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Therese Uri

Creighton

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Therese Uri

Creighton University
ThereseUri@creighton.edu
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Abstract: This qualitative situational analysis study charted the implications and potentialities of embracing a design culture within contemporary education. Fifteen design philosophers, instructors, and practitioners provided data using situational analysis grounded theory methodology (Clarke, 2005) to examine three levels of inquiry. Data was interpreted using traditional grounded theory coding (Corbin & Strauss, 2008) and charted on three maps: situational, social world arena, and positional. As the study progressed, the "in vivo code" of integrating differences became the most developed concept of the study. The "in vivo code" also addressed the central quest of the study as well as what remains to be learned about how design culture can take education beyond a limited test-centered and skills based system to one that views learning as complex and multidimensional.

Keywords: design culture, design thinking, situational analysis, 21st century education

Design Culture and Contemporary Education

This situational grounded theory study explored the potential impact of design thinking and contemporary education. Design culture strategies offer a forum for today's students to handle the difficult, diverse, and interrelated problems of the 21st century that cannot be fully addressed from uniform, reductive, and analytical frameworks of our current educational system. Unlike the positivist scientific paradigm which dissects and analyzes, a design philosophy offers a unifying logic that facilitates change, acknowledges complexity, shapes possibilities, and promotes a transcendental framework allowing an integration of ideas better suited for the post-modern age (Banathy, 2000; Ben Eli, 2010; Buchanan & Margolin, 1995; Nelson & Stolterman, 2012; Thackara, 2006).

Research Methodology

Because it focused on differences and complexities, grounded theory's situational analysis (Clarke, 2003) suited the foundational assumptions of design culture and inquiry and offered both ontological and epistemological footing for the research project. While systemic design learning combines two traditions, systems thinking and design action, situational analysis stems from symbolic interactionist sociology and pragmatist philosophy, and takes the research design into "the full situation of inquiry."(p. 556).

Problem Statement

Design thinking and design strategies have exploded into mainstream arenas. Fields such as business and organizational leadership have sought out design thinking's innovative tactics (Brown, 2008; Nelson & Stolterman, 2012). However, design culture and design thinking, as its own discipline, has yet to make an impact on contemporary education, both in K-12 and higher education (Banathy, 2001; Horn, 2001; Jenlink, 2001; Nelson, 1994; Schon, 1987). A major problem for educational leaders and educators lies in embracing, learning, and knowing how to move into a design paradigm.

Purpose of the Study, Research Participants, and Theoretical Sampling

The primary purpose of the study was to use in-depth interviews with design philosophers, teachers, or practitioners to generate information on the potential impact of design culture on contemporary traditional education. All of the participants were chosen because they viewed design as having its own philosophy or "its own founding postulates and axioms, with its own approach to learning and inquiry" (Nelson & Stolterman, 2012, p. 12). A total of 15 participants, 14 from the United States and 1 from the United Kingdom, were included in the interviews, enough to saturate the categories. Theoretical sampling was used in the data collection procedure. In other words, participants were interviewed based on their contribution to the development of the theory.

I started the process with a small homogeneous group of design educators selected from my systemic design academic background. As the data collection proceeded and categories surfaced, a larger, heterogeneous sample of participants were brought into the discussion to further the direction taken by the study. The design backgrounds of the fifteen participants included the following:

Professions of Participants
Instructors in graduate or undergraduate programs (such as graphic design) who use design strategies in their instruction or curriculums
Instructors in design schools or directors of design departments within a traditional university
Design historians and theoreticians
Directors of institutes built on design principles (such as sustainability)
Media artists, researchers, directors of design museums, architects
Published writers on design thinking or design philosophy

Levels of Inquiry

Three different levels of inquiry were used to shape the study. These included: a) the need to use design inquiry and practice in pedagogy and methodology; b) the need to teach design culture, design inquiry, and design practice as curriculum components; and c) and finally, the need to embrace design cognition as a form of intelligence (Cross, 1999). Because core analytic grounded theory tenets (comparative analysis, theoretical sampling, memoing, and saturation) were followed in generating data, further questions also emerged from the interview conversations.

Objective

The objective of this situational grounded research study (Clarke, 2003) was to form a theorizing proposition of design's impact on contemporary education by categorizing the collected data into three mappings or charts. The first map—a situational map—laid out the major discursive elements of the discussion. The second map—social world/arena maps—examined "meso-level interpretations" and "ongoing negotiations" within the collective. The third map—positional maps—explored the range of positions "taken and not taken" (pp. 559-560). Finally, the three maps were juxtaposed in order to view the relationship between the categories.

Research Design and Research Analysis

The unit of analysis for the project was the situation, and understanding its elements and their relations was the primary goal. The following questions served as guideposts in analyzing each section.

Central Research Question: What potential impact could design culture, inquiry and practice have on traditional education?		
Map 1: Situational "Who and what are in this situation?" "Who and what matters in this situation? "What elements make a difference in this situation?"	Map 2: Social Arenas "What are the patterns of collective commitment?" "What are the salient social worlds operating here?"	Map 3: Positional "What were the positions on basic issues and topics central to the situation under study?"

The categories were developed by generating elements from the raw data (open coding), interconnecting these elements into categories (axial coding), and finally building narratives or stories using "thick description" to connect the categories (selective coding). Categories were considered completed when saturated. Saturating categories entailed a zigzagging process of gathering and comparing information and then mapping ideas as the study evolved. Grounded theorists (Corbin & Strauss, 2008) define these methodological components as using a constant comparative approach—"the analytic process of comparing different pieces of data for similarities and differences" (p. 65).

In the early stages of data collection, memo writing, and initial coding, 48 elements were collected. As the mapping progressed and the data analysis process begun, the following were noted: categories and subcategories, areas of theoretical interest, relational modes of analysis and finally, inadequate data where further material should either be gathered or deleted. Categories were then plotted into appropriate maps.

Results of Study

In all, seven total categories were compiled: four categories were formed in the situational analysis, one category emerged in the social arena map, and finally, two categories made up the positional maps. In the final analysis, both narratives and maps were used. One offered an in-depth collection of interview talk, while the other offered a "birds-eye" view or another level of perspective (Map 4.1). Below are condensed narratives of the seven core categories.

Situational Map – Narrative One: Defining Design

(Narrative Elements: *Difficulty of defining design; misunderstanding design; reductive vs. integrative holistic design; art and design; language*)

At some point in each interview—usually the initial question—all participants were asked to define design according to their background. Most of the interviewees hesitated, laughed,

and expressed frustration or concern. Their responses to this question set the tone of the analysis, the continual insistence that design be properly interpreted. Participants fiercely protected the ambiguities of designing, both in how it was understood and misunderstood. On the one hand, the confusion of defining design lies in it being a ubiquitous activity. It occurs within many disciplines with different vocabularies and different methodologies. On the other hand, what previously was more specialized is now becoming more multi-disciplinary.

Like many terms, design is broad and difficult to describe. One participant likened defining design to defining water. How do you want me to answer that—as a chemist, a poet, a biologist or a regular person? Yet another suggested getting rid of the more limited concepts of design that people immediately gravitate toward such as architecture, fashion, and clothes, and regard design as any as any process of putting things together for a purpose, including designing abstract structures like institutions, education systems health care systems, etc. Some admitted that publicly there was a limited connotation of the word and that designers themselves were struggling with a redefinition. "Design is a key word in a lot of conversations. But, that does not necessarily mean that all people who are using that word either have a common sense of what it means or a sophisticated appreciation of what it means" (Participant #9).

An important point that surfaced was design's perception among professional designers and design instructors. There seemed to be two schools of thought in how design is approached and the epistemology from which it is perceived: a reductive perspective and an integrated whole perspective. All fifteen participants advocated an integrative-wholistic design approach that pointed toward composition, process, inquiry and context in explaining and defining design rather than reducing it to a set of problem-solving steps. For several design philosophers, the idea of design took on a meta-perspective. In a meta-design framework, a designer is constantly questioning. It moves past a superficial idea or narrowly defined context of design that really doesn't ask penetrating questions (Participant #10).

Several participants pointed out that language itself was part of the problem. A design historian (Participant #9) explained that design is a word that lends itself. It can be used by different disciplines or different domains of knowledge to identify particular things. Finally, because design is a creative process, a distinction between art and design also surfaced. The major difference revolved around viewing art as a singular form of expression while design was a collaborative effort that aimed for a specific outcome.

Situational Map – Narrative Two: Design Educating

(Narrative Elements: *Fluidity & Messiness; Design Educating Process; Design Learning Experiences; Constraints; Communication; Naïve, Expert, Mastery*)

The difficulty of defining design carried over into the difficulty of teaching design. How does a learner comprehend something that keeps redefining and reshaping itself? Understanding design's fluidity, its constant dynamic process coupled with overwhelming information and

overwhelming complexity, takes a good deal of practice. Designing, explained one participant is "like learning to playing an instrument—say the piano. You can identify the notes, but this time, it is in a different key and there are different combinations—all sorts of combinations have changed" (Participant #2). Because the design process is complex and messy, both facilitators and learners must develop a tolerance for chaos and uncertainty. Design instructors noted this was not easy. Students are used to linear, well-structured, right–wrong answers:

> **Researcher:** Am I correct to say that design offers a cognitive flexibility where I can move in ways that I couldn't before?

> **Participant #1:** I would say that it not just offers that, it requires that. It is a constant movement and that is also the scary part. It goes against what the students are used to. They are used to the learning experience as linear and well structured and that there will always be an answer. But when you move into design, you realize—first of all—there is no right or wrong design. Designs can only be judged in their context by people who care about it. It is a dynamic, complex moving process.

The above design instructor, like many of the interviewed participants, acknowledged there were no recipes in design learning. There may be techniques and skill and design theories used in aiding the process, but designing is not about mastering and incorporating the principles of a particular theory. Instead, designers frame problems; collect information; analyze and conclude and synthesize data and come up with the most appropriate solution offered from many solutions. "It is never a linear process. It's a cycle, an iterative process where you are constantly reframing the problem. You are constantly researching as you move forward, trying to come up with some sort of tangible output" (Participant #14).

Another design instructor's biggest issue at the graduate level was encouraging people to make a move, particularly when the only thing most of them have produced before has been a paper. "Dealing with complexity? Oh yeah, and sometimes they (the students) are not happy about that. There can be fear and anxiety. It can be a number of things. Some students simply want to be totally prepared before they get going" (Participant #6). An instructor who teaches an introductory design course remarked, "I used to be much more of a recipe guy. I have become much more about teaching people to become chefs." His educating process is to pay attention to the whole game rather than pieces of the game. The instructor went on to say that when students first play this complex game from a holistic perspective, it hurts. They don't know what to do, and they haven't developed any sense of "internal criteria" (Participant #2).

Achieving this type of artistry requires different types of learning experiences and skills to guide the process. Design instructors spoke about using alternative ideas and utilization methods in their teaching approach. These included polarity maps (structuring and defining polarities); prototyping (simulating what might happen in a situation); and brainstorming techniques (structuring and guiding ideas). Another instructor spoke about cultivating skill sets and habits of mind. "The skills sets that I associate with design are often the skills sets of

visualization, the tools of communication. No, they are not difficult to teach. It takes time, but it can be done" (Participant #9).

A key to dealing with complexity, explained a design philosopher, is "the reining in." All design processes need constraints and boundaries. "How do you shape or channel things into a particular manifestation of many possibilities? In the stronger sense, how do you shape energy that would otherwise be random" (Participant #7)? Constraints are always a part of designing. "It is just absolutely never the case that a new material, a new manufacturing process or even a new philosophy of design removes constraints," stated a design philosopher, "it just changes them" (Participant #11).

Because designing is a dynamic ever-evolving and reflective process, "designers must constantly evaluate what they do and change what doesn't work. You are kind of feeling your way—always—in a design project." Designers must converse with their project as well as with all people who are involved in the project. Thus, there is a conversation at many levels. If you have three people, you have four components: three people and the outcome. "People are not only negotiating with each other, but they are also negotiating with the outcome. In the end, what you get has to reflect a consensus that makes the best use of each of their contributions. Feedback tells you if you have done a good job" (Participant #5). Finally, designers take on an inner conversation when faced with complex information. "Designers really use the subconscious—not knowing—which means what you do is bring in or expose yourself to information about people and the situation. You kind of trust your judgment and that judgment is—to a large extent—grounded in and emerges from some kind of subconscious intuitional level" (Participant #1).

Situational Map – Narrative Three: Human Body

(Narrative Elements: *Embodiment; Individuation & Autonomy; Transformation*)

The question of what it takes to become a proficient design communicator as well as an expert designer brought up a unique aspect of designing. Integrative designers utilize faculties not always considered in a learning process. By recognizing patterns and trusting judgment, strategies and techniques that worked in one situation may work in another, and the expert designer no longer has to "start from scratch" with each new design (Participant #2). Therefore, expert designers rely on skills knowledge as well as embodied knowing, acquiring an ability to constitutively "shift according to their own references" (Participant #15).

Integrative designers deal with overwhelming information and complexity; therefore, they must resort to intuitive judgment. "There is no way that we can in our conscious rational mind, deal with all that information" (Participant #1). Designers-in-training learn to trust this faculty. The same design instructor explained that the more experienced students come to love the process because they can move beyond uncertainty. Design instructors also spoke about the necessity of whole body learning to remedy the distance between presenting material and engaging students. They differentiated between two different learning

experiences: a traditional skills-based approach and a more holistic design studio experience. One design instructor from a fine-arts background expressed his dissatisfaction with how skills are taught in a skills-based approach.

Several designers went beyond building skills and finding solutions to talk about design's fulfilling potential on an emotional level. There is more to designing than just creating some product, "Design is so fulfilling. I think people design without knowing. Whether they are fixing some tools or designing out of necessity, the ability to design well can become a sanctioned act that can be channeled into the future. This can be extremely fulfilling emotionally (Participant #13).

Another instructor spoke about the need to balance the intellect with feeling in order to grow not only as a designer, but as a human being. "Designers have this enormous power. They are basically saying what something is or should be or what something isn't or should not be. If you are not very conscious, if you are complexed all the time, I'm not sure it's possible to do good design" (Participant #12).

Situational Map – Narrative Four: Human Condition

(Narrative Elements: *Ethics, Shift in Consciousness, Design as Liberal Art, Aesthetics, Technology, Change & Human Evolution, Spiritual Dimension*)

Each participant expressed concern for the human condition, the planet, outmoded habits of thought, detached and fragmented manners of existence, over-specialization, and citizenship. The difference between reductionist design thinking and integrative design thinking resurfaced. One warned that design was "not a silver bullet" (Participant #8). Others felt that a design approach could help remedy existing wasteful situations and dysfunctional institutions.

The remedy between design and ethics, noted one design philosopher, lays in the initial design questions, the space where skill and ethics come together. "What is the underlying purpose of design? What are you designing for? You can use it to develop smart bombs or to develop all kinds of smart imaginary financial instruments that don't lead anybody anywhere, or you can use it to optimize systems for the betterment of humankind" (Participant #7). A design historian introduced perplexing questions about new limits, new materials and a new age of product design. He claimed that we live in an age where any number of technologies can literally design material to perform a certain way.

In line with the above thinkers, one instructor felt that along with flexible minds, designers-in-training needed to develop a deep sense of citizenship. Another participant presented a meta-design perspective that offered important guideposts. From what perspective are we using design? And from what perspective are we asking a question? A superficial and narrowly-defined idea of design such as the ability to design cheap goods because of the cost of plastics does not really ask a penetrating question. We need to ask evolutionary design question such as—"What do plastics do to the ecosystems of the oceans" (Participant #10)?

Other designers touched upon other ethical dimensions. "There are some things that we can do that we shouldn't do," asserted a design instructor. "But, that implies there are some people who are more conscious than other people. When I am teaching design, I try to identify kinds of power" (Participant #12). But how do design instructors teach the ethical importance and weight of those initial design questions? "Design is very collaborative. It's very much about taking people into account. You see, it's truly, it's very pragmatic, but it is also very human, very humane (Participant #13).

Social Arena Map – Existing Systems

(Narrative Elements: *Disenchantment with Current System; Conditions of Learning; Lack of support for Design Thinking; Design Studio Pedagogy vs. Traditional Scientific-Based Learning; Growing Popularity of Design Sensibility*)

In the second state of analysis—the social world arena—categories expanded outward into other areas beyond the design field. Many of the interview participants seemed disenchanted with the current educational system. Like any organizational structure, the school system is a product of design. However, explained one participant, "It's a product of decisions that have created organizational structures for what can get through and what can't. We have the wrong outcomes, the wrong means of getting there, the wrong system and that's bad design" (Participant #5). Another participant talked about how factors hold back change and suppress learning, "All those kids are learning machines, that's what they are. Their whole nervous system and all their physical development is geared towards learning as they grow. One of the absurdities of the education system is that it actually

A higher education instructor commented that sometimes designers need to defend themselves from the overemphasis of quantitative methodology. The quantitative camp often considers verbal skills, aesthetics and other design related thinking to be learning luxuries. In his push-back, the instructor explains that design thinking is not a luxury. There are quantitative ways of thinking. There are textural ways of thinking. There are visual ways of thinking. Each of these skills has to be cultivated. In fact, each of these skills is inherent in the human population. "It's important to acknowledge and nurture all the different kinds of intelligences and all the different personality types….otherwise we are hurting the nation as a whole, the community as a whole, and we are stifling individuals" (Participant #9).

Although designers are experiencing a growing demand of and a growing popularity for design thinking, it has not taken root in traditional education. "Design thinking is becoming very popular in many circles, but the notion of what a designer is in the general population—and certainly in academia—is still relatively narrow" (Participant #3). Another participant agreed and expressed that design thinking must have the support of a greater system. "The more I work on design, the more I realize that you always have to have the support of the larger system. You need a container, you need a culture" (Participant #1). A design philosopher clarified why bringing new ways of thinking into the current educational systems is so difficult. "We know that many of the current practices are driven by the structure of the

economy. We know the basic assumptions of nature are leading us in the wrong direction. Yet, it is difficult to change because they are tied to mechanisms and structures that are very powerful and work in a certain and self-reinforcing way" (Participant #7).

However, a graduate design instructor also reports how design is beginning to "leak" into traditional education. "What is happening today is very interesting because I work in many departments. Traditional departments are getting more interested in design….At the same time, design schools feel a strong pressure—as well as an interest—to bring in some of the scientific paradigm" (Participant #1). The instructor went on to say that he expects that type of integration to sink through the system. A graduate level instructor reported that there is interest in higher educational circles in cultivating innovative ways of thinking in disciplines like engineering and also in business. "They want to be involved in problem setting. They want to be able to think outside the box" (Participant #9).

Positional Map #1 - Design as Intelligence

Do certain individuals possess a competence toward handling complexity? Can design be considered an aptitude? One participant reflected, "I don't know. Is it a learning style? Is it an aptitude which is different from intelligence? I think all people are naturally creative" (Participant #3). Another participant expressed how easily the designing concept could be reduced to an either-or mentality. "I never imagined design thinking to be a set of formalized, orthodox guidelines that if you learned well, you had design intelligence at 180 or if you learned not so well, it would only be a 62" (Participant #11). Another instructor asserted, "There's an assumption that there's a sort of process that one is expected to go through. It ends up that once you've learned all these things and you've acquired the skills, then you do your Ph.D., and you can be creative" (Participant #15).

Several participants felt that the ability to design was a natural aptitude, but like sports or music, everyone could get to a certain level with good instruction, training and support. Another participant expressed similar thoughts. There are people born to be doctors, lawyers, architects and artists. There are even some people born to be designers, "I wonder if students even know the design profession. I don't even know if it's on the list. So, we are all missing out. Society is missing out because design is so important (Participant #13).

Positional Map #2 - Design Thinking as an Alternative Paradigm

The firm entrenchment of traditional pedagogy served as a starting point for the discussion involving education and design. A participant pointed out that traditional pedagogy has been around for hundreds of years. However, the same instructor also noted that many students who are educated in the traditional paradigm come into master's level design programs unsure of how to maneuver.

Other participants felt that a contemporary American education limits possibilities. One instructor stated that American education (his knowledge of it) beats out of people an inherent kind of wholeness and an inherent balance. "It privies towards a specific way of thinking and a specific way of being that is fragmented and detached rather than connected and systemic" (Participant #12). Another participant reflected, "My sense is that design thinking is present in children and that the current school system is sort of trying to drum it out of them. So, it's less we have to add design thinking into the school curriculum and more that we have to stop doing what we are doing" (Participant #3). When asked if design belongs in the K-12 education system, a designer born and raised outside of the United States elaborated, "What I see in the general culture is that design is really misplaced in the whole cultural tree (Participant #13).

Some designers feel that design has come of age and it has much to offer our educational system. A design philosopher described how designers are now making the argument that they have acquired a body of skills, techniques, and methodologies that can be applied beyond the tasks that clients have given them. Designers can "teach people through the lens of the designer" (Participant #11). Another design philosopher and historian gave a similar answer. "Yes, I think it can have an impact. I think that if people cultivate the skill sets and the habits of mind associated with design thinking, it is an exploratory and disciplined imaginative way to look at the world" (Participant #9).

One philosopher noted the importance of including design in the curriculum so students could become aware of design's structural approach. "Design is a way of thinking. It is a conceptual underlying approach. But the reason it is important to learn, is the idea of its structure. In order to be effective, you have to understand the nature of those structures" (Participant #7). Another meta-designer reflected, "I've seen what I think is a little bit of how children see things and learn. I think a number of people have said that children are designers. In fact, I think it's an anthropological, probably a fact that human beings—our species—has a very intuitive grasp of what one of my students called "madeness." There are whole sets of understandings or sensibilities that may be innate" (Participant #15).

A few designers talked about how design thinking could energize the disadvantaged students. "How could a new kind of design thinking galvanize students? If students begin to think more about the outcomes, they might work towards what it means to design a curriculum that brings the energies out and motivates them to learn" (Participant #5). Another design philosopher described how a teacher—using design tactics—could invert the learning. "Even the kids in the worst circumstances, they love something. What will excite their imagination? Make this coincide with what you do in order to teach them. That's the thing. Every child, every born living thing is born in order to learn (Participant #7). Finally, one participant thought design thinking was already being taught under different guises. But then she clarified, "If you want people who can act and think and imagine and create things—then yes, design, is the way you go there" (Participant #4).

Conclusion and Significance of the Study

Early in the analytical process, the phrase—*integrating differences*—provided an "in vivo code"—exact words of the interviewee—to describe the connection between the seven categories (Creswell, 2007, p. 239). It became what Clarke (2005) called the "sensitizing concept" or the most developed concept of the study. The "sensitizing concept" supports ongoing theorizing. Clarke uses the concept of theori*zing* over the concept of theory because the main objective of a situational analysis is to open the data and the situation to ongoing negotiations rather than promote an objective truth.

In conclusion, Clarke (2005) presented three guiding questions to assist in concluding the study, examining implications, and supporting theori*zing*.

Where in the world is this project?	Why is it important?	What is going on this situation?

In answering the first question, the popularity of design is growing beyond the boundaries of traditional design arenas into the mainstream because it offers a forum as well as the logic for handling complex innovative ideas and solving difficult problems. In answering the second question, design culture is important to the education community because design principles and strategies could offer new learning platforms. Currently, the primary focus in education revolves around developing the knowledge base and improving standardized testing scores. However, education philosophers (Gardner, 2004; Nussbaum, 2010) are concerned about the limits of basic skills and education equated with economic growth. The third question could be answered with the sensitizing concept culled from the categories and mappings of the study. Integrating differences aptly describes the many levels of designing from the integrative, holistic perspective advocated by the fifteen designers who participated in the study. Such an approach to design inverts a step-by-step, one-size-fits all procedure into an ever-evolving artistic shaping process formed by constraints and recognition of difference on many levels. Integrating differences also speaks to the synergy of good design. Whereas reductive design practices often bring about waste and entropy, designing from an integrative, holistic approach has the potential to eliminate excess waste and redefine an aesthetic perspective.

Overall, the participants in the study stressed the need for design thinking strategies as educational tools because design inquiry and action offers a creative, comprehensive, integrative approach that takes learners beyond today's educational overemphasis on basic skills, uniformity, scripted lessons, standardized tests, and a rationalized approach to learning. The design process would not replace our current system but offer a much needed creative pedagogy that would allow for higher-order thinking skills; construction of meaning; integration of disciplines; range and depth of learning; forums that handle complexity and difference, holistic embodied learning (knowledge and knowing), and the cultivation of autonomy.

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Map 4.1

Defining Design

- **Difficulty of Defining**
  - term is so diluted
    - say too much
    - say too little
  - get more specific   design as intention?   practiced in so many different ways   ten designers/ten answers
  - Golly!   laughter   hesitation   Setting yourself up for cliches
  - You (the researcher) are using design too loosely in this conversation.   You (the researcher) are talking as if its a defined thing.

- **Misunderstanding Design**
  - Publicly - limited connotation of the term
  - Designers struggling with redefinition

- **Art and Design**
  - Both forms of expression
    - Art - need not have an end except for its statement
    - Design - outcome/specific use
  - Meta-perspective
    - Both manifestations of design impulse
      - Both anchored in responses that are not--at the start--rationally necessary
      - Both anchored in interaction with the world and human experience

- **Language**
  - Language unhinged from our actions.   Lost the feeling-tone connection
  - Design lends itself.   Borrowed or appropriated by different domains.
  - Age of Pluralism   Demands clarity