A letter from the front line

Dr Pam Schenk

Visiting Professor
The School of Art, Design and Media, Nanyang Technological University, Singapore

Honorary Research Professor
Gray’s School of Art, the Robert Gordon University, Aberdeen

Dear Russ,

I have been conducting research into the role of drawing in design since the mid-1980s and in that time have seen the historic changes in the design industry, most significantly the introduction of digital technology to the studio environment, bring about major changes in the practice of design, particularly with regard to the role of drawing. So I have given much thought to one of the questions posed in your call for papers, namely ‘In the face of 21st century technology, why do we still draw?”

I have also spent many years teaching design students in various Higher Education Institutions (HEIs) in the UK and, more recently, running post-graduate courses in ‘Design’ in a number of UK universities. Having now spent over two years teaching design on a Bachelor of Fine Art course in Singapore, I am particularly conscious that it can be very difficult to convince students that it is still important to be able to draw. I would like, via this letter, to address some of the points I first made in an article in the ‘Education Special’ of the magazine ‘Designer’ published recently in Singapore (Schenk
This was an article intended to reach some of the many current and potential design students in the region of South East Asia and to convey the simple message: ‘Drawing is still important because it is still integral to the design process’. However, my most recent experience of teaching design and conducting drawing research has shown that many young designers now feel that they can use the computer for any aspect of the design process which their predecessors conducted through drawing.

This attitude is perhaps understandable. As with any language, the language of drawing takes time to learn and that can be difficult. Increasingly, a full curriculum can mean there are fewer opportunities to spend time on learning to draw. The hand-eye coordination, the handling of drawing media, the understanding of visual form and of the conventions of visualization are all difficult to achieve, and they take time and practice to master. However, there is much evidence to show that, in spite of the benefits of the computer, drawing remains vital in a designer’s capacity to explore and express ideas.

As I mention above, I have been involved in researching the role of drawing in design for many years and the conduct and main findings of this longitudinal study have recently been set out in some detail (Schenk 2005a). From the beginning, I have also included investigation of the design curriculum in my research, with particular regard to the development of appropriate drawing abilities for designers. Again, a detailed description of the findings of a recent investigation conducted with senior academics in HEIs in the UK has recently been published (Schenk 2005b)

I started my study before the use of the computer became ubiquitous in the studio environment and have, over the subsequent period, been able to monitor the effects of increasingly powerful and user-friendly computer-based systems on the way designers draw. I have interviewed numerous designers in the course of my work, and have investigated many studio environments and analyzed thousands of drawings. Some of the key findings indicate significant changes to the professional practice of designers with, what was a largely paper-based design process becoming over the years, one extensively facilitated by digital means. The study was originally based on an understanding that
designers need to develop key drawing abilities to support a wide range of tasks during the design process, and a detailed investigation was conducted over a five year period in the mid-eighties. This early research identified the uses of drawing and types of drawing produced for each ‘procedure’ in the design process, and these uses and types of drawing were systematically characterized.

Several research methods were utilized including structured and focused interviews; observation of studio practice; case study analysis of design consultancies and the analysis of the drawn record of numerous design projects. I chose representatives of the design profession varied in terms of specialist expertise and level of seniority and with regard to the type and size of the organization for which they worked. Case studies included both small and medium sized enterprises encompassing publishing, packaging, corporate identity, design for television and interactive media. The original study, which focused mainly on graphic design, was extended to include other design disciplines including textiles and industrial design. After over twenty years of investigation in this area, I still continue to talk to designers and to collect new information. For example, as mentioned above, I recently interviewed a range of academics, including Deans, Heads of School and Course Directors, in UK-based Higher Education about their attitudes to the place of drawing on the curriculum of design degree courses (Schenk 2005b) and have continued talking to academics about this subject while I have been working in the Asia-Pacific region.

The consistent and overwhelming finding of this work is that drawing remains at the very centre of the creative and developmental process of design. In fact, I have found that the low level of interest in drawing and the lack of drawing ability in today’s design students and new recruits to the design industry is a matter of serious concern to both design educators and professionals alike.

My research has shown that both academics and designers identify two main reasons for why it is important for designers to develop drawing ability; firstly, so that drawing can be used to support conceptualization and, secondly, so that drawing can be used to
facilitate communication of design ideas to others. Drawing ability is necessary so that a designer can have a visual dialog, first with themselves, and then with other people. Having the ability to draw ideas for yourself, and then to show these ideas to others, is regarded as essential.

Beyond the vital role of drawing for ideation and visualisation, many further valuable benefits can accrue to designers through the use of drawing. For example the development of the capacity to refine ideas through appropriate techniques, conventions and media are important. Good observational skills are also seen as an important aspect of drawing ability by most designers, with many of those interviewed telling me about their keeping of note books and sketch books in order to improve their skills, and several insisting that regular drawing, including attending drawing classes, was an important part of maintaining their visual literacy. Sensibility to texture, and fundamental perception and understanding of scale and structure are also important drawing abilities. Quantrill (2002) indicates that one way to look at the drawing process is ‘as a search for meaning’, or as one of the course directors I talked to put it ‘Drawing is about thinking, analyzing, exploring and imagining’. She thought designers should be able to draw ‘in a representative and interpretive manner, to explore information, to re-interpret information and re-present information, ideas and final solutions.’ The ability to look intensely, choosing one visual aspect over another to establish a theme for design concepts, was seen as a vital outcome of the activity of drawing by another interviewee, who added ‘There is always a reference to the visual world and visual qualities are inherent in design concepts’. Thus, while academics and professional designers may describe the importance of drawing using different terms and different standards, the value accorded to the acquisition of drawing ability is very widely held.

So, why is it that I refer to this paper as ‘A letter from the front line”? Well there are two self-evident reasons. Firstly, after spending most of my career working in very well established UK art and design faculties, several of which have been in operation for well over 150 years, I am now working in a brand new art school. The School of Art, Design and Media (ADM) was set up by the Nanyang Technological University just over three
years ago. We have just started teaching our third cohort of students. Although there are several well-established art schools and polytechnics teaching art and design subjects in Singapore, ADM is the first to provide a full, four year degree-level programme.

Secondly, after many years of working with masters level and research students, I am currently working with foundation level students. However, because I am having to look at very fundamental aspects of developing drawing ability, often with students who have had little or no chance to practice drawing, this opportunity has added a fascinating new dimension to my own research.

When writing my teaching programme for Two Dimensional Design (2DD) at ADM, where appropriate I have tried to build-in elements that reflect aspects of my research findings, and I have enclosed a few photographs of images produced during a class I developed for the first day of the 2DD course. Students in that particular class can be from Junior College, many of them science majors; they can be from polytechnics where they will have become competent in the use of various software programmes; and in some cases, they will have just finished over two years of military service so will have had very little opportunity to draw or do any kind of visual work. We start, as do many other foundation programmes, with the exploration of the elements of design and begin with ‘Line’. I call my first class ‘Make my mark’, a very easy way to begin. Thus, in this first class, I persuade the students not to worry about any lack of experience of drawing. Working with simple means, a range of brushes, black and white paint and cheap paper, we explore qualities of line through the task of producing as many different kinds of crosses as possible.

By the end of the morning, not only is the studio filled with a huge range of images of all types and sizes, but it is also possible to discern a range of drawing strategies and creative processes developing. Even the students’ skill level and confidence in handling implements and media can be seen to improve. Of course we discuss the different qualities of line we can see in the work on the wall, but we also discuss the special hand-made qualities of the drawings; we talk about the effects of speed and gesture; we look at
the way some drawings are the demonstration of a concept while others are the result of a technique.

For most of the first year we avoid the use of computers and we work in a paper-based environment, with drawing also forming a fundamental part of the other foundation classes. Students spend a day a week drawing from observation, and concept sketching and hand-drawn story boards are an important aspect of three-dimensional design and time-based media classes. I have been very agreeably surprised by the progress made in both creative thinking and sophisticated image production by our erstwhile strictly software-savvy students.
However, it must be acknowledged that in today’s competitive world competence with computer-aided systems is an essential part of a designer’s repertoire of skills. Speed of revision, investigation of technical and visual alternatives and control of production have been vastly improved for designers working in a digital environment. The development of sophisticated software has not only brought control over the technical aspects of design, it has enabled designers with weak drawing skills to resolve and present their ideas more convincingly than they were able to do in the past. However, computer-aided
systems have not replaced the need to draw. Although all the industrial designers I have spoken to acknowledge the need to work effectively with a range of software programmes from the early stages of a design, they also indicate that it is still necessary to be able to draw quickly and confidently for initial thinking. ‘Still can’t do the fuzzy stuff in the digital domain’ was one significant comment. As Fish and Scrivener indicated in 1990, ‘Despite their power and beauty, existing computer-aided systems fail to assist visual invention as much as they should’ and my recent discussions with designers and academics suggest many still hold similar views.

It is also important for students to realize that much design software has actually been developed through research into the practice of design. Without experience of the ‘physical’ world of paper-based drawing, students will struggle to understand many of the tasks that the digital media have been developed to perform. Moreover, as Menezes (2006) indicates, various researchers have suggested that designers can read more information in drawings than was invested in their making (Schon and Wiggins 1992; Goldsmidt 1994; Suwa, Gero, Purcell 2000), and this is another important point to make to students. They should learn to ‘read’ the drawings of others and, indeed, also learn to look back on their own drawings with fresh eyes. Representatives from many aspects of the design industry have expressed concern to me not only about a lack of fundamental drawing ability demonstrated by some new recruits but also their lack of awareness of the power and significance of drawing. So it is important to note that the link between creative ideation and drawing ability in the early stages of designing is still being emphasised by potential employers of design students.

It must also be acknowledged that through working in a digital environment, designers have developed new forms of drawing. The possibilities of moving from paper-based to digital environments through scanners and back to a paper-base through printers, etc, has revolutionised the range and type of images that designers are able to produce. However, these methods also rely on the drawing ability of the designer for their initiation and control. Of course students can use software programmes like Photoshop to change existing images into new ones. But this does not take the place of observation of the real
world nor indeed of actually producing drawn transcriptions from found visual sources. They can create original images with programmes like Illustrator, but not with the fluidity, immediacy of control and, indeed, the serendipity of their own hand-made drawings. I have no doubt that today’s students will find their own ways to enhance their creative abilities and advance the potential of design, but it is important to remember that the best ‘software’ they have access to is always in their heads and the best interface with this software is through their use of drawing.

References


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