Empirical Grounding

“soft” v “hard” science

Empirical Grounding

"[Some] areas are given the highly flattering name of hard science, because they use the firm evidence that controlled experiments and highly accurate measurements can provide, … [whereas]… soft sciences, as they're pejoratively termed, are more difficult to study for obvious reasons… You can't start… and stop [experiments] whenever your choose. You can't control all the variables; perhaps you can't control any variable. You may even find it hard to decide what a variable is."

Diamond, 1987, p. 35.

Evidence

- Hargreaves and North (1999): social functions of music.
- Salganik, Dodds and Watts (2006): winner-takes-all in artistic preference.
- Newman and Bloom (2012): Preference for originals over copies.

Evidence

Newman, G. E., and Bloom, P. 2012. Art and authenticity: The importance of originals in judgments of value. *Journal of Experimental Psychology: General* 141(3):558.

"The possessions of celebrities, such as President Barack Obama or George Clooney, lose value if their physical contact with the celebrity is undermined, as when the object is sterilized."

(with reference to Nemeroff & Rozin, 1994; Newman et al., 2011).

Interaction

- Evaluating creative systems must be done in context.
- The context is a “network of interactions”, an ethnographic reality.
- Perceptions of creativity provide one data point.
- => Interaction design.

Interaction

User experience

Less about efficacy with respect to function than a host of subjective qualities to do with interaction more generally, such as desirability, credibility, satisfaction, accessibility, boredom and so on.

Rogers, Preece, and Sharp, 2007.

Interaction

=> Interaction design.

- Provides methodologies for dealing with “soft science”.
- Situated in ethnographic reality, respects the uncertainty surrounding art.

Interaction

Creativity Support tools. Examples:

DiPaola, S.; McCaig, G.; Carlson, K.; Salevati, S.; and Sorenson, N. (2013): *Adaptation of an autonomous creative evolutionary system for real-world design application based on creative cognition.*

Conclusion

- Pay more attention to “soft-science” methods.
- Recognise “generative creativity”.
- => Draw on and *develop* “Interaction Design” methodologies.
- (And put *“is this system creative?”* questions on hold).