

DANCING IN THE DARK AND SEARCHING BLINDFOLDED: A KNOWLEDGE CREATION DUOLOGY

Dr Frankie Ng

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong.
frankie.ng@polyu.edu.hk

ABSTRACT:

Research as a powerful tool to generate original knowledge often appears to design practitioners, novices and veterans alike, as a myth. Very often, it is belittled to and mistaken by designers as but data mining and information collection. This paper demystifies design research, and elucidates its process through the duology of serendipitous experimentation and systematic inquiry through the course of knowledge creation. Prior cases (Ng, 2000; Ng, Hu and Zhou, 2009; Ng and Young, 2011) found that there is a marked distinction between design creation and research from the “doing” perspective (Schön, 1987). The former seems to put more emphasis on the merit of the final product(s) which is often arrived at by serendipitous spark of creativity whereas the latter seems to put equal emphasis on the process as well as the final product(s) through a systematic informed inquiry for new knowledge. Yet, more often than not, the process of neither design creation nor research is wholly homogeneous in nature, but a duology of “searching blindfolded” to “dancing in the dark”. It may start with an objective and informed search which maps the course ahead to a subjective happening of creativity, to ultimately any eureka through or at the end of the course of inquiry.

Keywords: Design research, research process, experimentation, serendipity, knowledge creation

1. INTRODUCTION

Research in design is often viewed as a myth, more so for a practice-led one (Frayling, 1993, Seago, 1994; Archer, 1995). It is so partly due to a relatively short history of systematic documentation of the research methodology in art and design research and partly due to a lack of interest in research among design practitioners. The research methodologies in art and design have often been left to individuals to devise or otherwise borrow existing methodologies or theoretical constructs from other disciplines for design research. This paper demystifies the nature and process of design research through the duology of systematic inquiry and serendipitous experimentations towards ultimate knowledge creation.

2. THE REASON FOR AND NATURE OF RESEARCH

The reason for, and thus the nature of, research, in design as well as in mostly all other disciplines, can be succinctly summarized as:



"A systematic inquiry for new knowledge"

Figure 1: The reason for research

Here, there are three words that should receive special attention: 1) inquiry, 2) systematic, and 3) new.

2.1 INQUIRY

All viable research topics must either probe a question for answer and/or problem for solution. Otherwise, there will be no need to invest future time and energy in a question and problem which has already been answered and solved. In fact, 'reinventing the wheel' is a common malpractice among research novices who are desperate to conceive and initiate research topics for earning a research degree or for career advancement. Examples could be questions like if Japanese culture has its impact on youngsters in Hong Kong, if architectural style can be translated for fashion creation? The answer to these questions is obviously yes.

2.2 SYSTEMATIC

Congratulations! Now that after a few ponders, you have finally come up with an unanswered question or unsolved problem that could make a viable research topic. You now move on to the next keyword: systematic. Being systematic here refers to the process of inquiry in research, and in particular, the possibility for such unanswered question to be answered, and more importantly, within the proposed research time-frame since over-ambitious is one classic danger for research novices. Chances are that you may have a rather inspiring question. Yet, if there is no systematic, objective or at times, scientific methodology with which the outstanding question can be answered convincingly and satisfactory, the topic is not yet a viable one. For example, I love to believe that there are parallel universes, yet, even the quantum mechanics today cannot be absolutely sure of their existence albeit some encouraging empirical observations that could have provided added explanations to support such 'belief'.

Here, note that we use the word methodology instead of method. It is so because the suffix '-ology' suggests a class of knowledge, i.e., methods, instead of one single method akin technology and technique. It suggests the possession of a comprehensive knowledge and understanding of the relevant methods by a researcher before s/he proposes the one s/he found the most appropriate in answering the proposed question. This is the major difference between design research and creation indeed. The former is more a joyful surprise of serendipitous search, i.e., dancing in the dark. The

result could be overwhelming and appealing, yet the researcher may not always know how s/he arrived at such result. The emphasis is put on the 'product'. On the other hand, for research, the 'process' is as important as the 'product', and at times, more important than the product. While a comprehensive knowledge of applicable methods is essential to begin with, the researcher must be able to articulate the reasons of his/her deployment of a specific method for finding his/her answer, and at the same time, demonstrates an equal understanding of the reason of NOT deploying any others. All will need to be articulated and explained convincingly, i.e., searching blindfolded –an informative and interactive search without knowing what is lying ahead of you.



Creation: **Product** instead of Process
Research: **Product** as well as Process

Figure 2: A major difference between design creation and research

In research, negative finding is finding. For example, although all your hypotheses could have been rejected after you invested a period of time in proving what you tended to believe, it is still a very useful finding to share because had such hypotheses not been rejected and proved as negative, others could not have known they are so and is likely to continue to believe the otherwise or be bewildered. Thus, in terms of contribution to new knowledge and understanding, it is indeed a positive piece of information worth sharing.

2.3 NEW

Congratulations again! Now that you have identified an unanswered question and/or an unsolved problem that offered you a viable research topic, and that you further identified (with reasons) the method by which the answer to that question could be found. What you need to ask yourself now is the most crucial question in research: will the research likely to yield new findings? 'New' here means originality, which is often the first question a research candidate will be asked in an oral examination. Failing it will not guarantee a researcher any academic degrees that warrant exhibition of originality. Note that new here does not necessarily mean a new tangible product. It could be a new ambience created, a new understanding of a certain supposed unrelated phenomena realised, e.g., The Butterfly Effect (Smith, 1990).

2.4 SUMMARY

With all these in mind, creation and research in art and design are very much like the duology of dancing in the dark and searching blindfolded respectively. The former exhibited appealing performance and results without much requirement of contextual reference whereas the latter focus on the informative and interactive searching process that help guided the way ahead; often arrived at an unexpected outcome. The accidental discovery of nylon is one fine example of the latter (Roberts, 1989).

3. CONCLUSION

This paper demystified some of the myths that have been puzzling researchers in design. It expounds the reason of conducting research and the process that it should be done properly. Although the duology of 'dancing in the dark' and 'searching blindfolded' have both been widely practiced, they refer to rather different behaviours. The former aptly describes the creative process of design of which the creator may not necessarily be able to recall, articulate and explain why s/he has arrived at a certain result, as if s/he is dancing in the dark; beautiful as it is, the contextual awareness might not exist during the course of creation. The latter describes the process of research. Although blindfolded and not knowing what will happen next, the tactile search is often informative and interactive, a certain system and information that gradually map the way ahead. The process is often slow but cautious, random but comprehensive. All the experience and data collected along the searching process *per se* is new knowledge with its own merit.

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