Creative practice and design-led research

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Triangulation

The problem of inscrutable or evasive evidence is not alien to the social sciences, which have long recognised the need to deploy multiple methods to elicit insights into phenomena involving human subjects and their practices. The usual approach is to adopt a series of methods to shed light on a single issue. So a study into under-age drinking might call on both statistical information compiled from police records and interviews with parents and children (Hughes, et al., 1997). The usual strategy is to establish some corroboration between so-called "qualitative" and "quantitative" evidence. This approach to multiple sources or modalities of evidence gathering, independently of their number, is frequently termed "triangulation," and is examined by Bryman (Bryman, 2004 p.454-456). Triangulation was originally posited as a means of validating or confirming the robustness of research findings by appealing to independent sources of evidence (Campbell, and Fiske, 1959), and draws on the geometrical metaphor of triangulation in geographical surveys as sufficient to define a fixed point in space.

In its more general application "triangulation" serves to corroborate a hypothesis. One mode of evidence can also be deployed to fill in the gaps left by another, or one mode of inquiry can open up suggestions or possibilities for another mode of inquiry.

Researchers in the social sciences generally recognize that any evidence gathering is a selective process informed by existing theories and practices (Kuhn, 1970; Winch, 1988). In a reflective research environment these theories and practices undergo revision, which influences the further gathering of evidence. The process is similar to that explained in the context of design as "reflection in action" (Schön, 1983) and as the interpretive (hermeneutical) faculty in design (Snodgrass, and Coyne, 2006). In what follows I focus on design, and you are invited to consider the applicability of the arguments to artistic practices, composition and other modes of creation.

Design-led research

By a conservative reading of the task of research, design enters the triangle as an issue of simulation. In their book on architectural research methods, Groat and Wang provide the example of research into flying buttresses in Gothic churches, calling on (i) the analysis of historical sources, followed by (ii) comparative case studies, and then (iii) simulation via model building (design) as a means of testing various theories about their construction (Groat, and Wang, 2002 p.361-365). But one could also assume a more radical role for design, giving prominence to design as a process.

A major difference between design-led research and that exercised within the social sciences and anthropology is that design-led research discovers what can be learned from direct intervention by the researcher. Ethnographic study encourages participation by the researcher, getting involved, seeing what life is like from the point of view of the subject, and accepting that the presence of the researcher has an effect on the material under study (Garfinkel, 1967). Design-led research accepts these tenets of involvement, but actively deploys *intervention* as a research tool. This is arguably the strategy of the Surrealist artist in placing an object from one context into another in order to provoke a response or to reveal something new: an anvil on an ironing board, a violin in a shipwreck, a fish in a desert. The strategy is also deployed in musique concrete.

The design approach would be tantamount to the deliberate introduction by an anthropologist of a refrigerator, a mobile phone or a video camera into a community that had never before seen

such devices, in order to elicit responses, reflections or evidence about family relations, the use of language, and attitudes to hygiene. The intervention can serve as a catalyst or an inhibitor that brings current practices into sharp relief and provides a focus for reflection and discussion. So a villager may not be forthcoming on the role of the visual image in her community until she sees a video image of herself. Anthropology is arguably inhibited from pursuing such approaches by decorum, ethics and a commitment to certain research practices. Not so design. I have developed an argument elsewhere of the value of devices and artifacts as a means of research, and for revealing something new about the environment into which they are placed (Coyne, et al., 2000; Coyne, et al., 2002). Subjecting participants to scenarios outside their usual experience reveals insights that could not easily be obtained by observation and interview alone.

A related research strategy is activity-based, requiring subjects to undertake a task which becomes an object of reflection, a familiar strategy in education, team-building, problem-solving, strategies to induce creative responses to issues (Groat, and Wang, 2002 p.120-121), and even entertainment. There are advantages to including design activity as part of a multimodal (triangulation) strategy. This might involve asking subjects to design, configure, and arrange objects and elements. The strategy here is to provide a medium in which people can be articulate without having initially to put matters into words. It also provides an environment for reflection and discussion.

A further design strategy familiar to those engaged in practice-led research is that afforded by design activity itself, as undertaken by the researcher, documented, and subjected to critique. In this case the creative output is integral to the research process, and may even constitute the main mode of communication within the research discourse. The strong claim of practice-led research is that all research is practice-led. According to one commentator: "Research is a practice, writing is practice, doing science is practice, doing design is practice, making art is a practice" (Frayling, 1993 p.4). We could add that all research is a "creative practice." In this light we might be keen to consider practice-led research as integral to research programmes rather than a mode of research that is special and different.

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