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Simple Information: Researching, Teaching, Doing

Abstract This research center profile describes the Simplification Centre, from its origin as a university research center to its present status as a not-for-profit dedicated to education and advocacy. We address the problem of poorly designed complex information in societies where a significant proportion of people have poor functional literacy. Our main activities are education, training, advocacy, and demonstration. This brings together a network of designers, writers and students to tackle "orphan" design projects – important communications that have no owner taking responsibility for effectiveness. Much of the poorly designed information we experience demonstrates the absence of professional processes for design and testing, so our goal is to articulate good practice to make it accessible to non-professionals.

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This paper was commissioned as one of a planned series of research group profiles, so it is not a research paper in the normal sense, but more anecdotal and personal – indeed, written in the first person.[1]

I will be presenting the Simplification Centre, a UK-based organization that exists to address the problem of the complex information we rely on to manage our lives – administrative forms, instructions for medicines, financial information, and the small print that accompanies contracts of all kind. Just as this is not a normal research piece, we are not a research group in the normal sense of the term, although we started life as one. Nevertheless, we seek to influence the world, build skills, and offer new routes to knowledge through our activities, limited as they are in scale. We could perhaps better describe ourselves as a center for reflective practice.

Our Problem Domain

Our design specialism is information design, and our work is situated in a tradition established largely in the 1970s, but with many precedents and pioneers in previous decades. Information design research has rarely considered itself or been considered as belonging to the mainstream of design research. A Venn diagram of overlapping disciplines would include – among others – graphic design, applied psychology, multimodal linguistics, ergonomics, instructional design, technical writing, and journalism.[2]

Information design presents particular challenges to design research. To explain what I mean, allow me to contrast the design of a government form with the design of a kettle. In *Notes on the Synthesis of Form*, Christopher Alexander[3] uses the design of a simple kettle to demonstrate just how many interacting factors a designer must consider, even with the most basic of products, including getting the water in, getting it out, safety in handling, stability, cost to produce, corrosion resistance – he lists twenty-one in all, and alludes to the much greater complexity of designing a car.

The design process for a kettle may be complex, but it is a single stage that can be entrusted to a competent specialist designer, after which the kettle is manufactured, sold to users, and then used confidently – because all kettles are used in mostly the same way. Industrial designers, architects, and even service designers can create concepts and specify them for manufacturing or implementation by others. But information design is different – there are just too many documents, signs, interfaces, diagrams, explanations, and pages that need to be individually crafted.

Until relatively recently, however – and still, in many countries and contexts – government forms were rarely entrusted to professional designers. This is also true of many information design products in many industries. Even in cases where professional designers do become involved, it is often to develop design systems for others to use – templates, styles, brand guidelines, and so on. In reality, most organizations we have worked with have thousands of documents and entrust their development of information to content experts working at a relatively junior clerical level. Information design is implemented through a combination of systems and page-level craftings. Sometimes it goes well, but in many instances the result is uneven quality, uninformed by design training and untested with users.

Understanding difficult information is a serious social and economic problem. International surveys organized by the OECD show that around half the population across the developed world have a literacy deficit which affects their ability to function effectively in society and at work.[4]

Literacy is assessed using five levels, Level five being the highest. The OECD

1 Editorial note: while the body text conforms to U.S. English, all project titles and institution names adopt British English where appropriate.

2 Key texts that contextualize this research tradition include the journals *Visible Language* and the *Information Design Journal*, plus conference proceedings or edited volumes such as Paul A. Kolers, Merald E. Wrolstad, and Herman Bouma, eds., *Processing of Visible Language*, vol. 1 (New York: Plenum Press, 1979); Paul A. Kolers, Merald E. Wrolstad, and Herman Bouma, eds., *Processing of Visible Language*, vol. 2 (New York: Plenum Press, 1980); Ron Easterby and Harm Zwaga, eds., *Information Design: The Design and Evaluation of Signs and Printed Material* (New York: John Wiley & Sons, 1984); Thomas M. Duffy and Robert Waller, eds., *Designing Usable Texts* (Orlando: Academic Press, 1985); and Alison Black, Paul Luna, Ole Lund, and Sue Walker, eds., *Information Design: Research and Practice* (London: Routledge, 2016).

3 Christopher Alexander, *Notes on the Synthesis of Form* (Cambridge, MA: Harvard University Press, 1964), 61.

4 OECD, *The Survey of Adult Skills: Reader's Companion*, 2nd ed. (Paris: OECD Publishing, 2016), DOI: https://doi.org/10.1787/9789264258075-en.

considers Level three "as a suitable minimum skill level for coping with the demands of modern life and work."[5]

> "Adults performing at Level 3 can understand and respond appropriately to dense or lengthy texts, including continuous, non-continuous, mixed, or multiple pages. They understand text structures and rhetorical devices and can identify, interpret, or evaluate one or more pieces of information and make appropriate inferences. They can also perform multi-step operations and select relevant data from competing information in order to identify and formulate responses."[6]

This makes it clear that higher-level literacy is about more than just reading the words. It is about reading purposefully and strategically. And it is easier to do this if the words have some shape and texture, if they are legible and accessible, and if someone has thought carefully about graphic alternatives when these work better than words alone.

Governments are very aware of the problem, and allocate budgets to adult literacy programs. Some countries have attempted to enforce this through legislation, such as the 2010 Plain Writing Act in the USA.[7] Much of this progress can be credited to organizations focused on plain language such as Clarity,[8] an international organization for lawyers committed to plain language, and PLAIN (Plain Language Association International).[9] Clearly, we are not the first group to address this issue. Researchers and campaigners have made considerable effort to improve information transmission over many decades, and this has led to a noticeable improvement in standards in the UK where we are based, and also in many other places.

We wanted to bring design issues into the debate – both the problems caused by poor document and interface design, and more positively the benefits afforded by good design. Design may not be the obvious route to solving the problem of literacy, where words would seem to be the main issue, but there are good reasons to take this path.

Poor documents are typified by long convoluted sentences, technical or jargon-ridden vocabulary, dense and unstructured typography, a lack of focus and unclear reading paths. Figures 7 to 10 show examples alongside redesigned alternatives.

The information design contribution involves providing a graphic infrastructure that makes strategic reading easier, using layout, diagramming, access structures – headings, contents lists, and so on – navigational tools, and any other affordances that reveal content structure and support self-aware, purposeful reading.

The Problem of Institutional Literacy

While good solutions to particular, recurring information design challenges do exist, we also wanted to tackle an important underlying and systematic cause of incomprehensible communication: the perspective and skills of the people responsible for it.

Plain language rules can be easily grasped by the typical manager in government or industry because they build on concepts most people learn in school. When we were asked to review the writing guidelines of a large UK government department, we found seventy-five sets of guidance aimed at staff writing customer communications before we stopped counting. A content analysis of this guidance showed that it was overwhelmingly concerned with matters of style, spelling, and punctuation at the sentence level – information that is well-known to most of its audience, and which could have been obtained from any number of published books on style. But pulling back from the micro-level of words and sentences – the

5 OECD, *Literacy in the Information Age: Final Report of the International Adult Literacy Survey* (Paris: OECD Publishing, 2000), xiii, DOI: https://doi.org/10.1787/9789264181762-en.

6 OECD, *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills* (Paris: OECD Publishing, 2013), 66, DOI: https://doi.org/10.1787/9789264204256-en.

7 For more information, see https://www.plainlanguage.gov/law/.

8 For more information, see https://clarity2018.org/about.

9 For more information, see http://plainlanguagenetwork.org/.

comfort zone – it becomes clear that few people learn at school how to structure and design a complex document or interface. This was reflected in the guidance under offer, which had little to say about how to explain complex ideas or design a document that supports user comprehension.

We call this "institutional illiteracy." To be considered literate, people need to be able to read *and* write. To us, this should be true for organizations who create documentation as much as the individuals reading it. So when an official document is incomprehensible, the blame – the literacy shortfall – is with the organization creating it as much as with its users. Elsewhere[10] I critique the materials used in literacy testing, which are often very poorly designed, and presented in an uncontextualized manner. If we were to test a bicycle and find that no one could reach the pedals, we would not conclude that people's legs are too short. So when we test a poorly designed document and find that some people cannot understand it, the document is a design failure as much as a literacy problem.

Throughout our existence, then, the Simplification Centre has grappled with the issue of how to build institutional literacy – defining the competencies needed, and developing design tools, processes, and skills based on insight from theory and research.

Before setting up the Centre, I had acted as a consultant for HM Revenue & Customs (HMRC), the UK government department responsible for collecting taxes, and had extensive experience with other government agencies and with many banks and financial services brands. In most cases, there was a clear institutional will at a senior level to communicate clearly, but the individuals responsible were mostly unqualified and unsupported non-graduates with no career path recognizing their specialism. In the UK government, as in most industry sectors, competency frameworks have been developed which define the skills required at each career level. But while the Professional Skills for Government framework[11] recognized other communication specialisms such as public relations and advertising, it ignored a core function of government: communicate clearly with citizens about their rights and responsibilities.

A Brief History

Designers of all kinds are typically trained to consider users' needs, but their careers may have taken them into areas which compromise their ideals. Some have responded to this with pro bono "design for good" activity, and much of our work is in this category. We were inspired by programs such as AIGA's Design for Good,[12] The Center for Urban Pedagogy,[13] Designers without Borders,[14] and software hackathons.

We began by creating a manifesto, which we discussed with two universities who were potential hosts. The University of Reading offered start-up funds and a chair, and we launched the Centre there in 2008 in the Department of Typography and Graphic Communication. Founded by Michael Twyman in the early 1970s, this department and its graduates have played a key role in the shaping of what we now call information design.

At the university we set up a membership scheme that attracted a number of corporate sponsors, chiefly UK government agencies but also two financial services companies, Aegon and AXA. In exchange for membership fees, we offered consultancy on specific projects, a benchmarking service, and training. We then used the fees to provide those services, and also to embark on a research program. In this way, we funded an information officer, a training development manager, two postdoctoral research assistants, a PhD student, and a visiting professor of linguistics.

Our specifications for a useful research center included

10 Robert Waller, "Graphic Literacies for a Digital Age: The Survival of Layout," *The Information Society* 28, no. 4 (2012): 236–52, DOI: https://doi.org/10.1080/01972243.2012.689609; See also Mary Hamilton and David Barton, "The International Adult Literacy Survey: What Does It Really Measure?," *International Review of Education* 46, no. 5 (2000): 377–89, DOI: https://doi.org/10.1023/A:1004125413660.

11 This has since been renamed the Government Communication Competency Framework. According to its authors, it "should be used in conjunction with the Civil Service Competency Framework." Government Communication Service, *Government Communication Professional Competency Framework* (London: Government Communications Service, 2016), 3, accessed May 6, 2018, https://gcs.civilservice.gov.uk/professional-development/competency-framework/.

12 For more information, see https://www.aiga.org/design-for-good.

13 For more information, see http://welcometocup.org.

14 For more information, see http://www.designerswithoutborders.org.

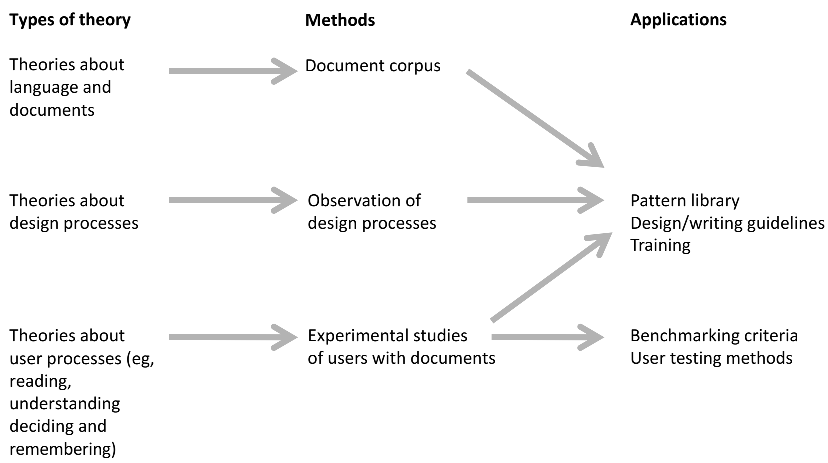


Figure 1 Our research model.

- *Access to real world problems*: our member organizations offered this, and we also held design clinics in cities around the country in which people brought examples of their work – good and bad – for discussion and criticism.
- *Access to users of information*: we worked with a local adult literacy class, and used the opportunity to gain insight into their needs and use of information. We also set up a research panel of local people prepared to come in for particular studies.
- *Access to customers for research and design thinking*: our member organizations needed practical guidance, and we needed to present this in a compelling and usable form.
- *Access to multidisciplinary thinking*: we discussed our plans with other university specialists representing psychology, neuroscience, linguistics, sociology, law, business, and design methods.
- *Access to design ideas*: we were situated in a graphic design department, and were closely associated with a Master's degree course in information design.

Figure 1[15] shows our research model.[16] It divides our domain into three strands, looking at artifacts (in our case, this means documents), processes, and users. The model represents our ideal, not our achievement – although we have made a start on each aspect of our proposed method, including building a prototype document corpus,[17] exploring co-designing with local members of an adult literacy class, and setting up a research panel of research participants.[18]

Our philosophy at the outset was that we were not interested in theory development or in data collection for its own sake – we were to be practically oriented so everything on the left hand side of the model leads to a tool for training, designing, documenting design, or evaluation. We expected each strand to contribute insight to the practical applications and tools we aimed to publish and deliver to member organizations.

These applications included

- *Benchmarking criteria*: a research-based, continually evolving set of evaluations used to improve documents submitted by member organizations. This is no longer offered, but the criteria have a continuing life, having been adapted for the Contract Design Awards by the International Association for Contract and Commercial Management.[19]
- *Design patterns*: many of our projects result in a pattern library tailored to the needs of the client organization. Originating with the architect Christopher

15 All figures are from various Simplification Centre reports and presentations and are reproduced here under Creative Commons License CC-BY-SA 4.0 International (see https://creativecommons.org/licenses/by-nc-sa/4.0/).

16 A document corpus is an uncurated collection of real documents available for (usually automated) analysis. Document corpora are modelled on language corpora used in linguistics, which are large databases of writing samples and transcripts of speech that enable researchers to base theory on actual usage. Theorists of multimodality and genre have advocated document corpora for similar purposes. Martin Thomas, Judy Delin, and Rob Waller, "A Framework for Corpus-Based Analysis of the Graphic Signalling of Discourse Structure," in *Proceedings of the 8th MAD Multidisciplinary Perspectives on Signalling Text Organisation*, ed. Lydia-Mai Ho-Dac, Julie Lemarié, Marie-Paule Péry-Woodley, and Marianne Vergez-Couret (Toulouse: University of Toulouse, 2010), 46–57, available at https://hal.archives-ouvertes.fr/hal-01391515/document; Robert Waller, "Practice-Based Perspectives on Multimodal Documents: Corpora vs. Connoisseurship," *Discourse, Context & Media* 20, (December, 2017): 175–90, DOI: https://doi.org/10.1016/j.dcm.2017.07.004.

17 Martin Thomas, Judy Delin, and Robert Waller, "A Corpus for Graphic Analysis of Texts" (paper presented at Multidisciplinary Approaches to Discourse, Moissac, France, 2010, Simplification Centre Technical paper 3), last

modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC3CorpusGraphicAnalysis.pdf.

18 For example, see Karen Stanbridge, "What Do People Notice about Their Documents?" (Simplification Centre Technical paper 7), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC7DocumentDiary.pdf; Jeanne-Louise Moys, "Typographic Voice: Researching Readers' Interpretations" (Simplification Centre Technical paper 6), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC6TypoVoice.pdf.

19 Our benchmarking criteria are explained in more detail (including references to their theoretical underpinnings) in Robert Waller, "What Makes a Good Document? The Criteria We Use" (Simplification Centre Technical paper 2), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC2CriteriaGoodDoc_v2.pdf. Our method is described in Martin Evans, "Benchmarking Everyday Documents" (Simplification Centre Technical paper 5), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC5Benchmarking.pdf. Evans also compares our scheme with others in his "Criteria for Clear Documents: A Survey" (Simplification Centre Technical paper 8), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC8CriteriaSurvey.pdf.

20 Christopher Alexander, Sara Ishikawa, and Murray Silverstein, *A Pattern Language: Towns, Buildings, Construction* (Oxford: Oxford University Press, 1977).

21 Robert Waller, Judy Delin, and Martin Thomas, "Towards a Pattern Language Approach to Document Description," *Discours: Revue de Linguistique, Psycholinguistique et Informatique. A Journal of Linguistics, Psycholinguistics and Computational Linguistics* 10 (2012): 1–29, DOI: https://journals.openedition.org/discours/8673.

22 Per Mollerup, *Simplicity: A Matter of Design* (Amsterdam: BIS Publishers, 2016).

Alexander, design patterns represent guidance expressed as solutions to user problems.[20] Instead of the robotic application of rules expected by most guidance on document design, the pattern approach demands that the designer actively engage in problem-solving. Design patterns are also an important tool for reflective practice – we search our design practice for repeatable solutions which can be documented and shared.[21]

- *Training and design education*: having identified the poor skills as part of the problem, this is still a key output for us, and the next section describes our approach.

A Note on Our Name: Simplification vs. Simplicity

The name Simplification Centre was originally a working title – but it stuck. It is generally understood by most who encounter us. But there is a potential confusion between simplification and simplicity. As Per Mollerup[22] argues, simplicity is an aesthetic and ethical ideal in modernist design. Writing about simplicity sometimes borders on the mystical – John Maeda's *Laws of Simplicity*[23] is an example, to my mind, and at times simplicity is perhaps another word for what Christopher Alexander[24] calls the Quality Without a Name, the feeling generated by something we judge complete, whole, satisfying, right.

Many information designers encounter resistance to surface-level simplicity amongst their clients, who are suspicious of dumbing down their messages, and worried about misrepresenting something difficult as something easy, or omitting important nuances and subtleties. And these clients are right to worry about such things – we have always distinguished between the simplicity of underlying content, the simplicity of information artifacts, and the simplicity of the user's experience.[25] Mollerup picked up on this and developed excellent terms that define this very succinctly: *quantity simple* versus *quality simple*. Quantity simple is the aesthetic preference for information to look plainer and shorter. Quality simple describes ease of use – usually achieved by highlighting, not hiding, structural features. Simplified information frequently expands, reducing surface simplicity, as helpful features are added – diagrams, headings, explanations, and so. Vijay Bhatia[26] has used the term easification to bypass this confusion.

Leaving the University

After three years, we left the university and established ourselves as a non-profit with charity status. This is not the place to recount all our reasons for doing so, but many with experience in the higher education sector will be aware of the pressures of combining research with fundraising, consultancy, and a full teaching load.[27]

In spite of the stated ambition of funding agencies, multidisciplinary research is notoriously risky and unrewarded. It is, in many ways, more challenging than staying within the boundaries of one's own discipline. Multidisciplinary journals are regarded as unprestigious, and research proposals can receive baffling reviews when paradigms collide.

So although we worked with a number of other university departments on project proposals and grant applications, we were unable to create the truly cross-university center we had hoped for. Our work did not obviously fit the agendas or frameworks set up by funding agencies, and we were driven more by a deep interest in our topic than in raising funds we did not strictly need, or fighting to define a new ecological niche in the research landscape.

Now, as a not-for-profit, we get by with very little income. We take on consultancy work to pay for our operational costs, where it fits with our declared aims as an educational charity. And our annual summer school and occasional conferences cover their own costs, but no more. We also have a good network of volunteers – mostly professional designers and writers – who contribute their time to our Simple Action days (more on these below).

Our Information Design Curriculum

Education and training were core components of our program. For many research centers, education is often not a central feature (except for doctoral students) or it is a tiresome distraction. Content in these cases is a trickling down of knowledge created through the research program. But because it was a central part of our research environment, educating gave us access to the state of knowledge, assumptions, and processes used by the people our research is aimed at.

Encouraged by HMRC, the tax agency, we created a part-time work-based university qualification. It was originally conceived as a postgraduate certificate, but because so many among our target audience were not graduates, they would not have qualified for the course. Instead we launched it as a Certificate of Higher Education, which is the equivalent to the first year of a Bachelors course (ISCED level 5), with a combination of residential courses, reading, and work-based assignments.

The Program

The full program of sixteen modules represents our view of the competences needed by information designers in the public sector and service brands.[28] It included five introductory modules on what we considered core content: simplification principles, clear writing, graphic information design, usability, and the customer journey (for example, see Figure 2). Students could then choose from a range of application modules, which included more advanced versions of the same topics as well as additional topics such as inclusivity, project management, and evaluation. The program ran for three years, and around forty-five students had graduated by the time the program was discontinued.

23 John Maeda, *The Laws of Simplicity: Design, Technology, Business, Life* (Cambridge, MA: MIT Press, 2006).

24 Christopher Alexander, *The Timeless Way of Building* (New York: Oxford University Press, 1979).

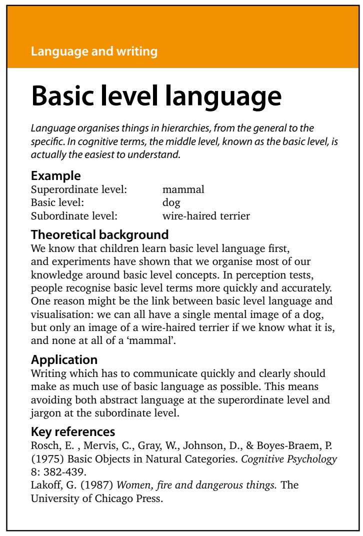
25 Robert Waller, "Simplification: What Is Gained and What Is Lost" (paper presented at Applications of Information Design Conference, Mälardalen University, Sweden, 2008, Simplification Centre Technical Paper 1), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC1SimplificationGainedLost-v2.pdf.

26 Vijay K. Bhatia, "Simplification v. Easification—the Case of Legal Texts," *Applied Linguistics* 4, no. 1 (1983): 42–54.

27 Also, I should have prepared myself better by re-reading the campus novels of Malcolm Bradbury and David Lodge.

28 The modules and competences addressed are those reported by Jenny Waller, "Professionalising Functional Communications: What Professionals Need to Know" (Simplification Centre Technical paper 12, 2011), last modified April 2011, http://www.simplificationcentre.org.uk/downloads/papers/SC12-ProfessionalisingComms.pdf.

Figure 2 Forms designers from HMRC work on a customer journey map.



Language and writing

Basic level language

Language organises things in hierarchies, from the general to the specific. In cognitive terms, the middle level, known as the basic level, is actually the easiest to understand.

Example

Superordinate level:	mammal
Basic level:	dog
Subordinate level:	wire-haired terrier

Theoretical background

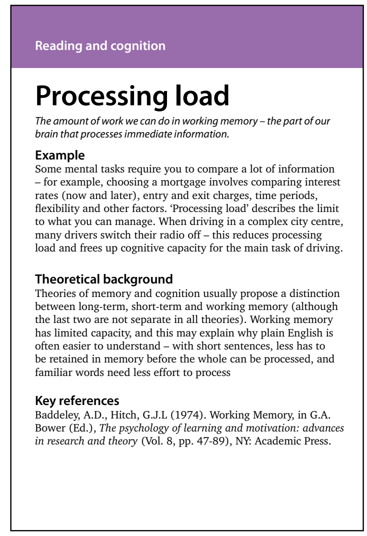
We know that children learn basic level language first, and experiments have shown that we organise most of our knowledge around basic level concepts. In perception tests, people recognise basic level terms more quickly and accurately. One reason might be the link between basic level language and visualisation: we can all have a single mental image of a dog, but only an image of a wire-haired terrier if we know what it is, and none at all of a 'mammal'.

Application

Writing which has to communicate quickly and clearly should make as much use of basic language as possible. This means avoiding both abstract language at the superordinate level and jargon at the subordinate level.

Key references

Rosch, E. , Mervis, C., Gray, W., Johnson, D., & Boyes-Braem, P. (1975) Basic Objects in Natural Categories. *Cognitive Psychology* 8: 382-439.
Lakoff, G. (1987) *Women, fire and dangerous things.* The University of Chicago Press.



Reading and cognition

Processing load

The amount of work we can do in working memory – the part of our brain that processes immediate information.

Example

Some mental tasks require you to compare a lot of information – for example, choosing a mortgage involves comparing interest rates (now and later), entry and exit charges, time periods, flexibility and other factors. 'Processing load' describes the limit to what you can manage. When driving in a complex city centre, many drivers switch their radio off – this reduces processing load and frees up cognitive capacity for the main task of driving.

Theoretical background

Theories of memory and cognition usually propose a distinction between long-term, short-term and working memory (although the last two are not separate in all theories). Working memory has limited capacity, and this may explain why plain English is often easier to understand – with short sentences, less has to be retained in memory before the whole can be processed, and familiar words need less effort to process

Key references

Baddeley, A.D., Hitch, G.J.L (1974). Working Memory, in G.A. Bower (Ed.), *The psychology of learning and motivation: advances in research and theory* (Vol. 8, pp. 47-89), NY: Academic Press.

Figure 3 (Left) Theory cards give abstract ideas a place in design critiquing.

Figure 4 (Right) Two theory cards from our introductory course session.

Theory Cards

The course was theory-led, but not in the way that the original theorists might have envisaged. Theories were treated as tools that, in greatly simplified form, can equip designers to better conceptualize their problem space.

Each A6-sized card featured a summary of a theory, including a simple definition, an example, and a key reference (Figures 3, 4). The cards were inspired by exam revision flash cards, the Pokémon-like cards at www.theorycards.org.uk, and the now-classic *Universal Principles of Design.*[29] The theories mostly come from other disciplines than design theory – cognitive psychology and linguistics, for example. The cards introduce just enough of the concept to be useful user insight, but nowhere near enough to bluff an exam question.

We still use the cards during our annual summer school, which kicks off with a critiquing session. Students bring examples of good and bad information design for the group to discuss. The tutors look for opportunities to introduce theories that help explain their criticisms. Later, the students use the cards themselves in discussions and presentations.

The cards give the theories a physical presence in the room in a way that is not the case when they are contained in a closed book or a web browser history. Part of our whole approach to information design is to see pieces of information presented graphically (whether textual or visual) as memory tools. Physical tools help us to reach, grasp, cut, lever, flatten, hammer, filter, and contain – to go beyond the capabilities of our hands. Memory tools extend the capabilities of our long-term, short term, and working memory, and it is not difficult to find metaphoric equivalents to reaching, grasping, and so on.

Using the theory cards in teaching raised interesting issues about the nature and utility of theory. For example, at an early stage we found ourselves with cards called "world knowledge," "schemata," and "assumption." While these are different concepts to discourse and cognitive theorists, in the classroom the distinctions seemed trivial: at their heart they each call for empathy with a user's experience, culture, and existing constructs.

The Summer School

Since the Certificate of Higher Education program ended, we have run an annual summer school. It started as a joint effort with the University of the Aegean, in Syros, Greece in 2013, but has now settled in Bath, UK. An international group of around twenty people attend each year for an intensive week of project work,

29 William Lidwell, Kritina Holden, and Jill Butler, *Universal Principles of Design: 125 Ways to Enhance Usability, Influence Perception, Increase Appeal, Make Better Design Decisions, and Teach through Design* (Gloucester: Rockport, 2003).

Figure 5 Karel van der Waarde leads the user-testing day.

discussion, and lectures. They include some graphic designers wishing to transition to information design, but many are from other professions who need to communicate clearly – contract lawyers, health educators, medical textbook writers, civil servants, technical writers, and statisticians, among others.

We run the summer school in partnership with the International Institute for Information Design,[30] and in fact three of the tutors are on the IIID's executive board. Each day's teaching focuses on a particular aspect of information design practice: critiquing, diagramming, designing text, user testing, and consultancy tools (Figure 5). Along with the theory cards and an extensive library we make available, the summer school acts as a kind of sushi belt of relevant ideas. Although the course is intense, and the ideas come at them quickly, students can grab the ideas, inspirations, and authors which appeal to them as they pass, to consider in more detail after the course. They work in small teams on projects which they present on the last day (Figure 6).

The summer school has a beneficial, even inspirational impact on students who invariably give us very positive feedback. It attracts individuals who have identified an issue in their professional context and want intellectual and social support to develop solutions which go beyond their current state of knowledge and skill. So community building is an important outcome.

Participants bring their own work to share during the week, and some of them also give presentations about their own specialist knowledge – for example, a recent participant was a behavioral economist with a government agency, who was able to contribute new content on nudge theory to the course. We have had a parliamentary lawyer who writes legislation, a medical textbook editor, a curator of a legal education website, several statisticians, and others whose contributions have extended our own perspectives on information design.

30 For more information, see http://www.iiid.net.

31 The term comes from Susan Verba's Center for Design in the Public Interest at University of California, Davis.

32 For example, see Robert Waller and Nick Parker, "Better Speeding Notices for Faster Comprehension" (Simplification Centre Simple Action report 5), last modified October 2016, http://simplificationcentre.org.uk/downloads/reports/SimpleAction5-SpeedingNotice.pdf.

33 Robert Waller and Stephanie VandenBerg, "A One-Day Transformation Project for Overdose Emergency Kits," *Information Design Journal* 23, no. 3 (2018): 319–33, DOI: https://doi.org/10.1075/idj.23.3.05wal.

34 Robert Waller, "Tenancy Agreements: A Fresh Approach" (Simplification Centre Simple Action report 2), last modified March 2014, http://simplificationcentre.org.uk/downloads/reports/SimpleAction2-TenancyAgreement.pdf.

Figure 6 This project was to raise awareness of the historical connection between the wealth of Bath, and the eighteenth century slave trade.

Advocacy and Demonstration

Because we exist to affect (rather than just investigate) our problem domain, we engage in advocacy. We respond to government consultations on matters such as the clarity of utility bills or consumer contracts, and comment through our blog.

Orphan design projects are challenges that no one seems to own, or that no one wishes to pay for.[31] Our Simple Action Days are similar to software hackathons – our network of designers, writers, enthusiasts, and students gets together for a day of creative action. We then publish these as short reports and try to engage in discussion with potential users of our ideas.[32] To date we've worked on tenancy agreements, planning notices, speeding tickets (Figure 7), and medicines information.

We ran a Simple Action day at the London School of Hygiene and Tropical Medicine to address the issue of instructions for overdose emergency kits.[33] Opioid overdoses, increasingly frequent, can be temporarily countered with an antidote,

35 George Siedel and Helena Haapio, *Proactive Law for Managers: A Hidden Source of Competitive Advantage* (London: Gower Publishing, 2011). For an example of simplified contract design in action, with an associated pattern library, see Robert Waller et al., "Cooperation through Clarity: Designing Simplified Contracts," *Journal of Strategic Contracting and Negotiation* 2, no. 1-2 (2016): 48–68, DOI: https://doi.org/10.1177/2055563616668893.

Naloxone, giving time for emergency medical help to arrive. Because they are effective and also safe, the kits are distributed widely, and even carried by drug users. So in an emergency, an untrained person may be required to use the kit to give an injection. The current instructions include various efforts to communicate clearly – such as the flow charts you can see in the top image in Figure 8. But there is far too much information to be useful at the point of use.

The new design uses a box to carry key information, and highly simplified instructions printed in large enough type to be legible in a poorly lit street or club. Of course, the design would need thorough testing before use.

Tenancy agreements are among the most common legal documents in use, but in the UK (and perhaps other countries) they are not standardized. Our redesign[34] represents a genre shift, from legal document to user guide. The information that is typically embedded in complex text (Figure 9, left) – or only implied – is made explicit and visually available (Figure 9, right).

This is in the spirit of proactive law[35] – the idea that it's better for contract documents to communicate so clearly that disputes do not arise, rather than be written unclearly (to humans)[36] but precisely (for lawyers and judges). (See figure 10.)

36 This is an allusion to Creative Commons, who publish a "human-readable" version of their legal contracts. For more information, see https://creativecommons.org/2009/02/18/the-value-of-human-readable-licenses/.


THAMES VALLEY POLICE

Please retain this page for your records

Fixed Penalty Support Unit
Thames Valley Police
PO Box 156
Banbury
OX16 2UX

Tel: 01865 293355

Date: 23/09/2016
DocRef: 3858061
FPN: 0433084561233120

Note: If the name above is that of a company, the request for information is addressed to the company secretary

NOTICE OF INTENDED PROSECUTION

Dear Sir/Madam

Vehicle Registration Number BF ZC

In accordance with Section 1 of the Road Traffic Offenders Act 1988, I hereby give notice that it is intended to take proceedings against the driver of motor vehicle BF ZC

for the alleged offence of EXCEED 30 MPH (ATTENDED) Recorded Speed 37

at 08:05 on 15/09/2016

at (place) Shooters Hill, Pangbourne

contrary to Section S81(1) S89(1) RTRA 84 Sch 2 RTOA 88

This allegation WILL be supported by photographic evidence at any subsequent court hearing

STATUTORY REQUEST FOR THE NAME AND ADDRESS OF THE DRIVER

I am authorised by the Chief Constable of Thames Valley Police to require you to provide information relating to the user of the vehicle above. In accordance with Section 172 of the Road Traffic Act 1988 I hereby give you notice that as [the registered keeper] [a person having been named by the person keeping as the driver] [a person who may have information which may lead to the identification of the driver] of the vehicle, details of which are shown above, you are required to notify me of the name and address of the user of the said vehicle at the time and date shown above. This can be done by completing and returning the form on page 3.

- On conviction for failure to supply this information the penalty is similar to that of the alleged offence itself, i.e. both a fine and penalty points. However, the maximum fine in such cases could be £1000 and the offence carries a 6 point endorsement.
- You are required to provide the information on page 3 of this document and sign the document in the appropriate places.
- It is an offence to knowingly and wilfully provide a false statement under Section 5 of the Perjury Act. This and offences of perverting the course of justice could both incur a term of imprisonment and/or a fine.

Under Section 172 of the Road Traffic Act 1988 you are required to supply the information requested above within 28 days of receipt of this request. If you fail to return or complete the document correctly this will prevent the option of a Fixed Penalty being available. Please complete the required sections on page 3 clearly in BLACK INK using CAPITAL LETTERS.

THIS NOTICE MUST NOT BE PASSED TO ANY OTHER PERSON.

The completed form must be returned to FIXED PENALTY SUPPORT UNIT, P.O. BOX 156, WARWICK ROAD, BANBURY, OXON OX16 2UX. You are advised to obtain a certificate of posting when returning the information required.

B Pritchard

By or on behalf of the Chief Officer of Police

Page 1


CITY OF MANTON POLICE

Speeding notice

30

This is an important notice. Do not ignore it or pass it on to anyone else, even if you were not the driver. We must get your reply by 28 October 2016

Mr Andrew Sample
12 Acacia Avenue
Manton
MN3 6XY

Notice date: **23 September 2016**
Document reference: **12345678**
Fixed Penalty Num: **1234123412341234**

Your car was recorded doing 37 in a 30 zone

Date of photo	**15 September 2016**
Time	**08.05**
Vehicle	**AB51HTY**
Place	**Station Road, Manton**
Speed limit	**30 mph**
Recorded speed	**37 mph**
Evidence	**Speed camera**

You need to tell us who was driving

This is so we can issue the fixed penalty to the right person.

Send us the Driver or Keeper Form by 28 October 2016.

If you were the driver, tick box A on the form

If you were the driver, you will be offered the chance to accept the offence without being prosecuted in court, and either

- receive a fine and points on your license (usually £100 and 3 points)
- **or** you may be able to avoid a fine and points if you go on a driver education course (please see the notes on the next page to see if you are eligible).

If you want to contest the alleged offence you must still send in the form, and you will have a chance to refer your case to a Magistrates' Court later.

If you were not the driver, tick box B or C on the form

If you were not the driver, you must give us details of the person who was driving the car at the time of the offence.

If you did not own the car at the time, you must tell us the name of the person or company who you bought it from or sold it to.

You must still fill in the form yourself. Do not pass it on to anyone else.

Contacting us

Keep this page for your records, and send the form to:
Fixed Penalty Support Unit,
City of Manton Police,
PO Box 123,
Manton MN1 2UX

Helpline 01234 567890

Legal notes

This is a Notice of Intended Prosecution issued in accordance with Section 1 of the Road Traffic Offenders Act 1988. It is also a Statutory Request for the name and address of the driver under Section 172 of the Road Traffic Act 1988.

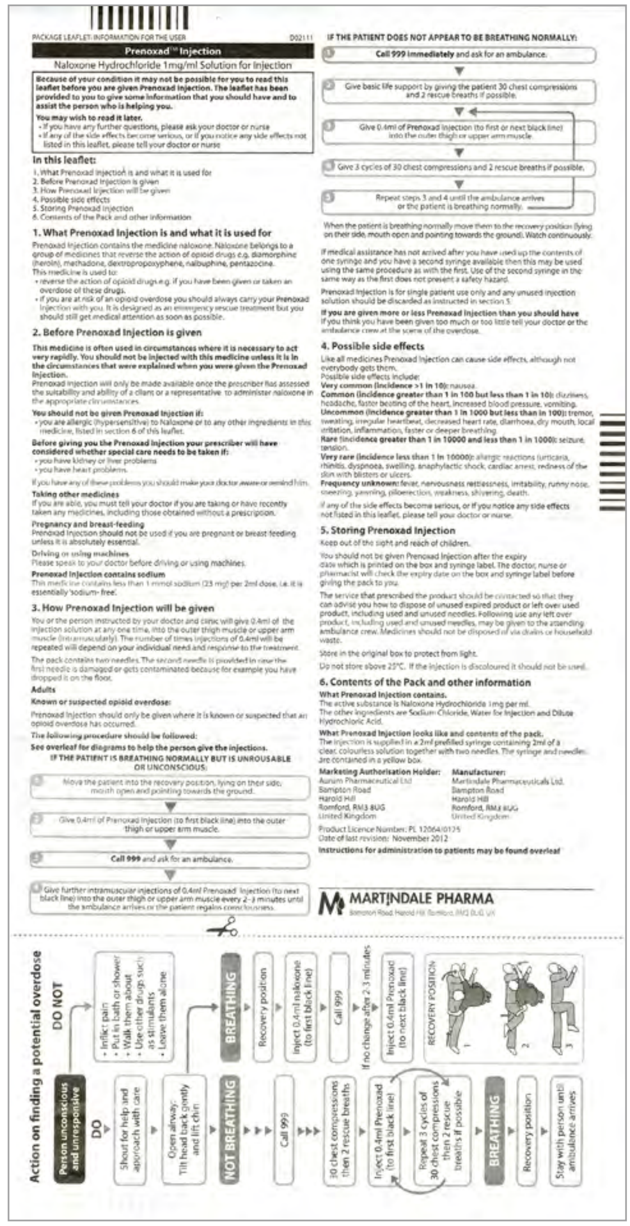
The alleged speeding offence is contrary to Section S81(1) RTRA 84 Sch 2 RTOA 88.

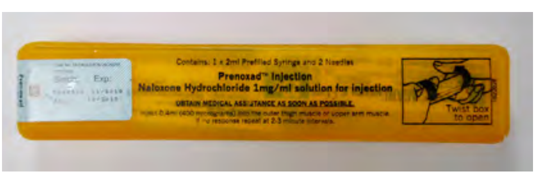
If you knowingly provide false information, you will be committing an offence under Section 5 of the Perjury Act.

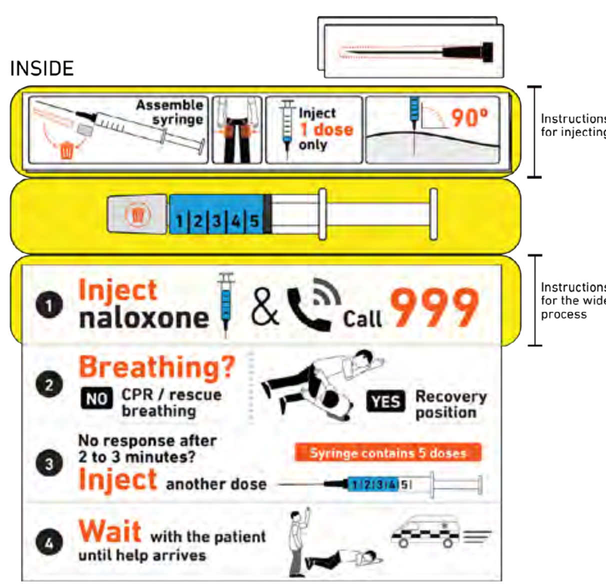
Data Protection Act 1998: information you supply may be held on a computer.

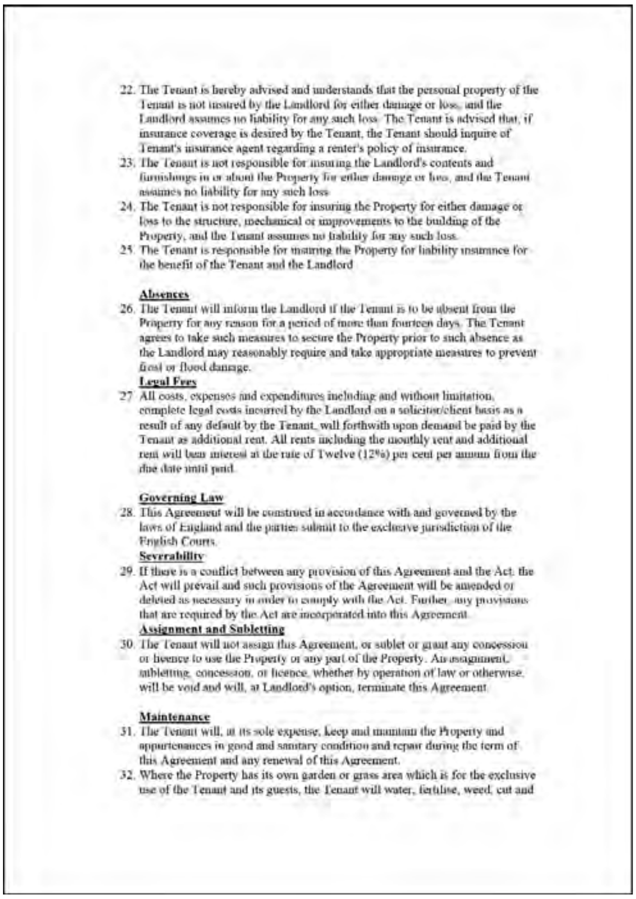
Figure 7 Official documents such as this speeding notice (left) follow no recognized discourse conventions. They fail on every level: legibility, vocabulary, sentence construction, structure, and usability. Our new design (right) is structured around a narrative in the left-hand column. Within a few seconds you know what it is about and what you need to do.

Figure 8 **The existing overdose emergency kit (above), and a redesign (below) that emerged during one Simple Action day.**








22. The Tenant is hereby advised and understands that the personal property of the Tenant is not insured by the Landlord for either damage or loss, and the Landlord assumes no liability for any such loss. The Tenant is advised that, if insurance coverage is desired by the Tenant, the Tenant should inquire of Tenant's insurance agent regarding a renter's policy of insurance.
23. The Tenant is not responsible for insuring the Landlord's contents and furnishings in or about the Property for either damage or loss, and the Tenant assumes no liability for any such loss.
24. The Tenant is not responsible for insuring the Property for either damage or loss to the structure, mechanical or improvements to the building of the Property, and the Tenant assumes no liability for any such loss.
25. The Tenant is responsible for insuring the Property for liability insurance for the benefit of the Tenant and the Landlord

Absences

26. The Tenant will inform the Landlord if the Tenant is to be absent from the Property for any reason for a period of more than fourteen days. The Tenant agrees to take such measures to secure the Property prior to such absence as the Landlord may reasonably require and take appropriate measures to prevent frost or flood damage.

Legal Fees

27. All costs, expenses and expenditures including and without limitation, complete legal costs incurred by the Landlord on a solicitor/client basis as a result of any default by the Tenant, will forthwith upon demand be paid by the Tenant as additional rent. All rents including the monthly rent and additional rent will bear interest at the rate of Twelve (12%) per cent per annum from the due date until paid.

Governing Law

28. This Agreement will be construed in accordance with and governed by the laws of England and the parties submit to the exclusive jurisdiction of the English Courts.

Severability

29. If there is a conflict between any provision of this Agreement and the Act, the Act will prevail and such provisions of the Agreement will be amended or deleted as necessary in order to comply with the Act. Further, any provisions that are required by the Act are incorporated into this Agreement.

Assignment and Subletting

30. The Tenant will not assign this Agreement, or sublet or grant any concession or licence to use the Property or any part of the Property. An assignment, subletting, concession, or licence, whether by operation of law or otherwise, will be void and will, at Landlord's option, terminate this Agreement.

Maintenance

31. The Tenant will, at its sole expense, keep and maintain the Property and appurtenances in good and sanitary condition and repair during the term of this Agreement and any renewal of this Agreement.
32. Where the Property has its own garden or grass area which is for the exclusive use of the Tenant and its guests, the Tenant will water, fertilise, weed, cut and


Tenant's Responsibilities

1 Who pays the bills?

Service	Supplier	Contact information	Who pays?
Water	Thames Water	www.thameswater.co.uk 0845 920 0888	Tenant
Electricity	EDF Energy	www.edfenergy.com 0800 056 7777 You can change supplier, but tell the Landlord first.	Tenant
Television licence	TV Licensing	www.tvlicensing.co.uk	Tenant
Council Tax	Camden Borough Council	www.camden.gov.uk	Tenant
Telephone	To be arranged by the Tenant		Tenant
Broadband	To be arranged by the Tenant		Tenant
Service charge		www.camden.gov.uk	Landlord
Insurance	towergate insurance (Landlord's contents only)		Landlord

Assured Shorthold Tenancy Agreement for 3 Stonehouse Terrace, London N11 5TY 2

Figure 9 A page from a typical tenancy agreement (left), and our redesign (right).

Term: A FIXED TERM of 12 months commencing on and including Friday 5th August 2012 to and including Friday 5th August 2013.

4.1 If the Tenancy is a Fixed Term Tenancy, the Landlord may serve on the Tenant at least 2 months notice in writing under Section 21(1)(b) of the Housing Act 1988 (as amended) to expire on the last day of the fixed Term.

4.1.1 The Tenant may bring the tenancy to an end at any time before the expiry of the fixed Term (but not within six months of the commencement date) by giving the Landlord at least one month's prior written notice.

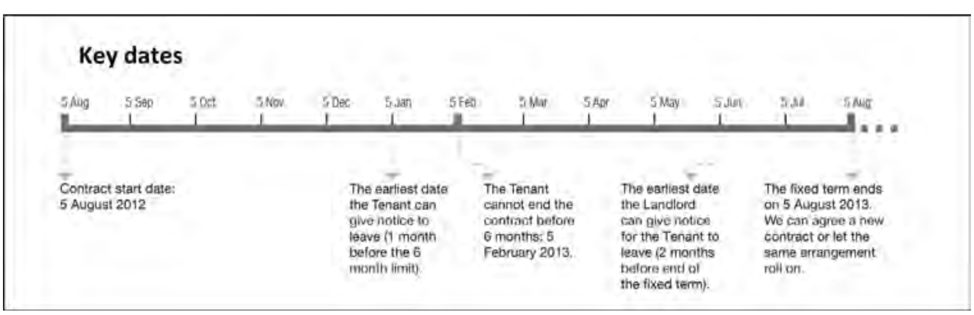


Figure 10 In a typical agreement (top two boxes), tenants would have to look in two places to work out the dates when they could give notice to leave. The new agreement contains a simple timeline combining both sets of information.

The Future

The Simplification Centre is currently rethinking its direction. The name is likely to change – we are clearly no longer a center, so we need a more modest title that does not overclaim. We are also seeking further partnerships to help us network more effectively. Activities like the summer school, lecturing, and participation in conferences help us build a community of practice: another key function of useful research centers.

The summer school is likely to grow, and perhaps merge with our advocacy work – past participants have expressed a wish to return, and we will work together on orphan design projects in parallel to the regular more instructional summer school program delivery.

One of our summer school participants remarked, "Most of my work is to do with communicating effectively, and I feel like I've been given x-ray specs that enable me to see it in a whole new way." I don't include this just as a glowing product endorsement, but because it exactly describes our objectives, both when we were a research center and now when we focus on advocacy and education. We want to develop better x-ray specs – better tools for the organizations and individuals who develop information products. We want to offer design patterns, insight, methods, and educational experiences that help them see how content, context, structure, language, layout, visualizations, and channels can work together to good effect. And we want all this to result in communications that help people to cope with complexity in their everyday lives – more than we want it to result in research grants, accolades, and publications.

Acknowledgments

Thanks to Ken Friedman and Jin Ma for their encouragement, and three anonymous reviewers for their helpful comments on the draft. Thanks also to our numerous volunteers, our Trustees (Professor Clive Richards and Alan Wells, OBE), and our core colleagues over the years: Martin Evans, Jenny Waller, Judy Delin, Karen Stanbridge, Martin Thomas, Jeanne-Louise Moys, and Sue Walker.