participants

The participants in this study will include up to eight students, inclusive of both academic programs. Potential participants will be solicited through social media posts in organized online groups of students from each program, and will be requested to be comfortable performing critique in their design discipline, and bring a project they have previously designed (or are in the process of designing) to be critiqued. The protocol for inclusion in the study includes accepting every other participant, judged by the order of his or her email response to the study solicitation. The final participant pool will be adjusted, if necessary, to assure approximately equal representation of gender and international origin.

Data Collection

A series of three data collection opportunities will be requested from study participants, including an initial individual interview, critique in a constructed dyad, and an individual stimulated recall session.

Initial Interview. The initial interview will follow a semi-structured format (see Interview Protocol) with a duration of approximately one hour, and will be video recorded to allow for transcription and further analysis. At the conclusion of this initial

interview, the participant will be asked to present an auto-critique or design rationale for their chosen design project.

Critique dyad. The critique dyad will be constructed using two participants from a similar design discipline; the participants will be asked to critique each other's chosen design project in turn, with the interviewer prompting for more information as necessary (need protocol for this?). The duration of this critique will be approximately one hour, including time for each critique and the participant's response.

Stimulated Recall. After a period of analysis by the researcher, a stimulated recall session will be performed individually with each participant. The researcher will ask follow-up questions based on the first two data collection opportunities, including, but not limited to, member checking of responses, discussion of thought process during specific audio or video segments of the critique dyad, and verification of data coding or interaction schemes.

Analysis

TBD. Sequence analysis and coding of the initial interview data. Comparison of auto-critique to peer critique to designer response to note changes in verbalization of design thinking or rationale. Role of the designer as defending their choices or suggesting changes to their existing artifact (and underlying reasoning).

Unintegrated Notes

The formal crit emphasizes authoritative power, putting the student in the subordinate position. (Percy, 2004). Percy (2004) notes the lessening of power relations in a more continual, reflective crit when performed online. Crits are high

stakes grading opportunities, so students are less likely to be honest (professor functions as assessor and facilitators of learning).

Dorst and Reyman (2004) note the complex situatedness of design expertise, noting that multiple levels of expert or novice thinking can coexist in a single design project. A certain level of design thinking is necessary to critique beyond the purely objective level—is one level up from “novice” adequate to accomplish this goal?

Morton and O’Brien (2006) discuss the role of progressing through different types of communication *about* design, possible following Dorst and Reyman’s idea of multiple experts. A good design discussion involves design details and a narrative approach. Dannels, Gaffney, & Martin (2008) discuss the role of communication in the critique process, noting (among other things) the importance of the transparency of design intent during the critique process.

Need for immersive participation in the design process (Logan, 2008).

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