The Character of Design, by Steve Baty
Core Jr.

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Without an understanding of the underlying characteristics of Design, we restrict our ability to improvise and innovate the processes and methods we use to undertake our work as designers. A lack of discourse about Design quickly leads to stagnation, unless external sources provide a transformative—evolutionary or revolutionary—influence. It is a sign of a lack of reflection, self-awareness and critical analysis.

As designers looking to improve our Design work, such reflection plays an important role, for it allows us to look at several facets of Design at once:

»Quality of execution of our process and methods

»Appropriateness of the process and methods to the challenge at hand

» Success of our designs

Project post-mortems tend to look at the first of these two; our customers (or lack) tell us the third. But in order to understand and answer questions of appropriateness, we must first understand the intent of a Design process and the methods therein. What is often discussed are the variants of overall process or variants of the individual methods. An articulation of the pros and cons of these variations focuses on a range of attributes such as efficiency or productivity, but rarely evaluates how the process or method satisfies the intent of the design activity. This omission is due to the fact that the intellectual discourse of design spends little time on articulating a deconstruction of the design process with respect to its intent, and instead looks primarily at its component tasks or methods. That intent is a realization of the characteristics of Design as a means of understanding and solving problems.

Intent

The basic intent of a design activity is the creation of some 'thing,' the specifics of which depend entirely on the problem being addressed. That 'thing' begins as an idea; it is extended, detailed, tested and refined.

There are, then, several different considerations in operation during the design activity. The first is the origin of the idea or ideas, so as to maximise our chances of success. But more ideas do not immediately or necessarily lead to success. There is, then, the desire for many

different ideas to be generated; a method by which these are evaluated and methods by which these are developed, refined and ultimately delivered.

A second consideration is that the refinement of ideas be directed. And directed towards the solution of the identified problem.

Thirdly, there is the question of from whence such ideas are born. What are the triggers, the seeds and the form of each.

Finally, there is the question of how it is we arrive at our understanding of the problem we are serving. And how that understanding is both articulated and shared.

And so, in an attempt to address the various considerations, the design process seeks to:

» Understand the problem to generate and evaluate ideas

» Realise the best ideas from those generated

» Communicate a shared understanding of the problem, the solution and the process

Understanding the Problem

At its heart, design seeks to purposefully improve the lot of some segment of humanity through the enablement or improvement of some human endeavour. To understand the gap or the current shortcomings of that human endeavour design undertakes direct, primary research with our 'target' segment—along with whatever secondary to tertiary research is appropriate.

More importantly, and philosophically, design seeks such understanding from the perspective of the people engaged in the end result—our target a.k.a. the people we are attempting to help.

Our tool here, and the vehicle for such understanding, is empathy. Empathy should be employed with eyes wide open to our surroundings, and the broader activity or purpose within which our 'problem' resides. From this vantage we have access to culture, personal motivation, meaning and significance. We can see why someone chooses to do a thing and why they choose not to.

We have one more significant vehicle at our disposal in our efforts to understand the problem: a deconstructed worldview through which the designer identifies and critically appraises each constraint, real or perceived, within the problem area. This combination of empathy and deconstruction allow for a third vehicle or tool: that of reframing. Reframing a problem is the path through which we ask the question: "What problem are we really solving?"

All designers have the potential for hubris and arrogance that comes with the belief that we have answers to questions others don't; an arrogance borne of being correct some of the time and asking questions that most others don't think to ask. But the reality is that we can be wrong—wildly wrong—and we need self-awareness of this tendency.

To temper this arrogance we involve a broad cross-section of people into the process of understanding the problem: people like customers and non-customers, the people who help them make decisions and the people within our organisation that make the products and services they purchase. Although it is ultimately our role to appropriately frame the problem, by engaging these people in the process of understanding, we increase our chances of success dramatically.

Generating & Evaluating Ideas

There is a critical step the designer must take in order to move from an understanding of the problem to a design idea. In many respects, analysis is crucial to realizing the value of our

research since good analysis can salvage something from bad research, but the converse is not so true.

Analysis has many component techniques from deconstruction to abstraction and generalization. These provide us with tools to collate individual observations into more and more generalized knowledge about people and to identify patterns within our data. During our research our aim is to learn as much as we can about the problem area. We capture photographs, stories, facts and trends. We dissect the foundations of the status quo and ask "Why?" and "What if?".

This process of deconstruction provides the raw materials with which the designer works, not in form, but concept.

During this process of understanding we are able to say, explicitly, two things:

1. I saw this

2. I know this

Together these provide an insight, a window of understanding into the problem. To this insight we can add a broad trend or design pattern, something that shapes our reaction to the world around us. Insight and pattern provide the spark for an idea. This is the process of synthesis, the act of joining two disconnected concepts or facts. With synthesis we have the generative engine of design. But if there is a strength and power to design, then it lies in the leap taken during synthesis. This leap can be shown and understood in hindsight, but not seen beforehand. This abductive thought process is the means by which the designer generates disruptive ideas.

The beauty of ideas is that they are a never-ending resource. With time and energy we can come up with an endless supply of them. When we capture many ideas, our emotional attachment to each is thereby diminished. This is an important characteristic of design: it allows the designer to more meaningfully and objectively assess the value of each idea. The designer not only generates a multitude of ideas, they maintain those ideas for the extent to which they demonstrate value. The multiplicity of the designer's approach allows them to be more exhaustive without sacrificing time. It is this characteristic of design, rather than iteration, that truly to leads to success.

With experience and practice designers can generate more ideas, more quickly, and of higher quality. Even so, not all ideas are good; some don't achieve the objectives for the solution. The designer has three methods at their disposal for evaluating the quality of an idea:

i) self-evaluation

ii) critique/review by others

iii) testing and evaluation by the target end 'customer'

Self-evaluation allows a designer to assess a design on the basis of intrinsic qualities. It is difficult for a designer to generate the objectivity necessary for a thorough evaluation of their own work.

During critique, the designer presents each of their concepts to the rest of the project team and receives feedback on the elements of the design that meet the objectives and those that require refinement in order to meet them. Critique provides an objective, time-efficient and effective method of winnowing out those concepts that least meet the objectives of the project. There are a few things to note about critique. Firstly, it's an implicit recognition on the part of the designer that they're fallible. This admission is an important one in maintaining the humility of the designer. Secondly, it is another example of how the involvement of other

people in our design work can help to strengthen the quality of our designs. The review of our fellow designers provides numerous additional perspectives.

The third method of testing and evaluation is a further example of the participatory nature of the design activity. During these activities, customers representative of our intended audience are given access to a version of the design and asked to provide feedback. That feedback might be explicit, an evaluation—commentary or critique—or implicit—observations from a researcher/tester, the successful, or otherwise, completion of a task, facial expressions and gestures. In some cases the designer will use these sessions to trigger direct design input from the customer, asking them to provide new concepts and ideas. Such input, known as co-design, is another characteristic of Design.

Communicating a Shared Understanding

In order to communicate, share and evaluate concepts the designer must make them tangible. It is not enough to simply attempt a verbal or written description. Words can be evocative, but they can never do justice to the richness of a design concept. Instead, the designer gives their ideas form as a sketch or prototype, and removes the ambiguity that comes with the written and spoken word. Further, a sketch or prototype uses a language of its own—one which we all share regardless of cultural or ethnic background.

A sketch might be a quick drawing to communicate a detail of the design or an abstract, conceptual map of the entire concept. Sketches come in a wide range of fidelity and quality, defined more by their purpose than their quality. Sketches are intended to be discarded, a sign-post along the way, not the destination.

A sketch can be shared with others, re-drawn, annotated, refined or discarded—all with little or no expense. The low cost of creation makes sketching an ideal tool to be used in early, exploratory phases of a design process. Regardless of method, the intention of a sketch is that it makes concrete and explicit an idea. A rough drawing, a theatre improv, an eraser tied to a marker—these are equally sketches.

As a concept develops, our use of the quality of tangibility shifts to an implementation (rather than conceptual) mode, and our needs move to the realm of understanding the mechanics of a concept. How will the pieces fit together? How will a person interact with the object? Does it still meet its intended purpose? Prototypes are still cheap relative to a production model, although only when we take into account the full cost of readying for production. Motor vehicle prototypes, for example, tend to be much more expensive on an individual basis than their production counterparts, but the prototype avoids the machining and configuration costs of an assembly line needed to make production versions. A prototype is the ultimate in "this is what I mean" when it comes to communicating, sharing and evaluating an idea. As a means of rigorously testing a concept prior to the expense of manufacture or production, prototypes make a great deal of sense.

Qualities of Design

These are the qualities of a Design process:

* Deconstructionist perspective

* Understanding born of empathy

* Abductive thinking and synthesis

* Multiplicity

* Critique

* Participatory and co-design

* Tangibility

Regardless of the overall process or the individual methods used, these qualities are what we strive for when conducting design activities. Combined, they provide a great deal of power in defining, framing and solving problems of any type, but they are particularly well-suited to problems of a more complex nature. Ensuring that your process and methods deliver on each of these qualities significantly increases your chances of success as you embark on your project.

Fonte: Core 77, 14 Mar. 2012. Disponível em: <http://www.core77.com>. Acesso em:15 Mar. 2012. On-line.