

This item was submitted to [Loughborough's Research Repository](#) by the author.
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

An analysis of the changing role of drawing in the graphic design process since the mid-eighties, with particular regard to the impact of technological change

PLEASE CITE THE PUBLISHED VERSION

PUBLISHER

© Loughborough University

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Schenk, P.M.. 2019. "An Analysis of the Changing Role of Drawing in the Graphic Design Process Since the Mid-eighties, with Particular Regard to the Impact of Technological Change". figshare.
<https://hdl.handle.net/2134/1463>.

An analysis of the changing role of drawing in the graphic design process since the mid-eighties, with particular regard to the impact of technological change

P M Schenk

Department of Visual Communication, University of Central England

Abstract

An investigation is currently being conducted to analyse the shift in the pattern of drawing usage in the work of graphic designers in the UK over the period from 1988. During this time computer aided systems have become commonplace in most design consultancies and the work of graphic designers has been extended to include design for multimedia and internet applications.

The study uses the findings accruing from an extensive survey of drawing practices completed in 1988 to act as a set of bench marks determining typical contributions of drawing activities to the design process. The new work includes a series of structured interviews involving the re-visiting of a sample of the respondents from the original study and additional respondents representing both designers and students working within a digital environment. A comparative analysis of designers' drawings produced in the mid-eighties with examples from the mid-nineties is also being conducted, and the implications for the curriculum development of graphic design and multimedia courses is being considered.

Introduction

In this paper a three part programme of work is described of which the latter stage is still in progress.

An extensive study of the drawing activities of graphic designers in commercial practice was conducted in the mid-eighties¹. This study was prompted by a desire to ensure that the needs of the visual communication industry and the individual development of the graphic designer were supported by an adequate development of drawing abilities on BA Graphic Design Courses. The main intention of the study was to form a basis on which the use of drawing could be characterised and the required drawing abilities of graphic designers established.

Since the conclusion of that study in 1988, a regular monitoring of the graphic design industry has indicated a considerable degree of change taking place in the processes charted by the initial study. Therefore, in late 1996, a decision was made to conduct a further systematic study to identify the particularities

of this change and to try to identify the current needs of the industry and the curriculum requirements implied.

The use of computer-aided design systems became ubiquitous within design consultancies during the eighties but the impact of this technology on the more traditional, established pattern of modelling systems, characteristically supported by drawing is, as yet, not fully understood. In addition, it is also evident that the introduction of computers to the learning environment has influenced graphic design students' approach to their work. Hence, some academic staff feel concern for a possible loss of creative control and a diminution of visual literacy because of a marginalisation of those parts of the design process that have traditionally been supported by drawing. For these reasons, the current programme of research is being conducted to investigate the relationship between the drawn and computer aided aspects of graphic design practice and to consider the findings in the context of the educational environment.

The Research Programmes

The first study was conducted over a five year period and involved the systematic collection of data by a combination of methods including interviews and participant and non-participant observation.

Designers' views about their drawing activities were elicited with observation of this activity and with an analysis of drawings produced. Structured interviews with fifty experienced designers were conducted and supplemented by shorter, focused interviews with twenty more junior designers. Extensive periods of observation of the use of drawings in meetings and in the studio environment were carried out and a collection of over 200 designers' drawings produced in the preparation of design solutions for a wide range of jobs and representing the full range of design procedures from initial briefing to production were analysed.

The study was essentially qualitative rather than quantitative and, of necessity, broad in scope, every effort being made to investigate all the major kinds of design application and working practices within the graphic design profession. The investigation concentrated mainly on generalists or practitioners responsible for the management or conduct of design solutions through all the phases of the graphic design process, although some attention was paid to the design processes of more specialist designers like illustrators and lettering artists.

A similar range of methods has been adopted in the initial stages of the new study, although it is realised that an heuristic approach is essential if the effects of technological change are to be investigated in depth. While it is useful to establish a basis by which a comparative analysis with the findings of the original study can be made, it is also important that the impact of technology is not approached merely as an intervention in the design process but, where appropriate, as a vehicle of change in the process of modelling.

Initially, a small scale pilot study was conducted and from the data collected a revision of the methodology planned. The

broad range of respondents to be contacted has initially been addressed as three groups, namely respondents from the original study; designers working in areas where relatively recent developments in technology have had a major impact on their work i.e. designers working in multimedia and interactive systems; and student designers working in a digital environment.

It is hoped that, ultimately, about a third of the practitioners interviewed in the original study will be re-interviewed. It is also intended that a similar number designing for relatively new applications, such as interactive multimedia, or employing technology that was not commonplace at the time of the original study, will be included. Moreover, as discussions with groups of graphic design students formed an important part of the original study, this type of input is also regarded as significant.

However, whereas every opportunity is being taken to achieve comparability between the findings of the two studies, it is clear that a sensitivity to quite new approaches must be maintained. For example, conversations with student designers have revealed the development of approaches and attitudes to the design process that were not prevalent at the time of the original investigation. In addition there have been found to be difficulties in the collection and analysis of drawings, as hard copies are not generally made by designers working in a digital environment. Therefore, additions and adaptations are being made to the methods of data collection as are found to be necessary.

Review of Current of Findings

At the time of writing this paper, 28 interviews have been conducted with a range of respondents from all three sample groups. A new collection of designers' drawings has been instigated and some observation of studio practice has been conducted. Although, as yet only part-way through the research, an initial analysis suggests that some important findings are emerging.

Much of the structure devised for the presentation of the original study has been

retained in order to achieve a basis for a comparison with the data currently being collected. For example, it was found at an early stage of analysis of the findings from the first study, that it would be necessary to include, what has been termed, a 'Preparation Phase' because there were characteristic uses made of drawing when designers were accepting briefing from a client. Again, the collection of visual reference material also involved characteristic forms of drawing. However, the greatest use of drawing was found to occur in what was termed the 'Main Creative Phase' to support the processes of analysis, ideation, synthesis, presentation and revision of design solutions. A 'Production Phase' was also included, again because specific types of drawing were found to be used for preparing work for production. The current work is in the process of identifying and characterising shifts in typical drawing usage in these phases.

Although it appears that less drawing is now taking place in the Preparation Phase, ironically, the procedures associated with being briefed appear to rely more on drawing because of the relatively new introduction of the fax. Many respondents in the original study said when they were being briefed they were cautious about their use of drawing, in that they did not want a solution to seem to occur too easily, or because they did not want to become tied to an ill conceived solution that an art director or client responded to during the briefing session. There is now evidence of the development of a very flexible and effective briefing mechanism, using the fax, where art director or publisher and designer can readily exchange drawings to check on their mutual understanding and approach (Figure 1. See appendix).

Designers in the original study indicated that the collection of visual reference material was problematic because of time constraints but it appears that nowadays more material is automatically provided by clients, partly to avoid copyright problems for designers working on digital formats, and partly because of repurposing work originally designed for print. In addition, whereas designers had previously to interpret visual reference material and adapt it through their drawing, now any source material can be scanned in to

a computer-aided system and be easily and readily manipulated.

Changes can also be identified in some stages of the Main Creative Phase. However, the majority of respondents in the current study described a very similar pattern of drawing usage in the analysis and early ideas stages of the design process to that described during the original study. 'Drawing is still the designer's way of thinking' claimed one respondent, 'it's still quicker to sketch' said another. Early drawings were also seen as 'part of a weeding out process' although the minimalist quality of these drawings was also described as 'not spending time putting down superfluous marks'.

From the evidence of the type of drawings designers currently produce in the early stages of the design process, there is an indication that a higher proportion of schematic drawings are made than were found in the original study. This is especially the case with designers working for interactive multimedia applications where flow charts and hypermaps frequently appear alongside more analogous depictions of screen or icon designs (Figures 2 and 3. See appendix). Drawing was described as an ideal way to rough out a storyboard with a series of thumbnail sketches. However, whereas initial attempts to explore letter-form design were invariably hand drawn, layout and text design were described by most designers as being produced on computer such that images could be readily scanned in, re-scaled and modified. In addition, pre-designed grids could be used to maintain consistency and variations to textual formats could be readily achieved and appraised.

Several respondents expressed concern about this procedure generating a formulaic effect. However, it was at the stage where this kind of synthesis of elements of a design begins to take place that the majority indicated they transfer their work to the computer. Most respondents acknowledged that the majority of the work on a design solution was produced digitally from then on. Over two thirds of the respondents made a particular point of saying that they considered it vital to have resolved their ideas about the overall concept and 'look'

of a design solution before working on computer, but that the ease, speed and economy that computer aided design affords ensured its use where ever possible.

It was also found that, although the presentation of design solutions in their various stages still forms a major part of the graphic design process, very little of the material displayed is hand rendered now, although it was claimed that the use of a layout pad was still essential to jot down team decisions about work in progress. 'Mood-boards', that are often used to establish early agreement with the client on an overall visual quality for a design solution, are generally produced from a collage of cuttings that can be customised for scale and colour variations using a colour photocopier and are thus rendered seamless and immaculate. Once design ideas have been conveyed to a computerised system, printouts provide readily available versions of interim solutions and 'print quality facsimiles' for in-house and client presentations. The original research had found that the production of these demonstration pieces could be rather costly and time consuming and frequently relied on types of drawing that demanded a fair degree of skill.

Although occasionally drawing is used to perfect final 'artwork', particularly when it is easier to adapt hard copies of the work by hand and then re-scan it, the Production Phase has become almost entirely computer based for the majority of designers. All the senior designers interviewed said they were glad of the enhanced control they had over their work in comparison to the reliance on the production houses that characterised their work in the eighties and before.

Conclusions

From the results of the first study it was possible to identify typical patterns of drawing usage for particular types of design problems and also to identify specific ranges of drawing activity that characterised each individual procedure and task of the design process. In that a broadly similar set of questions is being put to the respondents in the new study, it is intended that fairly precise changes in these

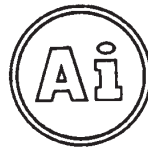
patterns of use will be identified. In addition, a number of distinct types of drawings and required drawing abilities were established by the original study, and these were set out in a taxonomy². This now provides a detailed, tabular system enabling an accurate assessment of comparability to be made. However, one of the main difficulties of the current study is the invisibility of the graphic design process when so much of it is now computerised. Whereas in the original study the drawn record provided a detailed witness of the progress of design solutions, now no such records exist. Evidently, equivalent decision making processes are now supported by drawing on computer as were previous supported by drawing in more traditional ways, and in order to move on it will be necessary to explore ways to log these processes.

Therefore the interim findings may be summarised as indicating that a major shift in the drawing usage of graphic designers has occurred since the time of the original study. Whereas the investigation in the mid-eighties demonstrated that drawing in traditional forms had a significant role in all the phases of the graphic design process, it now appears that these types of drawing are mainly to be found in the development and analysis of ideas, ie in the drawings that designers produce for themselves, and that there is typically the use of some form of technological intervention at the stages in the process when synthesis is occurring or some form of presentation or production is required. It is already clear that new approaches to the use of drawing and its role in the design process will need to be addressed if a relevant contribution to curriculum planning is to be made.

References

- 1 Schenk, P. M. The Role of Drawing in the Graphic Design Process. *Design Studies*. Vol 12 No 3 pp168 - 181
- 2 Schenk, P. M Drawing Research - a Case Study. In: Smith, J.S.ed. *IDATER 93*, Loughborough, Department of Design and Technology, Loughborough University, 1993, pp13 - 16.

Appendix



ASSORTED iMAGES
FAX MESSAGE / COVER LETTER
FAX 071-739 1973 TEL 071-729 8044

TO: JIM CHRISTIE	FAX N°: 001212 705 2516
FROM: MX	OUR REF:
DATE: 11/26/90	YOUR REF:
SUBJECT: WHAT BAC	TOTAL PP: 1

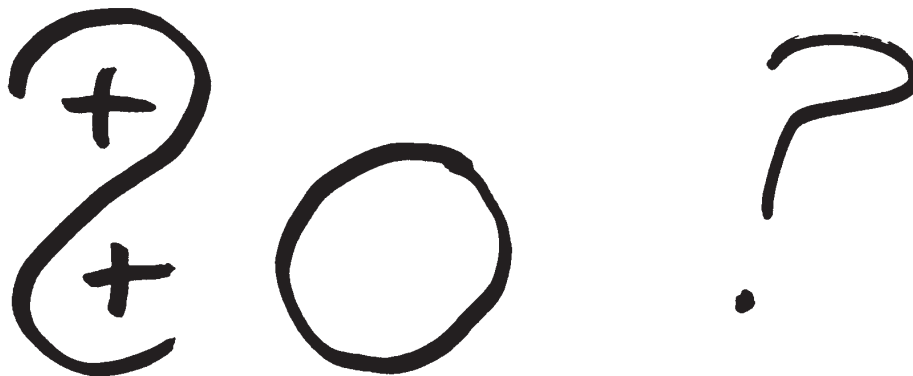


Figure 1 Fax showing an art director an idea for an image. (Malcolm Garrett, 1990)

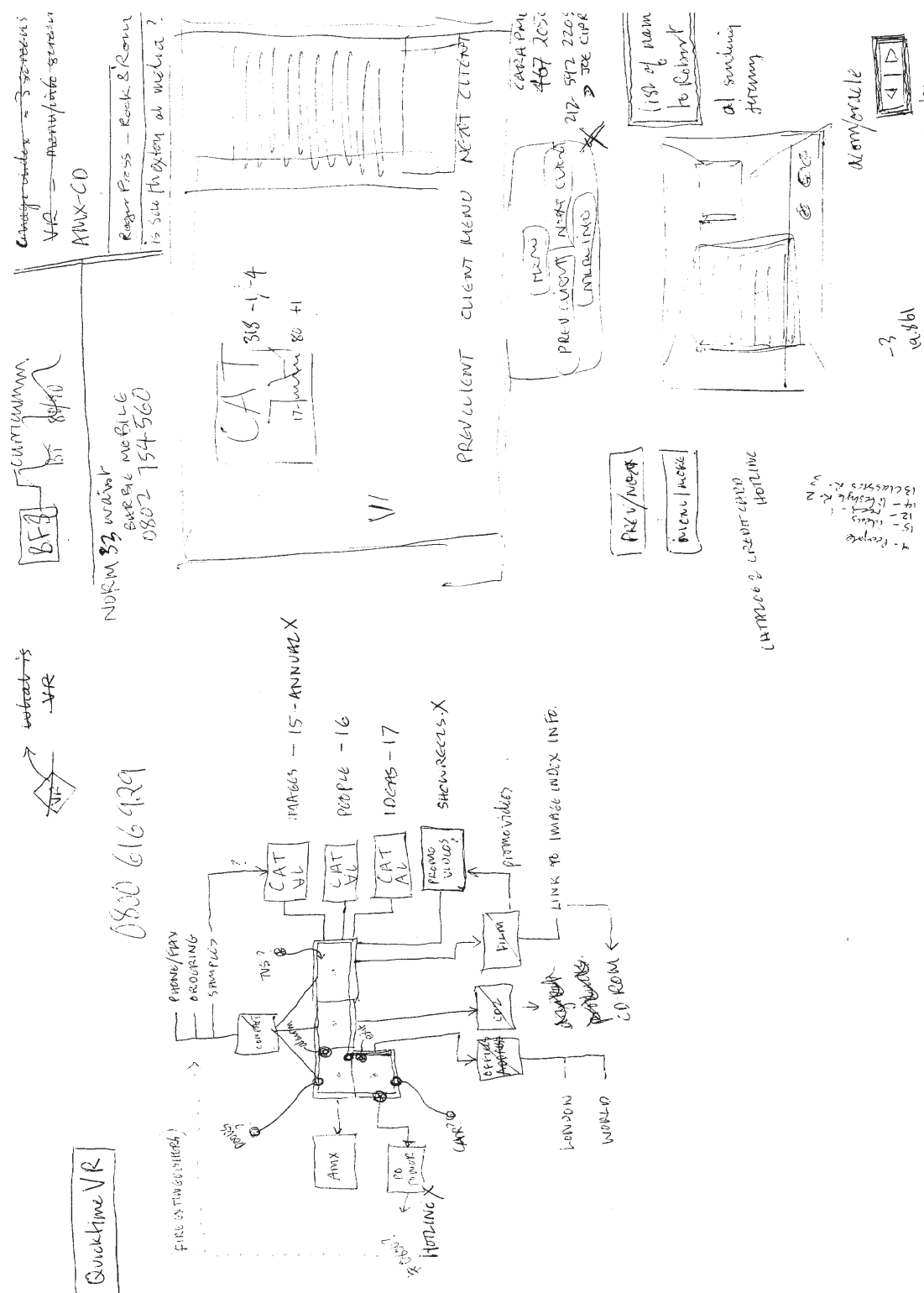


Figure 2. Drawing of flowchart and screens. (Malcolm Garrett, 1996)

