BORROWING FROM TRADITIONAL DIVINATION FOR EFFECTIVE DESIGN SYNTHESIS

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1. INTRODUCTION

As novice designers, students have a difficult time evaluating large sets of complex data. Some of the difficulties stem from the validity of the collected data itself (i.e. "Garbage in Garbage out"); However, even when the data has been gathered using a robust process, students struggle with the highly interpretive process of extracting insightful meaning that leads to progress.

In order to understand and explore the process of effective interpretation, a link was formed between the idea of traditional "divination" (a recognizably, highly interpretive process) and the process of design synthesis. Previous work (Fry, 2013, 2014) has focused on the validity of the comparison itself, the actual process of divination, the formulation of appropriate questions, and a recognition of the type of answers one can expect from a divination inspired process.

This paper will continue the investigation between traditional divination techniques and the process of design synthesis (i.e. the "interpretation" of data to extract meaningful results) and will focus on identifying useful aspects of divinatory tools that might help in understanding current design synthesis tools and may help in the creation of new ones.

2. BACKGROUND

The definition of divination as a *facilitated*, *tool-based*, *forced reflection activity* is appropriate when looking at the possibility of exchange between the culture of divination and the culture of design synthesis. In general, people accept the idea of divinatory forced reflection when they "flip a coin", or "pick a number", but engaging in a little more formal divinatory process ("shuffling a deck", or "casting a rune") is difficult for them, and the strength of the technique is often obscured by the baggage associated with the word divination. To objectively look at the process of divination, it has to be separated from fortune telling.

In a recent interview with Sheryl Connelly (Manager, Global Consumer Trends and Futuring, Ford Motor Company) the interviewer made the statement, "So your job is a guessing game." With impressive clarity, she responded, "The purpose [of futuring] is not to predict the future, but to expand your mind to understand the possibilities you might have to face" (Rebek, 2013). Similarly, in a book about the ancient Chinese system of divination the I-Ching, author Jack Balkin comments, "Unlike simple fortune telling...Divination...tries to recognize tendencies in events...patterns of thought and behavior...[and]

stimulate creative thought" (Balkin, 2002). These two statements point out the similarities and the creative drive behind both processes. In moving forward, the following summary points are helpful:

2.1 SUMMARY POINT ONE

Divinatory Insight does not "come out of thin air" (Loeb, 2006). There is significant amount of pre-work that needs to be done in order to understand BOTH the cultural background that form the basis of the divinatory "filter" as well as the unique, transient/situational circumstances (or the "problem") that requires the need for divination or creative thinking in the first place.

It is not difficult to get students to understand the necessity for divinatory pre-work – i.e. the need to understand deep cultural issues as well as transient circumstantial knowledge. They see this as a requirement of communicating the context and value of their ideas to others, especially those outside of the design discipline.

2.2 SUMMARY POINT TWO

Simple descriptions of divinatory traditions imply that after the two bodies of knowledge have been gathered, digested and simplified, the following basic process is routine:

- First, formulate a question
- Using some type of tool or process, force a connection between the two previously prepared bodies of knowledge and receive the answer.
- Interpret the answer to the formulated question

The need to start the process with a question in mind, and continue to reflect on that question throughout the various stages of the divinatory/design synthesis process is critical but difficult to get students to understand and appreciate. They often think of the question as an outcome of the process rather than a fundamental requirement in starting it.

In divination, not all questions are created equal, and not all questions can be answered through a divinatory process. The process favors divergent questions that act as "sparks" to stimulate creative thought rather than convergent questions that result in a limited range of correct answers.

2.3 SUMMARY POINT THREE

The reason that the divinatory process favors divergent questions, is partly because the results of the process come in the form of *informative* knowledge that act as guides rather than *prescriptive* solutions. They aid, rather than replace, the need to make decisions and require moving forward with personal effort. It is insightful to think of the outcomes of a design synthesis process in the same way, as "informing" decisions on the part of the design team, rather than "prescribing" actions to be carried out.

Getting students to understand that rather than getting answers, their efforts in process will help them gain a deeper understanding to a given situation in light of a specific culture, and will therefore enable them to ACT in a more informed way as they move forward with their own decisions is critical. This ability to move forward using informed, but still personal, choices is not easy and requires the courage to make conscious decisions when moving forward in a design process (Fry, Skaggs, 2013).

3. DIVINATORY TOOLS

One aspect that has been difficult to understand is how the divination metaphor works to increase understanding of existing design synthesis tools; or, how it helps in creating new tools that might make the design synthesis process more productive through interpreting data with more insight.

An example of a divinatory tool would be a deck of Tarot cards, a bag of 24 Nordic Runes, the I-Ching (Book of Changes), and/or a termite mound combined with a length of stick. Tools are the simplified, codified collection of the cultural knowledge or values that are used as the divinatory filter. Being familiar with these tools (and therefore the knowledge behind it) is part of the requisite pre-work to the divinatory process.

There is an advantage that divinatory tools have over many design synthesis tools – longevity and refinement. Divinatory practices evolve over hundreds (or thousands) of years, being refined and redirected as the larger culture/information set gains more data points. Each narrative that is told, each interpretation that is extracted from a tool builds the understanding of how to use it. In design synthesis, the need to capture "culture" remains the same as in divinatory traditions. But the development time is much shorter, and a designer's actual experience with the tool (and process) is often limited.

Are there some unique aspects of the tools used in divination that might either help to better understand the tools that are currently available and use them more effectively or to create new tools that have more efficacy? The following principles have come to the surface:

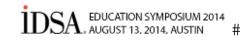
3.1 RELEVANCE

Divinatory tools such as the I-Ching, Tarot Cards, Nordic Runes work in problem spaces where they are relevant. A querant usually participates in a divinatory process when they have questions about life, rather than questions about how to change the oil in their car or what type of dog food to buy. These traditional tools are well suited to broad, sweeping question types.

Design problems often come in a more specific form than "Life, the Universe, and Everything" (i.e. "the Whirlpool Corporation - with its accompanying culture and biases - is looking to create a new line of small appliances for sale exclusively from their website to newly independent young adults in the hopes of building brand engagement"). The driving values and cultural touch points in design-focused problem spaces are, more likely than not, different than the divinatory standards of: Family, Change, Leadership, Seasons, Challenge, Heritage, Endurance, Sacrifice, Harvest, etc.

This concept of relevance became apparent when attempting to directly create an experimental design synthesis tool out of a variety of traditional divinatory tools. Effort was undertaken to create a tool that avoided the baggage that comes from the words "divination, "Tarot Deck", or "Runes".

On one hand, the tool was a very interesting way to practice the process of formulating a question, submitting the question to the tool, receiving an answer, and then having to interpret and present the answer in short narrative form. On the other hand however, because of the source material, the tool was



only good at answering certain types of questions; i.e. ones that were directed to very broad life experiences rather than more specific design synthesis questions related to a specific design problem.

Such tools are not foreign to the creative process. One famous creativity tool used to force connections is the set of "oblique strategy" cards by musician Brian Eno and artist Peter Schmidt (fig 1). The effect of the cards is expressed through a series of aphorisms which were developed to "overcome artistic obstacles" (Wikipedia, 2014) and to encourage lateral thinking.



Fig. 1 Oblique Strategy Cards by Brian Eno and Peter Schmidt

Other similar, popular examples are the Thinkpak[™] by Michael Michalko and Roger von Oech's "Creative Whack Pack". The Thinkpak[™] is "designed to break you out of your habitual way of thinking a produce a wide variety of fresh thoughts…" (Michalko, 2006).

In a general creativity sense, these techniques and tools work well in their context because there is no specific goal in mind other than to spark new directions, move one off center, or to present "a different perspective to your inspirational dilemmas" (Faena.com, 2014). They don't work well in a more specific design synthesis setting because they have more of a "process" bias rather than a "problem" bias. They are generic to creativity, and are often not situational enough to be applicable in a focused way.

3.2 PRE-LOADING/INTRINSIC KNOWLEDGE

Pre-Loading refers to the idea that a proper divinatory tool somehow holds knowledge in itself that moves the process forward and aids in the interpretation effort. Divinatory tools act as the repository of the cultural knowledge that will ultimately be used as the "filter" for looking at the situational knowledge and making decisions to move forward. Even the previously discussed "Creative Whack Pack" by Roger von Oech comes pre-loaded with the points of view of the Explorer, Artist, Judge, and Warrior. Other points of view such as "Accountant", "Engineer", or "Politician" are not represented because of the bias of the tool.

An example of how a tool that is not pre-loaded with decisions doesn't really work is that of a coin or a single six-sided die. By themselves, they are only potential divinatory tools, and only become actual tools when bias is loaded into them. "Heads I do it, Tails I don't."

Similarly, the structure of a three-circle Venn diagram might be thought of as a tool; however, it doesn't provide insight until the circles are given meaning or are pre-loaded with some type of active bias (fig 2).

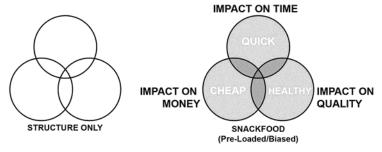


Fig 2 Pre-Loaded/Biased diagram

This conscious decision to pre-load the process with a bias simplifies the creative effort and moves it forward by eliminating those points of view that are not the most important to the driving culture – thus aiding the process of interpretation

3.3 FLEXIBILITY

The principle of flexibility is a complimentary characteristic to the previously discussed principle of relevancy. As long as a tool is used within its "relevant" domain, or where it has meaning, it should also be able to look at a given problem set from various directions, and provide additional insight.

For example, even though a Tarot deck is a single tool, it is used in divinatory practice to look at a number of questions through a variety of forms. Cards can be used one at a time or in combination for simple answers or complex comparisons.

The benefits of the principle of flexibility – Using the same tool repeatedly in a variety of situations allows one to become familiar with all its intricacies and idiosyncrasies. The more comfortable one feels with a divinatory tool, the better able one is to talk about the narrative it tells comfortably and with confidence.

4. CONCLUSION

The underlying purpose of this research effort is to improve a student's interpretive ability (i.e. the ability to draw conclusions that move them forward) in the design synthesis process. The specific purpose of this paper was to start looking at the characteristics of divinatory tools, and see if this comparison helps in better understanding the synthesis tools currently available, or provides insight into effective tools that might be created in the future.

From this brief exploration into the characteristics of divinatory tools, the following suggestions seem relevant when using tools in design synthesis activities:

Pick the right tool for the right task – Be aware of the biases that each tool comes with. Is it even possible for a particular tool to answer the question being asked? Is it specific enough, or is it too general? Is it geared to general creativity or does it actually work to create insight?

Don't be afraid to pre-load, or bias the tool – Divination is a process that is based on the idea of using an extremely limited number of answers in forced comparison to a broad range of circumstances to drive unique insight. Experienced designers know that creativity thrives best under constraints and are used to the idea of forced simplification in the spirit of creating unique frameworks and points of view. Based on this comparison to traditional divination, the tools that a designer uses to expose insight does not have to be complicated or provide an infinite number of possibilities.

Use tools that are useful in answering multiple questions – "Diviners" (or designers) become more effective at interpretation as they gain more skill at a particular tool. How many different ways can you use a 2x2? The more you use it, the better you are at understanding how to get insight from it.

Through the lens of these recommendations, tools such as "Brand", with the requisite components of vision & mission, the "Big Idea", brand attributes, value proposition, etc. begin to look like a codified, canonized cultural filter to be used in a divinatory/design synthesis process. Statements such as "less is more", and "form follows function" begin to look like oracular answers to a very interesting question that could have been asked as part of some divinatory/synthesis process.

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