PRODUCING DESIGN: WHICH WAY?

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Abstract

This paper argues that the recent trend of encouraging creativity in design should be critically examined. The paper discusses "creating" vs. "making" as an intellectual exercise in the context of art and design production, where making is an action of the rational intellect and creating is an action of the will for originality. The paper concludes by offering suggestions that will prepare designers to recognize the differences between making and creating, hence the implications on art and design production. The studio of design is not the real practice world; masters may flourish outside of academic world, however, in the context of design education, instructors must help design students become competent before they can become independent. Students have to figure out how to make before they are required to create.

Keywords

Design production, Design Creativity

1. Introduction

It is clear that the trend toward creating original designs will thrive and grow, at an exponential pace, in the years ahead. Unbridled imagination and absolute visionary power, in

concert with creativity, are skills that designers appear to be in most need of today (Travis, 2011).

The problem, however, is that this ideal can be achieved only at the expense of creativity, the blend of rationality and vision, which is related to "making" instead of "creating".

There are some issues to consider in initiating such a great change to the outlook of design training. Perhaps the primary challenge is that creativity is not characterized with clarity, or regularity (Yilmaz, Seifert, & Gonzalez, 2010).

We construct a relationship between objects and cultural values that exist in particular environments or social realities (Al-abbas, 2015). The intention of this paper is to discuss a creativity definition that distinguishes it as a particular sort of thinking, opposite to making. Once the difference between making and creating has been clarified, there may be a better comprehension of why design instructors ought to empower students, or even instruct them, to be creative. This distinction will also permit a better understanding of what is lost when the intellectual activity of creating is supported at the expense of the intellectual activity of making.

2. Producing Design: Creating vs. Making

During nineteenth century, the Romantic Movement in the arts celebrated imagination by distinguishing it as a mind power, an ability of imitating the creation act. Creativity and imagination have since been merged in their definitions and presented as an intellectual activity (Gaut, 2003). So far, the twenty-first century has kept up with the modern mania toward training design students to "be creative" in dealing with their learning careers and taking care of their issues (Teixeira, 2010). Schools and universities are doing away with the conventional emphasis on rationality as a mental excellence standard, endeavoring to include more creativity in their educational programs (Smith 2003; Walliss, 2009).

Although creativity in design training is a highly controversial issue, it is still one of the requirements in evaluating all design projects. Also, evaluating creativity has a number of limitations, as it is depends on the level of the expert that is going to evaluate. (Howard, Culley, & Dekoninck, 2008; Hausman, 2009). Nevertheless, even engineering colleges have joined the postmodern campaign to instill creativity in students, promoting it as the main intellectual ability of today's quickly changing world (Adams, Turns, & Atman, 2003).

The advances in digital technology over the previous quarter century offer a paradigm for clarifying the significance of creativity in design thinking (Wylant, 2008). Creativity constantly seeks after the new and progressive, apparently for the sake of novelty itself (Hausman, 2009). Instructors should be very clear when promoting creativity as a main intellectual propensity for their students to learn and rehearse. To accomplish this, classic philosophy may offer some direction.

The ancient Grecian concept for the world origin outlines making as opposed to creating. In Timaeus, Plato (Jowett, 2016) described how demiurge, or "world soul", transformed chaos to cosmos through forcing the eternal forms and thoughts on amorphous matter. Such great arrangement was achieved by rationality rather than imagination. Forms were always in existence and will always exist. According to this paradigm, the maker does not cause supernatural occurrences and create individuality out of will and imagination; rather, the demiurge practices rational thinking, encouraging the correct order to emerge as the most ideal path for reason and matter to be united. Likewise, the concepts of art and design as making and the designer as maker, in their aesthetics applications, have no connection to creativity at all. All that is needed to comprehend the maker and the act of making is a consideration of the nature laws. Makers do not perform supernatural occurrences in order to create uniqueness, but causes conditions for its rise by perfecting the potential of nature. (Jowett, 2016).

This is not to argue that makers do not utilize imagination, as it is the main mental skill that a creator requires in order to deliver the final product. To comprehend the role of imaginative power in making objects, readers should turn to Aristotle, another extraordinary ancient Greek philosopher. Aristotle expressed in De Anima, (Shields, 2016) that imagination intercedes between intellect and sensation. Although nature is the substance of imagination it is not hylomorphic which means that imagination has form but not matter. The same is true in the case of memory, although it is constrained to actual past events. Aristotle noted that the imagination can run anywhere in time as well as in space, and can produce things that did not happen actually. The most essential imagination characteristic, however, is that it can embody forms in the mind that examines the rationality of thoughts delivered by intellect. Imagination and reason cooperate in Aristotle's conceptualization of the making process, or techne as he called it. Rationality identifies the form in an abstract way, and then imagination can create content that makes such forms visible (Shields, 2016).

It is also important to specify Aristotle's four causes of being, with special concern toward the formal and final causes. Formal cause is what something really is, its inherent identity or form. Such form is dictated by nature not by the object maker. The form of any object is its potential state or its idea, and it is not realized until actually perfected. This impeccable state is in fact the object's final cause of being. Like formal cause, the final cause is dictated by the nature of the object not by the maker (Shields, 2016).

These fundaments of formal and final causes carry vital ramifications for the education of creativity today. Design students should be instructed that the form of the artifact they create is irrelevant, which may be a reason for caution or concern. In the event that objects created by the designer are not to be considered having an inherent formal personality, they will turn into subjects of contention, starting with arguments about the purpose and value of technology itself. Therefore, a crucial decision to be made in any kind of design education is to acknowledge both the restrictions and the advantages of teaching design as either an act of creating or making. Imagination is essential for both, yet creating requires a commitment to deliver progressive, unique forms, while making requires a commitment to deliver improvements on traditional forms (Shulman, 2005; Teal, 2010).

3. Instructing Creativity in Design

Delivering visual items that can be models for application and improvement is considered the ultimate reason for designing, which is true for the full range of design-related professions. Lawson's (2005) also supports this argument; in his book, How Designers Think, Lawson identified the importance of delivering designs within the designing process. For the designer, it is imperative to be actually skilled. The designer must comprehend the meaning of "tasteful" experience, especially that of the visual world. On their own, designers tend to express their thoughts in an exclusively visual manner, while architects quite often draw, paint, and build models. In reality, it would be hard to become a decent creator without building up the capacity to draw well (Lawson, 2005).

While the visual forms creation is central to the process of design, this should not lead to suggesting that designers are not unconcerned with the function of items they design, nor is it to disregard significance of user satisfaction and marketing in the process of design (Hausman, 2009).

So, what should design students be instructed? The present higher education expectation is that students of design should be, more than anything else, creative. Another question emerges: Can we teach creativity? First, the meaning of creativity needs to be clarified, for the purpose of answering such question; creativity is defined as the use of imagination freely with novelty creation as the end goal (Cropley & Cropley, 2010).

Although creativity is as straightforward as "using your imagination," design instructors need to say more to students than this because it may be impossible to instruct a student on how to be creative. Encouraging an individual to be creative is comparable to asking one to be talented or intelligent (Cropley & Cropley, 2010). However, instructors may instruct their art and design students to study forms that have characterized a particular design profession history. Fundamental to the act of making is the expectation that the maker is studying and envisioning pre-existing forms; therefore, these forms should not be created, but perfected. In this way, the design instructor may start by training a student on universal images that were founded throughout the design history. Constructing design training around examinations of pre-existing forms is intellectually rigorous and also imbues the design process with rationality. It would require the student to use rationality when envisioning design, rather than one of open creativity; such open-endedness may lead to solutions that are unreasonable and therefore impossible to produce (Kolodner & Wills, 1996). An approach based on the rational study of universal images is more substantial and expected to deliver positive outcomes than just advising design students to use their imagination or be creative (Cropley & Cropley, 2010).

Educating design students to be creative implies instructing them to utilize their imagination in a unique visionary manner, which poses a challenge (Crilly, 2010). One can advise a student to use divergent thinking and embrace risk when necessary; however, these approaches are not adequate for fostering creativity. A Creative idea just emerges, usually when an individual is not deliberately attempting to be creative. Almost all design students can be motivated to be creative, as creating appears to have limited link with rational thinking, but they cannot be educated on how to be imaginative, as required by genuine creativity (Deshpande & Khan, 2010; Williams, Ostwald, & Askland, 2010). Likewise, design students can be, relatively easy, taught how to make designs by studying pre-existing forms and applying these models to the current issues they are trying to solve, but this does not ensure that they will eventually produce designs that are can be described as imaginative. Still, a design student who figures out

how to make designs is most probably to comprehend "designerly thinking" than a design student who is given the opportunity to create designs freely without any guidance of imagination (Cross, 2001; Stolterman, 2008).

Within design education, creativity is frequently cited as a learning objective; students must be creative in order to solve ill-defined design problems (Wiltschnig, 2013). Students are generally taught to use their logic and convergent thinking in order to find the correct answers, but they should be provided with a more complete understanding of creativity in design thinking (Ambrose & Harris, 2010). Scott, Leritz, and Mumford (2004) emphasized the effectiveness of well-designed education programs in developing creativity. Nabih (2010) contended that all design programs should link design theories with practical application in a studio setting, and that design students should be granted autonomy greatly using the principles of Problem-Based Learning (PBL) to more actively involve them in their education. Demirkan (2016) emphasized the role of the instructor in design education, noting that it is not only the role of a design instructor to deliver new information, but also to facilitate students' education process by encouraging them to explore and apply the new information in innovative ways.

Design students will sure benefit from studying the pre-existing forms in all fields of art and design, immersing them in the rational act of making as opposed to the freewheeling act of creating. (Lawson, 2005).

4. Conclusion

The modern idea of creation is largely seeded in the philosophies of ancient Greece. Creating is an action that stems from the will of originality, while making is an action of the rational intellect.

Instructing creativity is troublesome, if not impossible, on the grounds that its presence in an individual is beyond anyone's control. Indeed, creativity often occurs unintentionally. Making is less reliant on such mysterious forces typically designated as inspiration; it is, to a great extent, driven by rational thinking. Although making and creating both require imagination, yet the act of creating is left to individual whims while making is directed by rational thinking. A designer who creates is constantly seeking new forms within their individual imagination, while a designer who makes has the capacity to draw upon an external pool of traditional forms.

The disparity between these perceptions provide adequate reasoning for taking a more critical look at present design instruction, which prioritizes the creation of new and unique items at the expense of improving existing items.

This is perhaps an ideal opportunity to empathize on the significance of rationality in higher education. Should a designer learn to draw before endeavoring to create unique designs? As far as creativity is concerned, along with other intellectual activities, the more an individual learns about conventional methods, the more opportunity they will get to produce novel designs.

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