A Study of Lay Graphic Communication

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ABSTRACT
This thesis aims to describe and analyse lay (non-expert and non-professional) graphic communication and its relation to professional design practice.

Keywords
Design, laypeople, ethnography, ethnomethodology, design expertise, design knowledge

THESIS SUMMARY
Facilitated by advances in technology and an increased access to professional tools such as desktop publishing and typeface design software, lay designers are able to move into fields formerly limited to graphic design professionals. In ways similar to photography a century earlier, graphic design and typography are thus increasingly democratised.

In several instances, this development has prompted the call for laypeople to be educated in design principles. Concurrently, design theory and history have made efforts to accommodate a notion of design as a more fundamental activity – that in fact, everyone is a designer. This notion draws on a more general idea of a creative production that is borne out of "everyday life", which may be evident in activities such as do-it-yourself and bricolage.

This thesis aims to describe and analyse lay graphic communication and its relation to professional design practice. It investigates the ways in which lay designers understand and make sense of design tasks by examining their practical reasoning and everyday knowledge about design, their awareness of graphic rules, principles, genres and conventions, and their awareness of the appropriateness of design solutions. It also considers the degree to which lay designers are aided or hindered by technology during the design process.

At the outset, a contextual analysis examines how experts, professionals, amateurs and laypeople have been commonly defined in graphic design and other relevant fields. It addresses issues in the professionalisation of design, and discusses the relationship between professional designers and their lay counterparts. Whereas a significant amount of professional design knowledge is tacit, some of it may be made explicit in the form of rules and principles. The contextual analysis is thus supplemented by a taxonomy of graphic rules and principles which lay designers are most likely to encounter.

The empirical part of the thesis comprises two "ethnomethodologically informed" ethnographies, one of which focuses on an educational setting, the other on a work setting. Both are preceded by a pilot study. These ethnographic studies aim to detail the activities and statements of lay designers in order to reveal their understanding of design, their use of rules and principles, and the influence of technology.

Their theoretical and analytical perspective draws on ethnomethodology's attention to the methods that people use to create a sense of order in everyday life and to achieve accountability. Preliminary findings indicate an active negotiation of understandings, a latent awareness of graphic rules and principles, a justification of design decisions, as well as a significant influence of technology on the lay design process.

By providing insights into lay designers' understanding of design, as well as aiding a characterisation of lay graphic communication, this project is expected to shed light on the nature of ordinary design ability and thus contribute to a fuller comprehension and conceptualisation of design knowledge and expertise.

BIOGRAPHY
Born 1977 in Heidelberg, Germany. Sarah is currently studying for a PhD in Typography and Graphic Communication at the University of Reading, UK, and is a Fellow at the Akademie Schloss Solitude in Stuttgart, Germany. She received her master's degree in History of Design from the Royal College of Art in London and her undergraduate degree in Communication Design from the University of Applied Sciences Augsburg, Germany.

Sarah has been working as a graphic and editorial designer since 1999, and has taught design history and theory at the University College for the Creative Arts in Rochester, UK, and at London Metropolitan University, UK.

She has written for the *Journal of Design History* and *Eye*, and has most recently contributed to the book *Design and Creativity: Policy, Management and Practice* (edited by Guy Julier and Liz Moor, Berg, 2009).

PROPOSAL

A Study of Lay Graphic Communication

This thesis aims to describe and analyse lay (non-expert and non-professional) graphic communication and its relation to professional design practice. It investigates the ways in which lay designers understand and make sense of design tasks, what knowledge informs their decisions, and how they utilise graphic rules and principles. It also considers the degree to which lay designers are aided or hindered by technology during this process. This project is expected to shed light on the nature of ordinary design ability and thus contribute to a fuller comprehension and conceptualisation of design knowledge and expertise.

Background

Facilitated by advances in technology and an increased access to professional tools such as desktop publishing and typeface design software, lay designers are able to move into fields formerly limited to design professionals. In ways similar to photography a century earlier, graphic design and typography are thus increasingly democratised. The Web 2.0 has accelerated this development by granting its users an active, participatory role, and by allowing them to emerge as co-designers and authors in their own right.

Concurrently, design theory and history have made efforts to accommodate a notion of design as a more fundamental activity which forms part of everyday life – that in fact, everyone is a designer [15]. Nigel Cross for example argues that "design ability is possessed by everyone" [3]. However, what may distinguish lay designers from their professional or expert counterparts is the level of possessed design ability.

More generally, Michel de Certeau has portrayed the "practice of everyday life" as providing strategies for ordinary people to create own meanings from within the structures given by systems of production such as the media, politics and commerce. The "hidden production" – the poiësis – of the consumer, which takes place during or after consumption, possesses both an aesthetic aspect, which uses conventions to obey the desired production, and a polemical aspect that provides space for resistance [4, 5].

These aspects are embodied by two specific types of everyday creativity: do-it-yourself and bricolage. Do-it-yourself has been characterised as a "self-driven, self-directed amateur design and production activity carried out more closely to the end user of the goods created" and may encompass various activities ranging from home maintenance to knitting and independent publishing [1].

Do-it-yourself is often considered an empowering and democratising activity. It is closely connected to the construction of self-identity, which is why a significant amount of satisfaction may be derived not only from the results of the activity, but also from the activity itself, from "making" or "doing". The process of making, and selling or buying handmade objects is further seen as renouncing conformity, and fostering self-expression and human relationships in an age which seems to increasingly deny an experience of "realness" [19].

Similarly, the process of bricolage may be employed as a means of signalling resistance to the perceived monopoly of corporate production systems. Originally used by Claude Lévi-Strauss to illustrate how traditional societies through creative practice respond to the outside world, the term "bricolage" came to denote a "creation of objects with materials to hand, re-using existing artefacts and incorporating bits and pieces" [10]. In this sense everyone, at some time or other, is a bricoleur. Dick Hebdige has suggested that styles assembled by youth subcultures via bricolage are "symbolic forms of resistance" which express the "otherness" felt by subcultural members towards the mainstream culture [11]. Punk for example re-assembled, subverted and transformed ordinary, everyday objects such as safety pins into symbols of genuine aggression.

With an increased lay access to professional tools, the role of the professional designer has changed, and rather than to prescribe, create and produce, professionals are now asked to facilitate, navigate and engage. Unsettled by this change, many professionals have come to view lay entryism as a threat, fearing that it will inevitably lead to a deterioration of quality, a redundancy of professionals and an unfavourable demystification of design practice.

Others have responded with a call for lay designers to be educated in design principles [18]. These may concern aspects such as alignment, contrast, repetition, continuity and functionality, and may be interpreted more flexibly than rules. What is considered correct or incorrect is constantly re-negotiated and depends largely on the appropriateness of the devices used.

While professional designers at some time or other encounter specific rules and principles during their design education and subsequent practice, lay designers will rely on rules and conventions learnt at school, observed in the environment or gathered from design primers. Lay graphic communication differs from professional graphic work not so much due to its flouting of rules, but because it is based on a more limited graphic repertoire, supported by a more basic understanding of design principles [20]. The usefulness of design knowledge which is codified in rules and guidelines is also relativised if these are oversimplified and separated from supporting evidence or exceptions to the rule [21].

Research Into Expertise

In this thesis, the term "lay" is used to indicate aspects of the "non-expert" and "non-professional". Lay designers thus possess neither the specialist skill or knowledge of experts, nor do they engage in a specialist activity as a means of earning a living (as do professionals). Amateurs, in contrast, may possess a high level of competence and work to professional standards, but pursue the chosen activity as a pastime [17]. Since people continuously shift between lay, amateur, expert and/or professional states, these distinctions are however less clear-cut in reality.

From the mid- to late twentieth century onwards, disciplines dealing with the analysis of human cognition and performance, educational disciplines, and those seeking

to create expert systems have enquired into the nature of expertise. Expertise may for instance be described as the "outstanding performance of an individual in a particular domain..." and is commonly regarded "as acquired special skill *in* or knowledge *of* a particular subject through practical experience" [8]. A majority of the literature on expertise also finds that expertise is highly domain-specific, derives from the superior ability to recall information and recognise meaningful patterns while problem-solving, and relies on the availability and flexible use of a large amount of knowledge in the respective domain [8]. Studies of design expertise have however concluded that characteristics and abilities identified by aforementioned research may not always apply to experienced designers, due to the prevalence of ill-defined problems in design.

Protocol studies indicate that expert designers are "ill-behaved problem solvers", since they intentionally treat most tasks as ill-structured by solving each problem newly from first principles rather than relying on precedent. In addition, they appear to be solution-focused rather than problem-focused [2]. In a study employing retrospective interviews and protocol analysis, Cross identifies the following problem-solving strategies of experts: taking a broad approach, addressing the problem from a distinctive perspective, and relying on "first principles" such as "form follows function" [3].

Scholarly enquiry has also focused on investigating the development of expertise. Kees Dorst for example has developed a formal model of design expertise [6]. This model identifies six levels (novice, advanced beginner, competent, expert, master and visionary), which are preceded by a seventh level labelled "naïve". Naïve design behaviour is most often exhibited by ordinary people who perform everyday design tasks, and by beginning design students. Through experience and reflection, a novice may pass through subsequent phases to attain a high level of expertise.

Bryan Lawson [14] explicates the cognitive development evident during the acquisition of expertise: after acquiring schemata specific to the design domain, novices start collecting a "pool of precedent" leading to the development of design principles. Gradually, the designer is able to immediately recognise and deal with various types of situations by means of a "repertoire of tricks".

As design experts are usually contrasted with novices, design research has not yet paid much attention to naïve or lay designers. One of the few studies that compare formally trained designers with non-designers was conducted by Lawson in 1979. Aiming to investigate the problem-solving abilities of science and architecture students, he found that the scientists attempted to analyse the problem fully before contemplating solutions, while the architects almost immediately started generating solutions, and devoted the remaining time to test their appropriateness [13].

Aforementioned studies are however only first steps taken towards an understanding of design expertise; they do not claim to provide this understanding. A challenge also lies in quantifying tacit or embodied aspects of (design) knowledge [16]. Consequently, design research can provide only limited answers to the essential question of how lay designers actually deal with and make sense of design tasks.

Methodology and Theoretical Framework

There are several ways in which design knowledge, design expertise and the design process have been studied, including protocol studies, interviews, simulations with software, case studies and ethnographies. In order to address the question of how lay designers understand and deal with design, and also to accommodate a notion of design as a social and cultural practice, this thesis takes an ethnographic approach to lay graphic communication.

According to Hammersley and Atkinson, ethnographic work "usually involves the researcher participating … in people's daily lives for an extended period of time, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, [as well as] collecting documents and artefacts" [9]. Ethnographic data is therefore gathered in "natural" settings, rather than in experimental or otherwise artificially constructed environments.

As this project seeks to gain insight into lay designers' understandings, decisions and behaviour, the method of participant observation, supplemented by conversations, documents and photographs, is considered preferable to methods such as protocol analysis. Furthermore, an observation of non-verbal articulations as contained in actions and behaviours is considered necessary, especially in view of the active construction of graphic communication and negotiation of meanings. A significant amount of design knowledge due to its tacit nature may also never be verbally expressed.

The empirical part of this thesis comprises two ethnographic studies. The first one of these focuses on non-experts who occasionally engage with design tasks, and entails observing an educational setting (a design course for beginners or non-designers). The second study looks at non-professionals who regularly perform design tasks as part of their everyday work, and involves observing lay designers in their usual work environment.

Here, a particular emphasis is placed on investigating the factors which underlie and influence the lay design process and its outcomes. Both ethnographic studies therefore examine:

- lay designers' general understanding of design,
- their practical reasoning and everyday knowledge,
- their awareness of graphic genres and conventions,
- their awareness of the audience,
- their awareness of the appropriateness of solutions,
- their awareness and use of professional design knowledge as expressed in graphic rules and principles,
- the influence of technology (defaults and templates).

Both ethnographic investigations are also "ethnomethodologically informed", in that their theoretical perspective draws on ethnomethodology's attention to the methods that people use to actively create a sense of order and coherence in everyday life [7]. In order to investigate exactly how social reality is constructed, ethnomethodological studies focus on the use of common sense knowledge, practical action, and practical reasoning. Rather than investigating whether people *follow* rules or social norms, ethnomethodology thus considers how people actually *use* rules, norms and shared meanings in order to make their action understandable to others [12].

Preliminary findings

To date, three investigations which form part of the thesis have been completed. This includes a contextual analysis, which examines how experts, professionals, amateurs and laypeople have been commonly defined in graphic design and other relevant fields, addresses issues in the professionalisation of design and discusses the relationship between professional and lay designers. Also, a pilot study and the proposed enquiry into lay design as observed in an educational setting have been conducted.

The aim of the pilot study was to assess specific aspects of the methods envisioned for the proposed ethnographic studies, and to determine whether these methods could aid the generation of useful data. In particular, the pilot study was to provide an occasion to test various practical issues, such as negotiating access, taking on a field role, observing and writing fieldnotes, and managing relationships with participants. Lastly, it was to enable a consolidation and fine-tuning of the research questions, and the development of analytical criteria.

The setting selected for the pilot study was a graphic design course for beginners at an art and design university in London. The observed group consisted of the tutor and twelve course participants, seven of which could be described as being lay designers. Situations in which participants were prompted to articulate their design knowledge and perceptions, such as critiques of design work, tutorials and discussions of graphic samples, proved to be most useful. Over the course of five sessions, actions and statements of participants were recorded in the form of notebook jottings, written up into fieldnotes, supplemented by diagrams and photographs, and analysed.

The results for example suggest an awareness of graphic rules and principles amongst participants. In the following fieldnote excerpt, the tutor and students are discussing a typographic composition:

> Student K says that what he likes [about it] is that "there are very large, colourful letters and very small ones." The tutor nods and explains that this is "the principle of contrast", adding that he would "encourage everyone to experiment and make something as large as possible, whether on the photocopier or on the computer".

Interactions between the tutor and course participants also demonstrated an active negotiation of understandings, such as those concerning lay design behaviour:

> Student G introduces her design solution, stating that it is "very simple" and "nothing special". It seems she is apologising for the fact that her solution is one that the tutor, minutes earlier, described as an idea that "everyone has". The tutor then explains that he did not mean to say that hers is not a good idea, but that such ideas are only "seeds" which need to be developed. He adds that, "an amateur designer would stop at these seeds, an amateur wouldn't go further and develop them".

The methods tested and adjusted during the pilot study were then adopted for the study of non-experts in an educational setting. The setting selected for this "educational study" was a design project course at a liberal arts and professional studies university in London. The observed group consisted of the tutor and fifteen students, who are currently pursuing a bachelor's degree in the field of communications, media and marketing.

For this course, students work in teams to develop marketing and communication strategies, websites, promotional films, leaflets and posters for professional clients. Over the course of fourteen weeks, briefings by clients, group work, design tutorials and a presentation to the client were observed. Fieldnotes were again taken and supported through documents, informal conversations and photographs of design work.

A preliminary analysis of data generated in the educational study suggests that, although design decisions are sometimes made arbitrarily by students, they often also justified their decisions based on a latent awareness of graphic principles, genre and conventions. The following excerpt for example describes a situation in which the tutor and a student are discussing the design of a poster. This poster is intended to aid the marketing manager of a historic house in finding necessary information quickly. Also, the visual identity of the historic house is based on the signature of its most famous occupant:

> Student N says that she was thinking of putting [the famous occupant's] head in the middle of the poster and grouping the information around it in a font that resembles his signature: "a script font." The poster would then be consistent with the visual identity of the house. The tutor however immediately shakes her head and replies, "No, you can't put information in a script font. The font that you use for information has to be clear and legible, and has to work with what there is."

Furthermore, it has become evident that technology exerts a significant influence on the lay design process. This last fieldnote excerpt details statements made by the tutor (T) and a student (S) while working on a PowerPoint presentation. The student has just inserted a background picture into the slide.

> T: You can't use that as a background. It's illegible.
> S: I can make it lighter. *She lightens the image.* But then it gets too white.
> T: It's too different tonally. The white bits get into the way. You also need to consider a grid on the PowerPoint instead of putting pictures just willy-nilly like that. [...]

T: Just don't ever use the clip art from PowerPoint. It's horrible.

They adjust the brightness and contrast of the picture.

S: I like [using] a picture as a background instead of the automatic ones in PowerPoint. Because that looks like you didn't even try.

Direction of Future Research

The next stage of research for this project entails observing non-professional designers in a work environment. These will most likely be administrators working for community groups or non-profit organisations. This "work study" uses as a basis the detailed analysis of data generated in the "educational study", and seeks to supplement and enrich the latter in order to arrive at a comprehensive description and analysis of lay understandings of design.

The analysis of both ethnographic studies will then be linked to the reviewed literature and contextual analysis to aid a characterisation of lay graphic communication. The overall aim of the project is to contribute to a fuller comprehension and conceptualisation of design knowledge and expertise.

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