Introduction
When we define society today as a “global society” it is as if to say that we are, or at least we strive to be, an interconnected society. Even more so than if we were to say society is “worldwide”. In a “global society”, borders are traversed and the phrase connotes interaction, participation, and inclusiveness. As both products of a global society and in response to the globality of their respective fields, this global condition prompts artists and designers to cross two types of borders: physical and methodological. In this paper, the crossing of methodological boundaries is the focus. In addition, the highly individualized nature of art and design research is recognized and serves as a launching pad for exploration of the question: How can librarians shape their practice in order to respond better to the needs of contemporary artists and designers?

We Create-Seek to Know
Many artists and designers today borrow methods, philosophies, and ways of working from a wide variety of fields, as they also invent their own methods of inquiry that support creative work. For instance, in an interview with the artist Julie Mehretu she explains how her work initially developed. Mehretu embarked on a “self-ethnographic” project in which she “began to dissect [her] lineage and ancestry…systematically organizing and collecting stories and photographs of [her] family, reviewing family genealogies, delineating their separate geographies, and stitching it all together into an archive of sources”. Ethnographic methods are also utilized in the field of industrial design where designers perform “quick” ethnographies, such as brief observations of people shopping or utilizing a specific product. Designers also conduct photographic surveys. For instance, a designer might photograph the interiors of cars and how people behave inside cars in order to create data for the design of new products for the auto industry. Through these methods, the artist and designer gain a better knowledge of the situation effecting their design or the creation of their art.

It is also common for artists and designers to work in a multidisciplinary way. The African-American artist Kara Walker describes her work as “chaotic” methodologically, but what she describes as chaotic sounds simply multidisciplinary. She says, “I was reading bell hooks, Michele Wallace, Pornographic novels, looking
at reference books on early American painting and portraiture...and twentieth century works by Black artists”. 2 Walker talks about her formative years at the Rhode Island School of Design as “having to rely on myself to discover source material regarding Race and racism”. 3 It seems that her “chaotic”, multidisciplinary way of working is what brought her some relief when expressing Race conflicts – an opening through which she can look outside of herself for source material.

The new media artist Simone Patterson describes a multidisciplinary process of working that involves “construct[ing] images through immersion into popular culture, by Internet browsing, watching television, and going to the cinema”. 4 In addition, Patterson explains that “No one single method alone can be guaranteed to work for art practice-based research. Such an approach is neither anti-theoretical nor unthinking empiricism, simply put; it is a method that is flexible and open to the demands of artistic production.” 5 A taste of the literature that Patterson identifies as influential run the gamut and includes feminist theory and philosophy (Cixous, Dworkin, Derrida, Foucault), visual culture, and new media studies. Patterson completed a PhD in art practice in Australia and describes her PhD research as “the making of artwork [as] the research, rather than the artwork being just an illustration or an accompaniment to the ‘true’ written research of the dissertation”. 6

Established PhD programs in studio art exist in several countries around the world but are only just beginning to emerge in the United States. Such programs emphasize the validity of practice-based work as Patterson describes. The presence of PhD programs in art may also present the librarian with new challenges.

The multidisciplinary approach is also intrinsic to the design process. In a single industrial design course, there exist as many product ideas as there are students, ranging from better fitting sportswear for female rock climbers to products that help reduce obesity in children; environments that improve communication in patients with dementia to products that encourage energy efficiency in home environments. Design work frequently involves data from marketing, engineering, and human factors, in addition to the background research needed related to the design brief (e.g. endocrinology, sports medicine, early childhood development, aging, etc.). Additionally, today’s global marketplace requires designers to create products for people in societies different from their own. In order to better understand users in foreign markets, thus creating better products and ultimately selling more products, many companies find that user research is key to profitable design. A recent article in the design magazine *Metropolis* featured a project by a team called Size China. In response to China’s need for better fitting helmets (for bicycling, snowboarding, and other sports) Size China created the first database of anthropomorphic data specific to the people of Asia. The result is not only better fitting sports equipment, but also health and safety equipment such as bird-flu resistant face masks for Asian consumers. 7

It is this highly individualized and multidisciplinary nature of art and design research that presents exciting opportunities for librarians. The claim that “the information needs of artists are too diverse to be addressed solely within the confines of art librarianship” becomes less true (if it were ever true), as the information landscape becomes increasingly interconnected. 8

**Librarian as Knowledge-Counselor**

The processes of inquiry, discovery, and research are highly individual and are a challenge to address in one-shot library instruction sessions. As such, it is an exciting process to take part in as a librarian. When librarians help artists and designers strengthen their information literacy skills and do so within the context of the creative process, art and design benefit. However, this embedded approach is not new or unique to art and design librarianship. Brenda Dervin’s Sense-Making theory asks us to appreciate the individuality of all researchers; to recognize that learning is built upon the existing and unique knowledge and experience of individuals; to understand that each researcher comes with his or her own unique perspectives, experience, history, and knowledge. Sense-Making theory recognizes the myriad ways in which people actively or passively gather information and that library research is rarely (if at all) a part of the information-getting or knowledge-building process. Dervin posits that the more librarians recognize and organize their own work around these concepts, the more effective we will be in assisting and instructing researchers.
In an article by librarian Sandra Cowan, she interviews an artist about the creative process. As a result of this conversation, Cowan finds that the phrase “information-seeking” oversimplifies the creative process and reduces it to a technical problem. She observes that the artists’ “processes are fluid, interrelational, dynamic, and creative; they rely on the action of creating understanding rather than finding pre-existing information.” This condition of “wanting to know” or “creating understanding”, rather than “seeking information” offers librarians opportunities to cross traditional boundaries of bibliographic instruction. In her book *Seeking Meaning*, Carol Kuhlthau presents the findings of her research into the way people use libraries. She labels librarians “mediators” and categorizes the roles of librarians into five levels: Organizer, Locator, Identifier, Advisor, and Counselor. Based on the descriptions Kuhlthau proposes, I currently like to think of my role within a “knowledge-seeking” environment as “knowledge-counselor”. My experiences co-teaching a semester-long “Design Research” course for industrial design students for the past three years is what prompted me to reconsider what role I play. I am not wedded to this phrase “knowledge-counselor” and propose it simply as way to explore the concept of librarians working in a “knowledge-seeking environment” as opposed to the more traditional “information-seeking”. In this role, I am not only teaching students how to locate information, I am counseling them in their own process of knowledge-seeking.

**A Diversity of Thought**

At the beginning of the Design Research course we ask students to explore the following questions: What is Knowledge?, What is Information?, and What is Data? It is through this exercise that students begin to understand better the difference between their ideas, the ideas of others, and the notion of “generating new knowledge”. In this course, Knowledge is defined as “what you know”, Data is what is in the library, and Information is something that happens to Knowledge. This is a more holistic view of the information landscape generally discussed in the practice of librarianship and provides several opportunities for intervention. First, talking about the importance in making distinctions between one’s own ideas and other’s provides an avenue to discuss citation, bibliography, and ethical issues (e.g. plagiarism), all while embedded in discussions about designing and creating.

A second opportunity for intervention is in talking about Knowledge, or “what you know”. Through this discussion, I take the opportunity to introduce the idea of thinking broadly about research and sources, or, what we like to call a “diversity of thought or “being expansive in one’s thinking”. I write a quote on the board by the information scientist Marcia Bates: People in general tend to “underestimate the value of what they do not know, and overestimate the value of what they do know”. As a result, we have a tendency to spend less effort seeking new information. It is common for students to initially develop a concept for a product that is narrowly defined and not responsive to the real needs of users. They bring with them misconceptions of what users needs are (for instance, many students take an interest in designing products for people with diabetes, but don’t know the difference between an insulin pump and a glucose monitor or the definitions of Type 1 and Type 2 diabetes). Designers may be genuinely interested in and care about users, but will typically over invest in what they think they already know. When this happens, designers typically miss important questions and design opportunities that matter.

**A Diversity of Questions**

To help students identify gaps in their own knowledge, a concept-generation exercise is introduced. (Illustration A) They draw maps that identify and make connections between key individuals (e.g. user categories, such as “children with diabetes and their physicians, parents, teachers, etc.”), approaches to research (e.g. user studies, product reviews, statistics, marketing research, ergonomic studies, etc.) and other zones for exploration (e.g., ecological viewpoint, socio-cultural viewpoint, etc.). This exercise helps students make connections between factors that influence a particular situation and ultimately the design of a product. I also work individually with students to help identify zones that they have overlooked. A complimentary assignment is being designed in which students partner with each other and role play “key individuals” in order to help each
other identify gaps in their knowledge. They develop more questions based on the question “What do you need to know in order to design something for this situation?” The goal is to engage students in discussion about what they don’t know, and what they need to know, about their topic. Beyond that, the ultimate goal is to help students recognize that constructing good questions - particularly questions that get at what they don’t already know - will lead to a richer and deeper design process, and consequently to the type of design that is needed and solves real problems. This exercise dovetails nicely with another assignment I give them on article searching, framed as a discussion about the need for a “diversity of sources”.

A Diversity of Sources

During an introduction to library resources, the concept of Information is discussed in the broader sense of the word (what is actually called “data” at the beginning of the course). In order to emphasize the point that the research students are conducting requires a “diversity of sources”, we talk about information and data as extending beyond library resources and inclusive of sources generated by the students themselves. Examples of this are in-person interviews, notes from observations, and photo inventories. The goal is to introduce library resources within the context of a wider information landscape. Working from their concept maps and the questions they generated, students revisit their original design concepts. They write a short description of their idea and from this statement they identify a list of keywords and phrases that they will use in database searches. This first set of terms may not include the vocabulary that is typically used by actual users (e.g. diabetics and endocrinologists) because, in the beginning, students may have a limited knowledge of the user’s world. Their vocabulary evolves as they become more deeply involved in their topic. After creating this list of terms, I instruct the students to locate at least three different articles on their topic, and they are required to use three databases representing three different disciplines (e.g. ABI/Inform – business; CSA Art & Humanities – design; Medline – medicine). (Illustration B) It is the requirement to utilize databases from different disciplines that underscores the multidisciplinary imperative of design research. Through this process of discovery, students rethink their original questions, their overall design concept, and generate better questions. Through the process of researching their topics, many students opt to revisit and redesign their concept maps before generating new searches.

These two assignments, Concept Map and Diversity of Sources, could easily be utilized in an art course, particularly one in which artists are working on long term projects such as theses and dissertations. Some artists make use of reflective journaling. In a library instruction sessions, students could mine their journals for content in order to create keyword lists and ideas for further reading or image collection.

Conclusion

When we view our work as part of a more broadly defined enterprise, that of knowledge-seeking, new opportunities for interaction with users of our libraries are identified. The individualized and multidisciplinary nature of art and design research offers librarians opportunities to better equip artists and designers with information literacy skills that are embedded in the creative process. While these exercises are a good fit for more complex projects, the concept of librarian as knowledge-counselor provides a framework in which librarians take part in the process of generating new ideas and good questions, in addition to the process of locating data. Within library science little research has been conducted on how artists and designers seek data, information, and knowledge. Future research could include how students in art-practice PhD programs conduct research as it relates to the work of librarians. Similar research could be done on how professional industrial designers work and what their needs are in relation to knowledge-seeking.
Notes

1 Douglas Fogle, ed. “Looking Back: E-mail Interview Between Julie Mehretu and Olukemi Ilesanmi, April 2003”, in Julie Mehretu: Drawing into Painting (Minneapolis, Minn.: Walker Art Center, 2003), 11.
3 Ibid.
4 Interview with the artist, Simone Patterson. April 8, 2008.
5 Ibid.
6 Ibid.
10 Ibid, 19.
11 Carol Kuhlthau. Seeking Meaning…

Additional Works Consulted


Illustration A – Concept Generation Map Exercise for Design Research

Keywords: insulin, endocrin*, sports, extreme sports, glucose, adult onset, juvenile diabetes, Type 1 diabetes, depression, well-being, anxiety, hobbies, adults, endocrin*, nutrition, diet
IDS3514: Design Research
Locating Articles – Library Exercise 2

Now that you have identified a research topic, you will need to learn more about this topic. Who are the key individuals? What are the precedents? What kind of studies have been done that could help you better understand the issues related to your topic?

In this exercise, you will use the keywords and key phrases you developed in the first library exercise – the concept mapping exercise. Pick THES database from the list on the right side of the page, or from the Databases A-Z list on the library website (http://lib.uts.edu.au). Use the keywords and phrases to complete searches within these databases – in order to locate articles related to your proposed topic. Along the way, you may find statistical reports, product reviews, patent documents, case studies and other types of information – in addition to regular journal articles.

This is a process of discovery. As you read and learn about your topic, you will likely decide to modify the focus of your topic. This is a normal part of the research process. Give yourself enough time to explore!

EACH OF THE THREE ARTICLES YOU LIST MUST BE FROM A DIFFERENT DATABASE.

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