

Creativity and control: drawing for ideation and specification in the design process

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Abstract

A review of nearly thirty years of design drawing research conducted by the author has yielded intriguing findings. Given the major changes in the design profession over that period, and taking into account major shifts in both professional and technological development, it is apparent drawing remains a kind of ubiquitous device, an adaptable tool that the designers of today can still use as necessary, much as did the designers in the pre-digital era. Through the analysis of the drawn record of various stages of the design process, particularly the development of ideas and the specification for production, a very flexible yet focussed use of drawing can still be identified. The drawing activities of two disciplines of designers are investigated in this paper, namely graphic and textile designers, more specifically knitwear designers, and drawings produced during and since the 1980s are analysed.

The use of digital technology has undoubtedly caused changes to the design process that have still to be fully understood^{1,2} and approaches that merge digital capabilities with more traditional drawing practices are being promoted^{3,4,5}. However, even in today's design studios, paper-based methods are still used to enhance design thinking. The role of drawing in ideation is still generally acknowledged to be most effectively accomplished by traditional drawing methods^{6,7}. Indeed, of the several hundred designers included in the research, the majority acknowledged that they draw to both develop and share ideas. The part played by specification drawings remains vital in some areas of design and the specification drawings of knitwear designers are particularly interesting. These drawings help to clarifying the complexities of both three dimensional form and two dimensional pattern for the use of production technicians, so they also perform various functions simultaneously. The comparison of the free, intuitive sketchy drawing of ideation with the precision and clarity of specification drawings provides clear evidence of not only the flexibility and adaptability of paper-based drawing but also demonstrates its enduring role in design.

References

- 1) Oxman R., 2006, 'Theory and design in the first digital age', *Design Studies*, Vol 27 No 3, pp229 – 265
- 2) Odling-Smee A., 2002, *The New Handmade Graphics: Beyond Digital Design*, Rotovision, Switzerland
- 3) Hastings P., 2010, 'Electric Finger: an experiment in touch surface drawing', TRACEY
- 4) Faure Walker J., 2005, 'Old manuals and new pencils', *Drawing: The Process*, ed Duff L, Intellect Books, 2005, pp 16-25
- 5) Wands B., 2001, 'A philosophical approach and educational options for the e-designer', *The education of an E-designer*, ed Heller S., pp 20-23
- 6) Rosenberg T., 2008, 'New beginnings and monstrous births: notes towards an appreciation of ideational drawing', *Writing on Drawing: Essays on Drawing Practice and Research*, ed Garner S, intellect Books, Bristol and Chicago
- 7) Tan S and Melles G, (2010), 'An activity theory focused case study of graphic designers' tool-mediated activities during the conceptual design phase', *Design Studies* 31, p 461

The creative application of technology to design a system, product, or process to solve a problem or meet a need. engineering notebook. Used to record all the information from each and every step of the design process in one place, and that can be accessed, if necessary, in the future. No information, even discarded ideas, should be added or removed. Simple drawing used in the idea generation stage to record and communicate ideas so they can be refined further in the solution creation step. solution creation. All ideas that were generated are evaluated and tested against criteria specific to the problem, such as cost, size, shape, appearance, performance, difficulty to produce, marketability, etc., and the best idea is chosen. specification sheets. While none of the designers in the investigation underestimated the advantages brought about by digital technology, most nevertheless expressed concern about the lack of development of drawing competency in student designers, due to an early adoption of this technology to the exclusion of traditional drawing methods. Against this background, it is crucial that academics are able to respond to what has been a sustained period of change in design and manufacture, and take stock of the enduring advantages that traditional drawing methods can still provide. @inproceedings{Schenk2013IdeationAS, title={Ideation and specification: drawing for creativity and control}, author={Pamela Schenk}, year={2013} }. Pamela Schenk. In the third, ideation stage of Design Thinking, design thinkers spark off ideas in the form of questions and solutions through creative and curious activities. When facilitated in a successful way, Ideation is an exciting process. The goal is to generate a large number of ideas ideas that potentially inspire newer, better ideas that the team can then cut down into the best, most practical and innovative ones. Ideation is the mode of the design process in which you concentrate on idea generation. Mentally it represents a process of going wide in terms of concepts and outcomes.