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HOMELESS, STICKY DESIGN.

**STRATEGIES FOR VISUAL, CREATIVE, INVESTIGATIVE
PROJECTS.**

**DERIVING AND APPLYING COLLECTING, ORDERING AND POSITIONING
AS A CRITICAL LANGUAGE AND A DESIGN APPROACH
BETWEEN VISUAL COMMUNICATION DESIGN AND VISUAL RESEARCH.**

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**A THESIS SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
2007**

UNIVERSITY OF TECHNOLOGY, SYDNEY

CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Helen Box

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This work is dedicated to my dear friend Tom, 1977 – 2003.

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ABSTRACT

My research takes place against the backdrop of the design research debate ongoing since the 1990s. This debate highlighted the potential contributions that design artefacts and practice could make in a scholarly and professional research context. Despite numerous interesting possibilities, the discussions taking place in the design research community largely do not attend to contemporary Visual Communication Design practices and outcomes.

In this research, I specifically focus on outcomes taking place at the margins of the Visual Communication field, which, though peripheral, are both admired and engaging, and what this research entitles 'sticky'. Eleven projects are examined including, for example, one that collected the ephemera serving as the impromptu bookmarks in the books shelved in a university library, yielding the meticulous inventory of three hundred scraps of paper listed by Dewey decimal classification number.

Despite their 'stickiness', I found that these outcomes are in fact only partially accounted for by key authorities in Visual Communication Design: despite a strong graphic language these projects are not concerned to convey an unmistakable message directed to a particular audience.

Instead other discussions taking place in the sociological sub-field of Visual Research, which values the open-ended inquiry of the observable features of everyday subject matter, seemed more relevant. Ultimately however, in view of other expectations – a theoretical framework and sustained textual analysis – these 'sticky' projects similarly confound Visual Research.

Consequently I realised that these 'sticky' projects are 'homeless' and, to indicate the partial explanations provided by Visual Communication Design and Visual Research, I tagged them 'creative, investigative, visual projects'. This research thus sets out to derive a language to attend to such 'sticky' but 'homeless' creative, investigative, visual projects.

I explored diverse literature and additional visual work – on topics such as the origins of the encyclopaedia, the tendency to make lists, psychological explanations for keeping personal collections, scientific visualizations, French Poetry, experimental travel, where to file UFOs in a picture archive, information management, the anatomy of the human heart, documentary photography and post-modern cartography.

By bringing this interdisciplinary analysis to bear on the set of ‘sticky’, ‘homeless’, creative, investigative, visual projects, I derived a *language* of Collecting, Ordering and Positioning. From this tripartite model a design *strategy* was then extrapolated which I applied to produce an original creative, investigative, visual project, called *BikeWork*, which involved the participation of sixty-five cyclists and production of a series of three posters. This research concludes by speculating that the value of a creative, investigative, visual approach – vivid and systematic though fragmentary and approximate – is its agency. Accordingly I finally recommend that future ‘sticky’ researchers further explore the distinctive appeal of a vivid and fragmentary approach.

THE 'HOMELESS', 'STICKY' DESIGN IN QUESTION

Eleven key projects are discussed.

Collecting

Lipstick (Greene 2001)

Why Are All These Books Orange? (Siegel 2004)

The Last Periods of Some Books (magnified 4266%) (Buchanan-Smith 2003 [2002])

The Bicycle, Cross, and Desert (Weed 2005)

A Coming Of Age Reading Checklist (McMullen 2004)

The Readers Before Us (Waller & Beard 2002)

Ordering

Periodic Breakfast Table (Weese & Halpern 2001)

Endcommercial: Reading the City (Böhm, Pizzaroni & Scheppe 2002)

I [heart] [heart] (Daly 2007 [2005])

Positioning

Newsmap (Weskamp 2004)

NameVoyager (Wattenberg & Wattenberg 2004-2005)

PREFACE: EVERYWHERE BUT NOWHERE

In the summer of 2003, as I began the research which would eventually lead to this dissertation, I spent a good deal of time at the library. There I made an interesting observation. In my efforts to begin to understand the range and scope of literature of, and the key authorities in, Visual Communication Design, I noticed that I was traveling all over the Dewey decimal classification (DDC) system, and accordingly all over the university library. From level two, with the 152 and 153 numbers within 'Psychology' and 'Perception', across the floor to the 302 numbers covering 'Social interaction', 'Non-verbal communication' and 'Media', the more occasional venture onto level four for 658 and 659 numbers in the 'Advertising' and 'Marketing' sections of the 'Applied Sciences', and of course up to 741 and 745 numbers on level five covering 'Illustration', 'Comics', and 'Commercial Art'. Visual Communication, it seemed, was everywhere.

But as my time at the library shifted from 'literature review' mode gaining basic bearings for defining visual communication, to 'data collection' mode uncovering the particular material that my research topic would focus on, I made a further yet strangely contradictory observation about the classification of Visual Communication at the library. The kinds of projects that I was getting excited about and espousing as ideal instances of Visual Communication – projects that are characterised by graphic elements, word and image relationships, and that are engaging, meaningful, entertaining and communicative – could not be found by searching for Visual Communication at the library. Instead, they had been absorbed by other disciplines – 'Geography', 'Manufacturing', and so on. It seemed that as well as being everywhere, visual communication was also nowhere in particular.¹

So as I diligently climbed up and down the stairs, traversing backwards and forwards between the various Dewey 'addresses', I wondered if it might be interesting to visually summarise the locations of Visual Communication at the library. The resulting project, *DDC Mapping*, is the focus of this preface as it provides a kind of microcosm of the whole thesis: using Visual Communication Design strategies to gain some basic bearings on how the subject Visual Communication is presently broadly, but inadequately understood.



¹ I have subsequently noted that this trend has also been observed by Chayutsahakij (2002:104-5).

DDC Mapping takes advantage of the classification expertise that underpins our everyday but oblivious use of electronic catalogues and shelf browsing at the library. Therefore beginning this discussion with a quick overview of library classification is helpful. Firstly, a 'keyword' search will produce a lot of results, but many will be irrelevant as this kind of search throws up occurrences of the search terms anywhere in the catalogue entry in any combination. By contrast, a 'subject' search picks up instances of the Library of Congress Subject Heading, which are standardised topics, allotted to and imprinted in the bibliographic details of just about all (more or less recently) published non-fiction books. So for example, keyword searching the library catalogue for 'visual' and 'communication' (at my university circa 2003-2007) will give you almost 400 results (from *Solving behavior problems in autism: improving communication with visual strategies*, 371.94; *The insects: structure and function*, 595.701; *Cell phone culture: mobile technology in everyday life*, 303.4833; and *Foundations of neurobiology*, 612.8).² By contrast a subject search for 'Visual Communication' yields around 150 results, a much more manageable number of titles, which are generally more relevant. (However it is still important to bear in mind that a subject search is also flawed, since titles have been assigned the subject of Visual Communication according to the reckoning of an individual cataloguer or librarian somewhere.)

Finally, turning to the Dewey decimal classification numbers themselves, librarians recognise that these 'addresses' can be thought of practically *and* conceptually. Not only do DDC numbers assist us with the physical task of locating books on shelves, but additionally DDC numbers epistemologically orientate titles within a world map of knowledge. I was surprised to learn that in fact DDC numbers are not universally, precisely fixed to books (in the same way the Subject Headings are.) Instead librarians individually 'number build' the Dewey number addresses of books. Rather than being objective, automatic and neutral, this process is discretionary, delicate, and subjective, even idiosyncratic, such that the same book can actually be found at different Dewey numbers at different libraries.

Hence Dewey decimal classification raises certain dilemmas. Consider, as Scott supposes, the case of a book of dog drawings; how should a librarian decide whether this should be located in dogs or drawing? Should the biography of a lawyer be classed in biographies (at the 920s within Class 900 'Geography, History and Auxiliary Disciplines') or in law (at the 340s within Class 300 'Social Sciences') (Scott 1998:26)? Grappling with such decisions, librarians are painfully aware that while '[one] of the functions of classification is to bring

² Authored by Hodgdon (1996), Chapman (1998), Goggin (2006) and Delcomyn (1998) respectively.

together on the shelves materials on the same subject and on related subjects.... no classification accomplishes that function perfectly.... Thus, throughout the DDC various aspects of a topic or discipline may be placed in different numbers'. (Bloomberg & Weber 1976; cited by Scott 1998:17) Therefore, titles that belong together according to one feature, are actually 'scattered' or split up, because they are categorised according to another feature. In other words, even though some things might equally legitimately belong in two different bodies of knowledge, things cannot be physically located in more than one place, (unless of course two copies of the book are obtained which can be assigned different addresses).³

If, as Maltby & Marcella explain, 'some important aspect of the content of [an] item or its relationship to others...[can] be revealed...via [its] chosen [DDC] location' (2000:27), then it follows that we can unpack this meaning by considering where books are shelved. Thus, to produce *DDC Mapping*, I plotted the search results from a subject search for Visual Communication against their Dewey decimal classification addresses. The point here is not to assess the efficiency of information retrieval at the library, nor test how well the librarians at a particular library are familiar with Visual Communication, and therefore how 'well' or 'badly' the discipline has been conceived. Instead, the point is that since library classification is inescapably flawed and discretionary, this has been used to an advantage in the *DDC Mapping* project (↻ FIGURE 1). The library catalogue has been used to provide a 'meta-analysis' for how (in this case) Visual Communication is presently conceived.

For want of a better word, the 'findings' are revealed by the scattered clusters, which can be unpacked with reference to the three volumes that make up *Dewey decimal classification and the relative index* (Dewey 1996). The so-called Schedules are the telephone-book sized indexes that exhaustively list the subdivisions of the DDC in order from 000–999: the 'Main Classes' are split into 'Divisions', themselves split into 'Sections', and decimal points are used according to degree of specificity that is required. In *DDC Mapping*, the labels for the numbers that run along the vertical 'axis' are the Main Classes referred to in the Schedules. Looking more closely at the specific locations of the clusters and referring to the Schedules, *DDC Mapping* reveals that 'Visual Communication is chiefly located within 'Non-verbal communication' (302.222), 'Media' (302.23), 'Drawing' (741), 'Decorative arts' (745) and 'Philosophy of the fine and decorative arts' (701). To a lesser extent, clusters also occur at

³ Observing these occupational dilemmas, Chan and Hodges (2000) speculate that librarians must wistfully 'dream' about a classification system that could keep up with the relentless changes in the 'world map of knowledge' (Chan & Hodges 2000:114). Elsewhere, Richard Dawkins ponders 'whether librarians ... are particularly prone to ulcers' (Dawkins 1991, cited in Maltby & Marcella 2000:25).

Class 000 Generalities	000	000.0246 HAME
	010	000.0246 HAME
	020	000.0246 HAME
	030	000.0246 HAME
	040	000.0246 HAME
	050	000.0246 HAME
	060	000.0246 HAME
	070	000.0246 HAME
	080	000.0246 HAME
	090	000.0246 HAME
Class 100 Philosophy Paranormal Phenomena Psychology	100	100.0246 HAME
	110	100.0246 HAME
	120	100.0246 HAME
	130	100.0246 HAME
	140	100.0246 HAME
	150	100.0246 HAME
	160	100.0246 HAME
	170	100.0246 HAME
	180	100.0246 HAME
	190	100.0246 HAME
Class 200 Religion	200	200.0246 HAME
	210	200.0246 HAME
	220	200.0246 HAME
	230	200.0246 HAME
	240	200.0246 HAME
	250	200.0246 HAME
	260	200.0246 HAME
	270	200.0246 HAME
	280	200.0246 HAME
	290	200.0246 HAME
Class 300 Social Science	300	300.0246 HAME
	310	300.0246 HAME
	320	300.0246 HAME
	330	300.0246 HAME
	340	300.0246 HAME
	350	300.0246 HAME
	360	300.0246 HAME
	370	300.0246 HAME
	380	300.0246 HAME
	390	300.0246 HAME
Class 400 Language	400	400.0246 HAME
	410	400.0246 HAME
	420	400.0246 HAME
	430	400.0246 HAME
	440	400.0246 HAME
	450	400.0246 HAME
	460	400.0246 HAME
	470	400.0246 HAME
	480	400.0246 HAME
	490	400.0246 HAME
Class 500 Natural Sciences and Mathematics	500	500.0246 HAME
	510	500.0246 HAME
	520	500.0246 HAME
	530	500.0246 HAME
	540	500.0246 HAME
	550	500.0246 HAME
	560	500.0246 HAME
	570	500.0246 HAME
	580	500.0246 HAME
	590	500.0246 HAME
Class 600 Technology and Applied Sciences	600	600.0246 HAME
	610	600.0246 HAME
	620	600.0246 HAME
	630	600.0246 HAME
	640	600.0246 HAME
	650	600.0246 HAME
	660	600.0246 HAME
	670	600.0246 HAME
	680	600.0246 HAME
	690	600.0246 HAME
Class 700 The Arts Fine and Decorative Arts	700	700.0246 HAME
	710	700.0246 HAME
	720	700.0246 HAME
	730	700.0246 HAME
	740	700.0246 HAME
	750	700.0246 HAME
	760	700.0246 HAME
	770	700.0246 HAME
	780	700.0246 HAME
	790	700.0246 HAME
Class 800 Literature (Belles-Lettres) and Rhetoric	800	800.0246 HAME
	810	800.0246 HAME
	820	800.0246 HAME
	830	800.0246 HAME
	840	800.0246 HAME
	850	800.0246 HAME
	860	800.0246 HAME
	870	800.0246 HAME
	880	800.0246 HAME
	890	800.0246 HAME
Class 900 Geography, History, and Auxiliary Disciplines	900	900.0246 HAME
	910	900.0246 HAME
	920	900.0246 HAME
	930	900.0246 HAME
	940	900.0246 HAME
	950	900.0246 HAME
	960	900.0246 HAME
	970	900.0246 HAME
	980	900.0246 HAME
	990	900.0246 HAME

Figure 1. DDC Mapping (Box 2003)

'Marketing' (658.8) and 'Advertising' (659) and 'Knowledge' (001), as well as at 'Public speaking' (808), 'Mental processes and intelligence' (153), and 'Education' (370). Even a cursory analysis suggests these clusters reveal both the *fundamental* nature of visual communication ('Knowledge', 'Psychology' and 'Non-verbal communication'), as well as its *specificity* ('Drawing' and 'Decorative arts'). (It is also interesting to note the Classes of knowledge in which Visual Communication appears to play no part: 'Religion' [200s] and 'Geography, History, and Auxiliary Disciplines' [900s].)

Despite the fact that I could see how visual communication fitted logically within each of these locations, I also wondered about the absence of a single Dewey number locating visual communication. As I travelled all over the library, it occurred to me that an individual, distinct Dewey address for visual communication would be more than convenient. I looked with envy at the PhD researcher in mechanical engineering who was able to head straight to 621, assured that this was the certain indisputable location of an established, narrowly defined discipline. By contrast, that visual communication had no fixed, stable, or definite address, and was rather a dispersed and scattered discipline, seemed to confirm the uncertain, neophyte scholarly claims of visual communication. But then, I also wondered whether a single Dewey location could adequately epitomise the inherent interdisciplinarity of visual communication as a specialisation with 'no special subject matter of its own' (Buchanan 1995:15)? If visual communication is regarded as a language, vehicle, or instrument (as it frequently is), then it is only fitting that visual communication would occur in every category in the library, and be equally at home in religion, geography, or mathematics.

As I continued to reflect on the various locations for Visual Communication, I realised that they were quite instructive. It occurred to me that each of the alternative locations seemed to be inadequate or reductive in some way. Characterising visual communication as 'non-verbal communication', for example, was to define it negatively, by what it is not. Similarly, it was dismaying to find Visual Communication filed in 'decorative arts', accompanied by handicrafts, heraldry and dioramas. The term alone – *decorative arts* – conveyed the complete opposite of what four years of undergraduate design education had taught me Visual Communication was all about.⁴

⁴ I do not intend to maintain prejudice against the 'decorative' here, but to relate that my design education strongly differentiated itself from decorative arts, since this connoted a kind of ornamental, optional, 'window-dressing', while Visual Communication Design aspires to provide a more indispensable communicative role than this.

Similarly, canonical Visual Communication Design texts such as Edward Tufte's celebrated three-part series were located at quite separate Dewey Decimal 'addresses' spread all over the library. *Visual explanation images quantities, evidence and narrative* (1997) was located at 153.7 ('Perceptual processes' within 'Psychology'), *Envisioning Information* (1990) was at 302.23 ('Media - means of communication', within 'Social interaction'), and *The Visual Display of quantitative information* (1983) was assigned two addresses (for multiple copies) at 310.22 (within 310 'Collections of general statistics') and 001.4226 ('Presentation of statistical data'). But despite each text being allocated the Library of Congress Subject Heading 'Visual Communication', *none* could be found in the (unofficial) 'design section' of the library on level five around 741 and 745.⁵ And so despite being everywhere, visual communication seems to belong nowhere in particular.



To a large extent *DDC Mapping* conveys the well-documented problems associated with adequately defining the profession and practice of Visual Communication design. However it is not the intention of this thesis to categorically investigate and resolve these problems. Instead, my research is centrally concerned with uncovering a body of creative yet investigative visual work, and finding explanations for such puzzling projects. I classed these projects as 'puzzling' as they are distinguished by a refined and systematic visual approach, yet often focussed on banal, inconsequential or unverifiable subject matter. Let's look a little more closely at three such projects: *Lipstick*, *Periodic Breakfast Table* and *Newsmap*.

Lipstick (Greene 2001) (→IMAGE 1) is an exquisite visual survey of close-up photographs of in-use lipsticks, each captioned with a woman's first name. *Lipstick* exudes a forensic rhetoric, as if it were a professional, museological, photographic archive. But *Lipstick* is also lavish, playful, revolting and provocative: by virtue of the subject matter being used cosmetics, the vivid range of colours, the detail of the shapes and textures of the lipsticks at various stages of use, and arcane associations suggested by the italicised serif names:

Simona, Wendy, Beth.

Lipstick is typical of the work featured in the anthology *Speck: A Curious Collection of Uncommon Things* edited by Peter Buchanan-Smith (2001), but to me it is the standout work. In fact in my teaching as well as in presentations to colleagues, I have

⁵ I note that the only recently acquired fourth book in Tufte's series, *Beautiful evidence* (2006) is an exception as it *is* on level five, assigned 700.103 – 'Effects of social conditions and factors on the arts'.



Image 1. *Lipstick* (Greene 2001)
(source: Buchanan-Smith 2001)

enthusiastically cited *Lipstick* as epitomising the appeal and expertise of visual communication design. So it was perplexing for me that neither a subject nor keyword search for 'Visual Communication' would yield *Lipstick* (within *Speck*). *Lipstick* (within *Speck*, assigned the subject heading 'Design – United States – History – 20th Century') is located at 745.4, the subdivision of 'Pure and applied design and decoration', within 'Drawing and decorative arts'. How could I reconcile myself to the fact that *Lipstick* – forensic, evocative, fabulous *Lipstick* – was situated between 'Antiques' (745.1) and 'Handicrafts' (745.5)?

Consider also *Periodic Breakfast Table* (Weese & Halpern 2001) (→IMAGE 2), which appears in *Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students* (Lupton 2004:156). The project *Periodic Breakfast Table* is an intriguing, pedantic, visual taxonomy of varieties of North American breakfast cereals. Yet (appearing within *Thinking with Type*) it is located at 686.22, within the 600 Class 'Technology & Applied sciences'. The splendid *Periodic Breakfast Table* appears in the rather more austere subdivision of 'Manufacture for specific uses' (680). (To unravel this a little, specifically 686 is 'Printing and related activities' within which 686.22 is 'Typography'.)

Lastly consider *Newsmap* (Weskamp 2004) (→IMAGE 3) that featured in the anthology *Else/where: mapping new cartographies of networks and territories* (Abrams & Hall 2006:63). *Newsmap* is an online graphic interface that reveals the biases and imbalances in web based news coverage. So, in this screengrab (Weskamp 2004), we can see that while German news is dominated by sport, the majority of French news reporting is concerned with business, and the greatest proportion of entertainment news is covered in Italy. While this is certainly a powerful and interesting visualisation tool, the claim that useful, generalisable understanding can be derived from it is less certain. Yet *Newsmap* (appearing in *Else/where*) is located within Class 500 'Natural sciences and mathematics', more specifically 520 'Astronomy and allied sciences'. (The book number address for *Newsmap* [in *Else/where*] at 526 'Mathematical geography', is consistent with the subject headings assigned to *Else/where*: 'Digital mapping' and 'Geographic information systems'.) And, as for *Periodic Breakfast Table* and *Lipstick*, neither a subject nor keyword search for 'Visual Communication' could lead to *Newsmap*.⁶

⁶ In this argument I have taken the liberty of attaching DDC book numbers to the individual visual projects that are actually just one of many appearing in the book. This is not strictly accurate, as the classification is assigned to the book, and not the individual visual project. Also this strategy construes the selected visual project as representative of the book as a whole. Nevertheless, the three projects as anthologised in their respective books, could not be found by means of a direct subject search for Visual Communication.

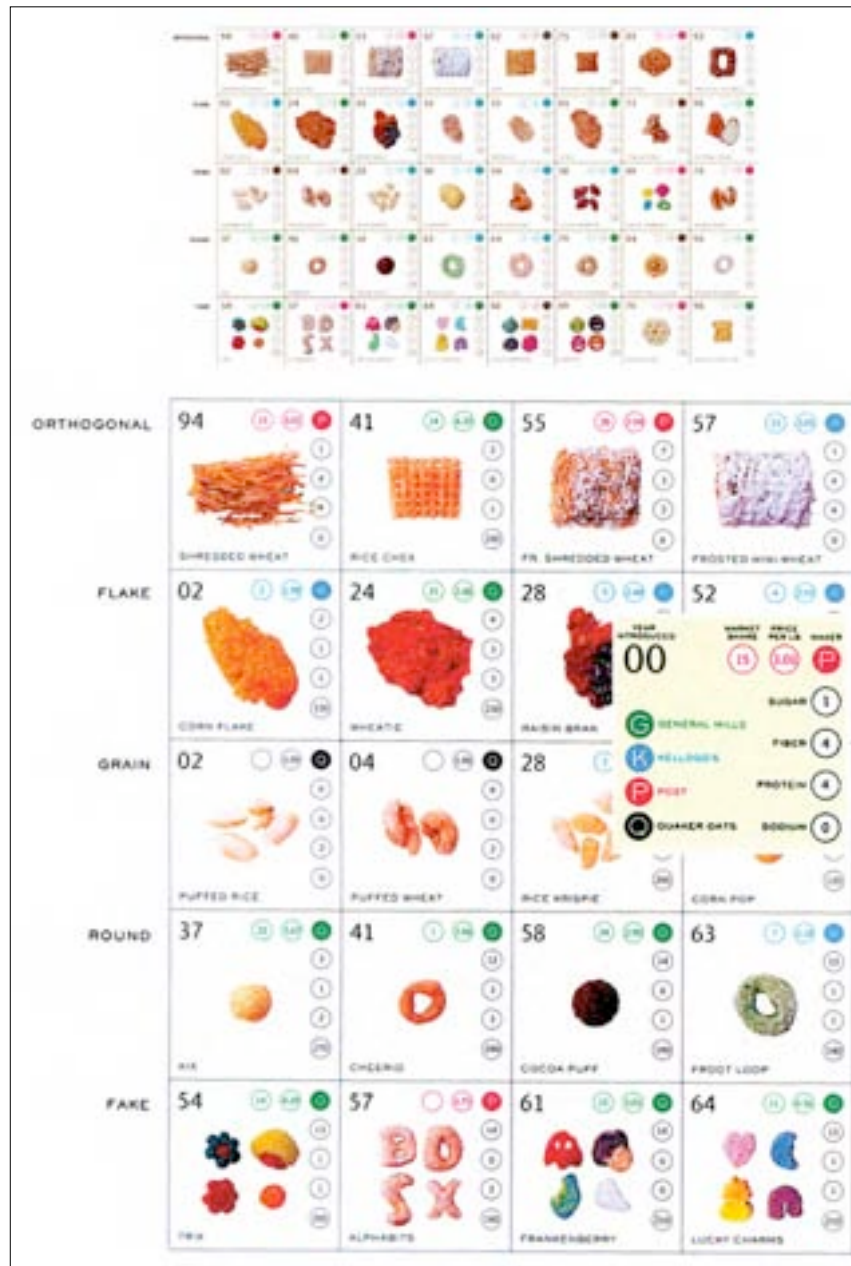


Image 2. Periodic Breakfast Table (Weese & Halpern 2001)

above – the complete table (source: <http://www.2wice.org/issues/spring/artifacts/periodic>, viewed February 15 2005)

below – enlarged detail and with legend (source: Lupton 2004)



Image 3. Newsmap (Weskamp 2004).

(source: www.marumushi.com/apps/newsmap/newsmap.cfm, viewed April 8 2006)



A vivid photographic archive of used lipstick, the meticulous tabulation of breakfast cereal, an approximate graphic translation of trends in online news... what *are* these artefacts? And, while these projects may be presently precluded from Visual Communication, is it appropriate that they are accounted for by handicrafts, manufacturing and the natural sciences? While in one way these projects could be construed as exemplars of visual communication design, in another way, perhaps these projects actually do sit outside of the usual (albeit uncertain) definitions of visual communication design. So, following this line of thinking, if standard visual communication discourse doesn't fully account for these projects, what can? How can we understand this phenomenon of work that employs labour-intensive

expertise yet is directed to the inconsequential; work that is engaging and communicative yet disputable and irrelevant? What do they communicate, and how? For example, is their visuality inherent to their communication? In other words, would their 'knowing' be lost if they were not design projects? (Indeed, *are* these design projects?)

This research identifies that these kinds of projects are not isolated and are rather part of a trend for which no easy explanation can be found, and this thesis sets out to determine how we can understand these exemplars of Visual Communication, that nevertheless do not quite fit in Visual Communication.

CHAPTER 1.

'A SET OF PHENOMENA THAT ASK FOR EXPLANATION'

OR,

HOW I CAME TO PRODUCE A THESIS WHICH DERIVES A NEW LANGUAGE TO TALK ABOUT SOME PECULIAR, ENGAGING, BUT ARGUABLY 'POINTLESS' VISUAL PROJECTS

In this introduction, I will delineate the specific research question that I have set about to resolve. I will also describe the intellectual context for this research, and finally provide an overview of the structure of this thesis. But first, since in this dissertation we will be exploring diverse and disparate spheres of ideas and a body of curious, marginal, creative work, I will begin with some brief anecdotes about how I came to these matters.

Section 1. The motivation behind this research

a. How refined triviality came to my attention.

The original motivation for this research was the persistent lack of recognition of Visual Communication, and in particular, to substantiate the idea that 'Visual Communication can communicate something that otherwise could not be communicated' which was the enduring lesson from my undergraduate design education. Though steadfast and insistent, admittedly this claim was always maintained in a way that was intuitive and unverified. Nevertheless, I was still dismayed to find my early professional practice dominated by beer labelling, tampon packaging and branding inner-city condos. But when I later realised that the 'peculiar value' of Visual Communication was not even recognised by academia, I was surprised. An internationally published, visual sociologist deemed me unsuitable to

undertake postgraduate research under his supervision, apparently because of my background: I was only a *design* graduate.⁷ Despite my belief that social science and design had many shared interests and common goals, and that the two together could develop engaging, communicative social inquiry, I realised that conventional social science did not recognise design expertise. I wondered what could bring about such a coalition, and whether such disciplinary divides were justified?

At this time I reasoned that if the enthusiastic, exciting claim from my undergraduate education – that 'visual communication can communicate something that otherwise could not be communicated' – could in some way be substantiated, designers like myself might be able to put forward a stronger case for collaborating with social scientists. Moreover, social scientists might come to appreciate the unique, valuable ways of working carried out by Visual Communication Design.

Consequently my initial research set about searching for evidence – actual examples of projects – that to me demonstrated the peculiar value of Visual Communication. And indeed, as a result of this search, I uncovered a considerable body of intriguing visual work. These projects were published internationally in design anthologies (e.g. *Speck* [Buchanan-Smith 2001], *All Messed Up* [Gerber 2004]), design periodicals (e.g. *Dot Dot Dot*), and even at times in academic design journals (e.g. *Design Issues*), all which can influence professional design practice.

⁷ This rejection was formative. The work by this Internationally Published, Visual Sociologist (henceforth known as I.P.V.S.) had deeply influenced my honours year project: despite being a *sociology* text, it was highly instrumental in my *design* work where I was developing a visual approach to creatively explore issues surrounding identity and material culture. My feeling of solidarity with I.P.V.S. seemed to be confirmed when I later discovered another book with which he was involved, which promoted the use of visuals by social researchers.

I contacted him to introduce myself as a designer with a first class honours degree and to enquire if he would be interested in supervising my PhD – seeing as we shared an enthusiasm for the visual. During this conversation I.P.V.S. made a distinction that eventually gave rise to the original research problem statement: it seemed that my designer's training would make me unsuitable for supervision by and association with a 'scientist'.

My indignation that Visual Communication and Visual Research were not regarded as what I had believed to be a perfect match, led to this first iteration of my research problem:

'Academics with Social Science and Cultural Studies backgrounds are using the visual for research purposes. A Visual Communication background arguably creates experts in visual sensitivity, visual engagement and visual impact. Does it therefore follow that "we" are better equipped than "them" to use the visual for research purposes? What can researchers with Visual Communication training bring to the use of visuals for research purposes, that researchers without Visual Communication training cannot?'

In hindsight, I think I.P.V.S. probably sensibly distanced himself from design and positioned himself as a scientist for pragmatic (rather than ideological) reasons: I lacked the skills a sociology department expected in students undertaking postgraduate research; and he doubted that he had the expertise relevant for supervising a designer.

The strange thing was, as my research progressed, I realised that many of the projects I continued to get excited about and cite as exemplary of 'Visual Communication Design's distinctiveness', did not actually fit conventional definitions of and expectations for Visual Communication Design. As I continued to gather this work – that I asserted as exemplars of engaging, investigative work distinguished by a refined visual language in order to support design's case to social research – I was so engaged by them that I did not initially notice how 'pointless' they were (and then despite this dawning awareness I still was attracted to them). In fact, referring to them as Visual Communication Design at all was becoming frankly tenuous: these were not commercial or commissioned design; not sexy, decorative and slick instances; and not even serving social or 'green' purposes. Not profitable and not non-profitable: at one point I simply began to refer to these projects as 'these things that do not fit'. (A full account of how these projects only partially satisfy expectations of Visual Communication Design follows in Chapter 2.)

At this point in the story, let me reveal that I had had big plans for Visual Communication Design (I did think it capable of saving the world)⁸ and for this thesis (I once thought I might unequivocally prove that design was as capable of insight and worthy of reverence as social science).⁹ So, it was surreal to find that my thesis, after years of research – as a 'contribution to the body of knowledge' – turned out to be about trying to understand peculiar, intriguing, ambiguous, but frankly for the most part, pointless visual projects.

⁸ *My initial decision to study design: Serious, noble aspirations.*

Though I have been in one for nearly ten years now, I have never felt quite at home in a design faculty. You see, I have not 'always loved typefaces'. I do not constantly carry a sketchbook or a camera. I don't relish the tactile qualities of paper-stock. I don't screen print cool designs on t-shirts, I don't enjoy being alone for long periods of time on a Mac. I don't design my family and friends' business cards or websites.

But my decision to study design was a very deliberate one. I value relevance, logic and pragmatism. My upbringing (by a nurse and an engineer) was dominated by a single unrelenting expectation: to make a useful contribution. After careful contemplation, I deduced that the profession that was capable of making the greatest contribution was Visual Communication Design.

According to my earnest teenage reasoning, all the world's problems could be spun down to the same difficulty: a shortfall in understanding. By contrast it seemed to me that the solutions were approachable once it was imagined that a wide, general audience could access information from vital specialisations, such as health, ethics, environment and economics. By my reasoning, it would be essential to have experts in communication to convey the meaning necessary to increase understanding. And I intuited that visuals were more accessible and affective than words.

⁹ *The original plan for the present research: a formidable alliance*

Though the decision to study design in the first place was reached some time ago now, I guess I still believe in the power of visual communication design. The initial motivation for undertaking this doctoral research was to promote the compatibility of visual communication design and social research. I aspired to put forward the case that design expertise need not be at odds with research expertise, and instead that the two approaches were more correctly regarded as complementary. Together design's expertise in persuasiveness, serendipity, and intuition, and research's expertise in rigor, significance and usefulness, were capable of forming a formidable, superlative alliance.

Although my plans to produce a manifesto for steering Visual Communication Design into the future were in fact thwarted, it is my hope that the reader will come to enjoy, appreciate and value these puzzling projects. Although these projects are not likely to be described as impartial, comprehensive or instrumental, they are vivid, suggestive and somehow insightful. After viewing these kinds of projects, it is hard not to feel that one *has* come to gain insight into something new. I call them 'sticky', because they 'stick' in the mind. Therefore we can describe the objective of this research as exploring a paradox as well as a hunch. How can we make sense of and develop an appropriate language to talk about work produced by expert, committed industry, though apparently intended to serve no instrumentality? How can this work 'feel insightful', and what is the nature of this understanding? Perhaps if I try to sum up in one sentence what I think I have learned as a result of this research, it is that the value of these projects – their vividness, insightfulness and suggestiveness – would be lost if they *were* impartial, comprehensive and instrumental. But now I am getting ahead of myself, because this kind of speculation and evaluation is where the dissertation ends.

Right now, it is important to sort out a few of these terms.

b. Clarifying the terminology: What do I mean by 'homeless', 'sticky', 'pointless', 'creative visual investigative projects'?

DESIGN, VISUAL COMMUNICATION, GRAPHIC DESIGN ~ These terms are essentially superordinates of each other in this thesis. Visual Communication encompasses graphic design, as well as many other forms (e.g. web design, illustration, etc.), and design encompasses visual communication design as well as many other subdisciplines (e.g. industrial design). To delineate these terms more polemically: many Visual Communication designers find the term 'graphic design' dated and reductive; and in this research I note that the 'design research debate' has never seemed entirely relevant to what most Visual Communication designers in studios and client meetings actually do.

'VISUAL' VERSUS 'IMAGE' ~ Common sense understanding and everyday use of *image*, *visual*, *seen*, *photograph*, *depiction*, and *representation* are not specific (and even interchangeable), so it is necessary to make a few distinctions to avoid confusion. In this thesis, *visual* encompasses anything that can be seen through a window, the front-page of the newspaper (both on paper and online), as well as photographs and illustrations... these are all 'visuals'. The *visual* is often logically distinguished as 'not text' (anything that's not words and numbers). But since reading and writing are also visual activities, more care is required to avoid moot definitions. (Probably the most significant distinction to grasp in the

context of chapter two is that *observations* [which are seen] and *visual representations* [which are created] are obviously quite different, yet both are implied by 'visual'.)

The following distinctions are practical rather than theoretical, and intended to achieve clarity rather than demonstrate cleverness. I have delineated: *photograph*, a life-like representation made by a camera; the *seen*, dependent on observation; the *image*, a pictorial depiction, which may be sketched or photographic; and finally, *visual representation*, a superordinate term which pertains to created images (and is distinct from the seen or observed) and so may include photographs and illustrations. 'Visual representation' also incorporates visual work with words (such as captions and typographic compositions) and considers layout (how words and images are juxtaposed to create different meaning).

CREATIVE, INVESTIGATIVE, VISUAL PROJECTS ~ The particular name given to 'sticky', 'pointless' projects – which are not quite Visual Communication Design nor quite Visual Research, and so labelled 'homeless' – in the context of this thesis. These projects are outward looking, but do not represent neutral observation. They are created with minimal 'authorial' stylistic intervention, but yet are highly crafted. They are not instrumental and frequently absurd, but yet they are systematic and intentional. They are playful but structured. They seem suggestive and seem insightful, though not rigorous neither rational. My particular selection of these three descriptors – *creative*, *investigative*, and *visual* – is discussed towards the close of this introductory chapter, in Section 3.

STICKY, STICKINESS ~ Refers to my continual gravitation towards and intuitive estimation of these projects, which seemed to be confirmed by the response they received when I showed them to others. When I displayed these kinds of projects in lectures or presentations, like myself, my audiences – peers, students, senior colleagues – were engaged by them, relished their visual sight, and were entertained by their play and creativity. To borrow the title from McAlhone & Stuart's (1996) book, we might describe that it is their 'stickiness' which causes us to experience 'a smile in the mind' when we view these kinds of projects. Indeed this metaphor is worth elaborating on: for I do not claim that these projects produce 'a side-splitting, belly-laugh in the mind', nor 'a light bulb "ding!" in the mind', but still a *smile* in the mind. That these projects seemed to 'stick' in the mind struck me as worth investigating. This does suggest the broader ambition of this thesis – to explore and assert the value of such slight insights.

POINTLESS ~ Possibly the most perplexing term. I have explained that as I progressed in this research I began to notice that my favourite design projects – the ones I cite in lectures to exemplify the distinctive quality of design – were actually 'pointless'. But for a moment I would like to draw attention to and take a little more care with this description. Thinking again, finer distinctions can be made. Perhaps *uninstrumental* is a more correct, less glib word for what I mean. For the 'point' of these works in terms of their *purpose* is very clear: the work is not accidental or undirected, and is rather deliberate and intentional. A refined visual strategy is intentionally deployed to produce work, yet which is banal, trivial, and inconclusive. The 'point' that isn't apparent is the consequence, significance, or usefulness of such work.

WORK, PROJECTS, BODY OF WORK ~ This finally brings us to the problem of how to refer to such ambiguous and homeless projects. On some occasions they are referred to by their full label 'creative, investigative, visual projects', and other times this is shortened to 'the creative work' or simply 'the projects' or 'the work'. My use of this terminology is to maintain the distinction between actual examples of creative, visual, investigative work ('works' or 'projects') and the written texts, theorists and authors (that I use to unpack the projects). In this dissertation written texts, theorists and authors are broadly referred to as 'literature' and 'discourses', even though these can be regarded as 'works' or 'projects' themselves.

c. A language for 'homeless', 'sticky' things: the research question central to this thesis.

'It is best to try and frame your thesis around an intellectual problem or paradox, not around a gap. It needs to focus on *a set of phenomena that ask for explanation*, which you can express as a non-obvious puzzle for which you can formulate an interesting and effective answer' [Dunleavy 2003:23, my emphasis].

This thesis is centrally concerned with creative, investigative, visual projects, which though undoubtedly refined and intriguing, labour-intensive, deliberately undertaken and expertly executed, could be also described as 'pointless', trivial or inconsequential. In the end, it was not in spite of their apparent triviality, but *because* of their triviality that these projects became central to this research. Despite my enthusiasm and interest, and what I perceived to be their compelling 'stickiness', I did not seem to have a suitable, sensitive language for talking about these projects as a Visual Communication Designer.

Dunleavy's recommendation (cited above, from which the title of this chapter is taken) was a key discovery in the conceptualisation for my dissertation. I had been frustrated that there

was no 'gap in the literature' to account for why I could not explain these phenomena, (and at one point found myself trying to somehow *manufacture* a gap in the literature for which this work was solution). Instead, as Dunleavy recommends, the reasoning and rationale behind this thesis has been reversed: now we take as the first premise that these kinds of projects exist and are prevalent, we find that they are not straightforward to explain, and so let us undertake research to explain it.

Thus this thesis is about creating a *language* to contribute to an increased understanding of Visual Communication Design. The kinds of Visual Communication we look at however are not grand, important design, but odd, little projects – perhaps at best, kooky and engaging, but perhaps at worst 'pointless' and hermetic. What I am interested in is developing a language to talk about this kind of work so I could begin to establish whether these kinds of vivid creative approaches are insightful, or are they just titillating? In seeking a language, I have particular requirements in mind, which I think of as steering between 'black boxes' and 'spaghetti diagrams', as I will now explain.

In my experience, teaching first year Visual Communication Design students seemed to at times degenerate into (and yet was most appreciated when it was) a 'show and tell session'. Reflecting on this, I have come to crudely characterise Visual Communication Designers' attempts to describe what they do as either 'spaghetti diagrams' or 'black boxes', and in both cases the distinctiveness of the design can be lost. 'Spaghetti diagrams' is an idea originally put forward by Peter Downton describing the tendency to over-analyse and schematise design processes – that end up of not much use for someone actually wanting to sit down and do design, but could serve as 'wonderfully good models of spaghetti' (2004:44).

'Black box' is an expression (adapted from electronics) that is used when the constituent actual operations of something are not (and do not need to be) understood, but its overall function or outcome is known. In a similar way, I employ the term to refer to the blunt explanations not uncommonly put forward by designers, such as 'I dunno it just looked cool' or 'it just felt better like that'.¹⁰ Sometimes, if the designer who has created the work is somewhat more articulate, these sentiments are explained in terms of their propensity for 'design thinking': a kind of creative, logical, productive intuition, that is tacitly known and just can't be explained.

¹⁰ Poggenpohl (2002:246) has also used the term 'black box' to describe design practice.

The lesson from 'spaghetti diagrams' is that attempts to formalise and 'scientise' elusive but persistently appealing visual design, should be cautious of killing off precisely that elusive but persistent appeal. But, as 'black boxes' indicates – especially since design is taught at university level, and designers claim 'designerly ways of knowing' which assert that design is a means of analysis and synthesis in its own right (and no longer decorative formal problem solving) – avoiding the attempt to unpack such design work is no longer plausible.



Of course this is not the first attempt towards better articulating what design is about. Accordingly, I now turn to consider the disciplinary backdrop for this thesis, what I refer to as the 'design research debate' that has proposed various ideas regarding the development of design as a scholarly discipline in its own right entitled to a distinctive research tradition. I characterise this scholarly and professional debate as dominated by two opposing positions: practice orientated claims on one side, and theoretical, philosophical reasoning on the other. Both positions have contributed interesting and important design understanding in an emerging field. While I identify my research as broadly belonging to the same general field, I found that the approaches emerging from the design research debate did not have much bearing on the kinds of projects – *Lipstick*, and others – that I am most excited about. In a way, this debate actually provided a context that serves as a *foil* of sorts for my own research approach to developing a language, terminology and a typology of design.

So now I will turn to this design research debate, which provides the intellectual, disciplinary backdrop to my research. Despite its achievements over the years establishing important groundwork for the emerging academic discipline of design, as we shall see the kinds of conversations that currently take place, for the large part, do not attend to the kinds of projects that are the focus of this thesis. This literature review further demonstrates the paucity of an appropriate sensitive language for talking about 'sticky' creative, investigative, visual work.

Section 2. Reviewing the design research debate [and its limited interest in baffling visual projects such as *Lipstick*].

As is almost universally observed by design scholars (such as Macmillan 2005; Poggenpohl 2002; Strickler 1998; Cooper 1995; and many others), design is a relatively young discipline without a scholarly tradition, trying to establish itself in academia. Indicative of the newness of the field, consensus among design scholars could not even be reached to identify the

essential 'key' literature in the design discipline, which could constitute a bibliography to underpin the field (Chayutsahakij 2002:115). The consequence of lacking such a 'reservoir of knowledge' is not only that design risks stunting the development of its own intellectual culture and own self-understanding, but somewhat more seriously, that 'there is a real danger that [design] will step aside and leave the shaping of the future to other disciplines' (Winkler 1997).

In particular, as an emerging discipline, design is grappling with the requirement to produce original research, in order to meet the expectation that all advanced fields contribute to a growing body of knowledge. There seems to be consensus that design is justified as an independent discipline based on its distinctive expertise, frequently referred to as 'designerly ways of knowing'. This was first coined by Nigel Cross in 1982 as a 'third way of knowing' or as Dilnot puts it, "'an-other" model of knowing' that cannot be 'accommodated satisfactorily within either the model of the sciences / technological sciences or within the humanities / social sciences' (Dilnot 1998:67). That is, there is general agreement that there is something irreducible about design that cannot be accounted for by other disciplines. However the issue that does persist concerns which scholarly activities are appropriate to enable design to advance its contribution to knowledge. In other words, how should design do research?

The key question is: should design adopt research practices from other more established disciplines (and if so which ones, and to what extent), or assert its own distinctive research? On the one hand some scholars assert that design can and must develop its own specialised research processes, anxious that borrowing from other disciplines in the attempt to develop a research culture, design will be 'colonised' and its distinctiveness lost. On the other hand, other scholars are concerned about the dubious claims often asserted by such novel research, and rather insist that design researchers must become skilled in established research methods.

So far, the design research debate has been dominated by questions concerning whether design activities can be considered as research activities (indeed even vice versa). Email lists and journal articles grapple with possibilities such as: is design's distinctive knowing actually manifest in the design processes undertaken and the design artefacts produced? And if it is, could this design knowing in fact satisfy recognised research criteria, such as generalisability and transferability.¹¹ Can *practice* be systematically conducted and repeatable? Can *artefacts* be precise, clear and accessible?

¹¹ Writing with a design audience specifically in mind, Zeisel helpfully emphasises how using self-directed

The design research debate provides a backdrop for the present thesis in two ways. Firstly, since this thesis aims to better understand investigative, creative, visual projects, and is motivated by the hunch that visual communication design can say what otherwise cannot be said, this thesis is inspired by (and attempts to make a modest contribution to) the case that design is a distinctive 'third way of knowing' (Cross 1982). However, as the following literature review will reveal, there has also been growing frustration at the various ways design has tried to assert its 'designerly ways of knowing'. For the sake of argument, I tend to characterise this as two opposing positions: one side (the progressive practitioners) is impatient with overly abstract theoretical arguments, while the other (the conservative theoreticians) is uneasy with the implausible practice-based claims to knowledge. Indeed the second way this dissertation is contextualised by the design research debate is by heeding these frustrations. I avoid straightforwardly equating design=research, as I avoid complicated logical induction for design=research. Although I place creative, investigative visual projects at the centre, and seek to unpack their refined, logical appeal, this thesis never suggests that these projects are equivalent to research practices. Rather, in the concluding chapter of the thesis, I cautiously put forward the possibility that partial yet vivid 'insights' are conveyed by the strategies and principles used in these projects, and speculate on circumstances where this kind of appeal would be suitable.

questions can make research 'jargon' meaningful, as I have here summarised and tabulated (1981:76-86).

QUALITY CRITERIA (RESEARCH 'JARGON')	FOCUSING QUESTION	PRACTICAL OUTCOME
SHARABILITY: 1. INTERSUBJECTIVITY 2. RELIABILITY 3. VALIDITY	'HAVE I CARRIED OUT MY RESEARCH IN SUCH A WAY THAT IT CAN BE SHARED WITH OTHERS?'	'IF YOU USE METHODS THAT ALLOW OTHER PEOPLE TO CRITICIZE YOUR RESEARCH, YOU CAN LEARN FROM THEM.'
COMPARABILITY: 4. TENABILITY 5. TESTABILITY	'HAVE I PRESENTED MY RESEARCH RESULTS IN SUCH A WAY THAT THEY CAN BE TESTED IN COMPARISON WITH OTHER RESEARCHERS' RESULTS?'	'IF YOU CAN DIFFERENTIATE BETTER RESEARCH FROM WORSE RESEARCH, YOU CAN IMPROVE YOUR OWN.'
APPLICABILITY: 6. SPECIFIABILITY 7. GENERALISABILITY	'HAVE I CLEARLY IDENTIFIED WHAT PROBLEMS MY RESEARCH RESULTS CAN AND CANNOT SOLVE?'	'IF YOU KNOW WHEN YOUR RESEARCH FINDINGS ARE APPLICABLE AND WHEN NOT, YOU CAN ACT ON THE WORLD WITH GREATER CONTROL.'

By the conclusion of the following review of the design research debate, it will become clear that a particular challenge has emerged as the legacy of the past few decades of debate in design research, with which researchers exploring 'designerly ways of knowing' – as is the case in this thesis – must contend. The challenge is to produce research that can both withstand scrutiny from scholars in established fields, but without sacrificing (and rather ideally embodying) the distinctiveness of actual design.

a. Unanimous agreement that design deserves a place at university.

The alleged irreducible distinctiveness of design is an exciting and significant, but still uncertain possibility. This is particularly compounded by the persisting contradiction that surrounds design, for this very irreducible distinctiveness is also associated with design's universality and ubiquity.

Accounts of design's universality invariably cite Herbert Simon who in 1969 reasoned that '[everyone] designs who devises courses of action aimed at changing existing situations into preferred ones...Design, so construed, is the core of all [professions]' (Simon 1969; cited in Margolin 1989:3). Indeed, in view of the fundamental definition of design as an 'intention' or 'plan, project and working hypothesis', it is a truism that 'there is no area of contemporary life where design...is not a significant factor in shaping human experience' (Buchanan 2005:6).

However, it is a peculiarity of design that it can simultaneously be defined by its distinctiveness and its universality. Nigel Cross most notably determined that 'contrasting design with the sciences and humanities is a useful, if crude, way of beginning to be....clearer of what we mean by design, and what is particular to it' (Cross 1982:221). Cross clarified that while the sciences explore the natural world by thorough analysis and experimentation, and the humanities explore the realm of human experience by analogy and criticism, design is concerned with the artificial world through synthesis and invention.¹² Furthermore, these different domains and methods are accompanied by different values: while the sciences value objectivity and 'truth', the humanities value subjectivity and 'justice', design is distinguished by an emphasis on practicality, ingenuity and appropriateness (Cross 1982:221-222).

¹² Pugh (1982) objects to the notion of design as a third culture since it is separatist and largely irrelevant: and will 'give rise to another incomprehensible pile of gobbledygook' not understood by design practitioners, let alone the sciences, the arts or anyone else. Pugh instead proposes that design is an 'integration' of the sciences and the arts. Pugh asserts that we can broadly understand the difference between designing books and designing aircraft in terms of the differing ratios of science to art (Pugh 1982:93).

Despite the fact that 'designerly ways of knowing' has entered the vernacular of design and Cross's original findings are evident in more recent conceptions of design,¹³ it is notable that Cross (most recently in 2001) has repeated his call for defining "designerly" ways of knowing, thinking, and acting' (Cross 2001:55). Indeed Bruce Allison (1993) has warned that 'if [design] practitioners continue to reject an ongoing responsibility for understanding and explaining what we do and why we do it then others, like psychologists and design historians will gladly take over responsibility' (Allison 1993; cited in Cooper 1995:14).

In summary, our understanding of design is that it is a knowledge broadly concerned with change, invention and synthesis. Somehow, it is at once fundamental and universal (ubiquitous), as well as distinctive and particular (exclusive). Considering design's potential and given our thus-far ambiguous and hazy understanding, there seems to be a strong case for a more explicit and robust explanation of design.

b. The conundrum: how can design do research? To borrow, or not to borrow.

Any academic discipline is required to undertake research. The question of how design should do research and what kind of knowledge design provides access to has been the focus of much debate so far. As Cross puts it, how can design advance 'its own strong and appropriate intellectual culture' but 'demonstrate [that]...standards of rigor in our intellectual culture at least match those of the others' (Cross 2001:55). Should design researchers 'adopt or adapt methodologies developed in other academic disciplines' (Seago & Dunne 1999:11), or is design 'distinct enough from other disciplines to require and justify the use of specific methodologies' (Findelli 2000[1999]:56)? In fact should design research '[develop] original methodologies which recognise [design's] distinctive quality of discovery' (Seago & Dunne 1999:11)?

There has been a strong reaction by designers against adopting research processes from other disciplines since such derivation threatens design's distinctiveness. Indeed Cross insists that 'we must avoid swamping our design research with different cultures imported either from the sciences or the arts' (Cross 2001:55). Indeed, the design discipline has literally been personified as an adolescent, 'Young Design', so 'desperate to find a place for itself in the world' that it 'put on the clothes and language of other disciplines' even though they didn't really fit (McDonald 1994:72). The fear is that designers, suffering from

¹³ For example according to Poggenpohl (2002) '[design] is about action and projected change; it goes beyond problem investigation or description of a situation and into the synthesis of a solution.' Similarly Nemeth (2003) explains that design can envision future possibilities and tackle ill-defined problems.

'methodological intimidation' will tend to 'play it safe' with 'academically acceptable' but, as a result, frequently 'dull and pedestrian' research projects (Seago & Dunne 1999:11-12). Additionally, and more serious than being boring, such 'openness to colonization by other discourses' has been diagnosed as the 'most notable pathology of design discourse' since this will 'systematically erode [design's] identity' (Krippendorf; cited in Findelli 2000[1999]:57). By culling research topics and methods from more established disciplines, design risks losing exactly the qualities – 'originality, iconoclasm, energy, style and wit' – for which it is distinguished (Seago & Dunne 1999:12).

Therefore design research looked for ways to develop its own research. Possibly the most stimulating work that explored the possibilities for research and design, was carried out by Christopher Frayling (1993/1994).¹⁴ Frayling's work provided a flexible framework that has been widely cited by subsequent design researchers, leading Findelli to remind us though Frayling's work is 'seemingly consecrated' it is actually 'still controverted' (2000[1999] 56). Frayling distinguished three opportunities: 'research *for* design', 'research *into* design' and 'research *through* design'. As we shall see, it is this third possibility that has particularly inspired design researchers, and which we will clarify in comparison to the first two.

Firstly, 'research *for* design' refers to 'R & D' or background research undertaken that is directed towards a particular design project: such as testing the performance of a glaze by an industrial designer or user testing the clarity of a brochure designed by a graphic designer. 'Research *into* (or *about*) design' includes the various accounts of design phenomena usually done by other disciplines – such as a sociological, historical or economic account of design – which are straightforward dissertations since they can adhere to the conventions of their respective disciplines. Finally, the most contentious but potentially ground-breaking possibility is 'research *through* (or *by*) design' where a degree may be awarded for a project and is often labelled 'practice-based' or 'practice-led' research (Frayling 1993/1994, Findelli 2000[1999], Newbury 1996).

To summarise, maintaining design's distinctive authenticity appeared to be at odds and even incompatible with achieving acceptable academic standards. So an ideal way to resolve incongruity was offered by the possibility that, via the artefact, via expertise, via practice, design *was* research.

¹⁴ Apparently adapted from Herbert Read's earlier ideas on art education (Newbury 1996:216).

c. The possibility that research could be practice-based.

This third option – 'research *through* (or *by*) design' – initiated vigorous debate surrounding the possibility that 'the practice of design projects has a central methodological role to play' (Findelli 2000[1999]: 56) and could be equivalent to research. If it could be shown that design processes and artefacts constituted research, designers would be clearly able to meet academic expectations and yet also maintain design's distinctive processes.¹⁵ However others have noted the institutional concern that practice-based doctorates will undermine and devalue more established doctorates. While practice might satisfy doctoral criteria such as 'originality', there is persistent unease about its ability to be 'intellectually clear and accessible' (Candlin 2000a, 2000b).

The view held by proponents of practice-based research is that practice is under-recognised because it is 'knowing how' rather than 'knowing what', which is the established, conventional understanding of knowledge. The problem with 'knowing how' is that it is implicit, hard to specify, internalised and not expressed in words (Poggenpohl 2002, Candlin 2000, Gray & Malins 2004, Bamberger & Schön 1991). Despite being difficult to articulate, 'knowing how' is real and unique. Professional practitioners in a variety of fields, from planning to psychotherapy, solve problems – on the spot, by action – using 'knowing how'.¹⁶ The problem is, 'knowing how' remains 'hidden in the knower's actions; it remains silent – expressed in the builder's work' (Bamberger & Schön 1991:207). Practice-based research attempts to reconcile this split between academic research 'about' (which requires knowledge to be clearly and durably articulated) and practice-based 'knowing how'.

The question then is to how to extract 'knowing how' and make it explicit, externalised and formalised in order to be recognised as research. Since the 1990s various approaches have been pursued: while some scholars drew on Polyani's (1983) work on tacit knowing and the relationship of creativity and invention (e.g. Poggenpohl 2002, Rust 2004), others pursued Schön's (1983) reflective practice approach that characterises design as a conversation (e.g. Newton 2004 and Gray & Malins 2004).

Exploring the ability of design artefacts and design processes to embody knowledge is an epistemological question that seemed to encourage abstract, theoretical debate. Design

¹⁵ Finer distinctions within 'designerly knowing' have so far included exploring the *skill* of designing; the knowledge *embodied* or performed by the artefact; and the way designers *come to know* something about contexts or people or materials or technologies, etc., by designing (with/for) them.

¹⁶ Like design, nursing is a field that has been particularly invigorated by the recognition of knowing in practice.

discourse became dominated by reviewing fundamental questions such as 'what is research', 'what is knowing' and 'what is design'. Indeed, in their account of design research discourse in the 1990s, Gray and Malins contend that '[defining] "research" became an obsession' (Gray & Malins 2004:3). This kind of reasoning elicited further theoretical questions, such as what is the role of practice in theory-building and, the reverse, what is the role of theory in practice (Findelli 2000[1999]) and even 'how there can be PhDs in design at all' (Dilnot 1998:65). Such epistemological questions were tackled by academic deduction yielding diverse findings. For example, Downton reasoned that '[design] is a way of inquiring, a way of producing knowing and knowledge; [which] means it is a way of researching' (Downton 2003:1), while Glanville concluded the reverse: that 'research [is] a (restricted) design act, rather than design being inadequate research' (Glanville 1999:81).

d. Criticism of the direction of practice-based research.

This theoretical and abstract debate was subject to various complaints, especially since it is 'possible to argue...that an over-emphasis on questions of methodology and epistemology is a distraction from the essentially practical business of doing research' (Newbury 2000:284). Indeed Macmillan recounted that design research had become fixated with 'reiterating the fundamentals: explaining what research is, having to justify it, and engaging at a very elementary level in the endless dispute whether design practice is a research activity' (Macmillan 2005). Interestingly, criticism of practice-based research simultaneously reflects two opposite concerns that can be characterised as 'conservative backlash' on one side and those who just want to 'get on with doing design' on the other. On the one hand, some scholars (e.g. Newbury 1996, 2000; Seago & Dunne 1999) were frustrated by the obsession with methods and perceived the concentration on theoretical explorations of research to be at the expense of actually doing design. And at the same time, other scholars (e.g. Friedman 2005; Archer 1995) were disturbed by the lack of methodological rigour and concerned that standards of research were being threatened by the pursuit of new designerly approaches to research. Either way design researchers were said to be perplexed (Scrivener & Chapman 2004) and design PhD students to suffer additional anxiety on top of the usual anxiety associated with undertaking doctoral research (Candlin 2000a, 2000b).

Friedman has declared that 'few fields face the exaggerated claim for "practice as research" as design' (Friedman 2005). Macmillan explains that '[there] has been an understandable temptation within the discipline to re-define practice as research, but this ignores the issue of research training. Those who have received both know that learning how to design does

not equip you to undertake research' (Macmillan 2005). While practice-based research proponents assert that 'knowing how' is as valuable as 'knowing what' (Gray & Malins 2004:22), Friedman maintains that a research degree cannot be awarded '[unless] those who "know how" EXPLAIN how' (Friedman 2005, emphasis in original). This 'conservative backlash' (e.g. Archer 1995, Macmillan 2004, Friedman 2005, Love 2006) insists that a narrow interpretation of established standard research criteria must be adhered to. To count as research, practice 'must be knowledge directed, systematically conducted, unambiguously expressed. Its data and methods must be transparent and its knowledge outcomes transmissible' (Archer 1995:13). Expertise alone, no matter how outstanding, is not available for other members of a field to 'examine, adopt, adapt', and rather '[it] is the explanation that constitutes the original contribution to the knowledge of the field' (Friedman 2005).¹⁷

However, this focus on reviewing the fundamental principles of research has necessitated researchers in design to engage with taxing theoretical debate 'not demanded of researchers in [more established] disciplines where...agreed research principles...have become embedded' (Scrivener & Chapman 2004). Notwithstanding some 'more or less convincing' arguments about 'the ability of objects and images to embody knowledge' (Newbury 2001:58), scholars have observed that the 'continual refinement of theoretical positions' regarding the extent to which design practice can constitute original and transmissible knowledge has 'created something of an impasse' (Newbury 2000:288).

This direction away from designers just getting on with doing design has led some to warn that as a discipline design will only become valued 'when it meets needs that other practices do not offer' and not through 'its own practitioners' insistence' (Nemeth 2003:98), and others to recommend that now perhaps 'it is only possible to move forward through a discussion of actual examples' of research projects (Newbury 2001:57-61). Yet despite this fatigue expressed by Newbury, Nemeth and others, recently the call has been renewed for '[analysis of] the epistemological and practical characteristics of existing research methods' in order to demonstrate how these 'well developed methods for gathering and analysing data' are 'unsuited' to the needs of art and design, representing the continuing interest in more theoretical discussions (Love 2006).

¹⁷ Failing to meet these academic stipulations and so disqualified for a doctoral award, Archer offers the compensation of 'other kinds of [practical] reward ... fees, patents, profit sharing, publication, fame' (Archer 1995:13).

e. Where we are today: a discipline that is regrouping

During the last decade, the design research community has suffered some considerably weak practice-based PhDs (see Friedman 2005; Macmillan 2004; Love 2006), as well as some anxiety-inducing epistemological arguments (see Scrivener & Chapman 2004; Newbury 1996; Candlin 2000a). Today, we can extrapolate that the present challenge is how to maintain both design's distinctiveness and research's standards.

The emergent view is that a studio-based education dominated by heuristic, intuitive processes is inadequate for originating doctoral research and developing a vibrant intellectual culture (e.g. Winkler 1997; Nemeth 2003; Strickler 1998). As Nemeth bluntly points out, 'seeing what might work' might be a great way to solve design problems, but it 'is not enough to form the basis for a profession' (Nemeth 2003:99). Accordingly there seems to be growing recognition that rigorous research which also maintains design's distinctiveness, is possibly best undertaken by designers with research training.

The two most popular strategies put forward as ways for designers to gain research skills, have been interdisciplinary research collaboration and reformed undergraduate education. Strickler (1998) recommends collaboration with colleagues from more established fields as an opportunity for design doctoral candidates (despite having only studio training) to gain experience in producing original, verifiable research (indeed that could withstand scrutiny from Archer [1995] et al.). Meanwhile Nemeth (2003), Winkler (1997) and Byrne (2001) call for undergraduate design education to be revised in order to instill the 'disciplined process of research' (Winkler 1997:133) so designers can 'create generalizable, publicly examinable forms of knowledge about design and to use to design' (Byrne 2001; cited in Nemeth 2003:108). And it seems that designers might be particularly responsive in undertaking such research training since the 'intangible' processes vital for design 'such as intuition, imagination, and creativity...are essential to research as well' (Ziesel 1981:3).

Similarly Seago argues that the antagonistic sentiments common among art students 'are based on a deep misconception of the research process' (Seago 1995:4) since '[true] research is based upon the dual components of intuitive imagination and critical rationalism which constantly alternate and interact' (Seago 1995:5). Of course, this is not unique to design research. In her interdisciplinary research methods book O'Leary insists that inspired research is the product of both the creative, intuitive and innovative right and not only the strategic, logical and conventional left side of the brain, since '[as] researchers, a lack of creativity will see us finding exactly what we expect to find. Without the ability to "think outside the square", we will always dwell within it' (O'Leary 2004:2).

Returning to the specific case of design, an astute summary of the various possibilities surrounding the relationships of design and research is provided by John Ziesel, who made the following appraisal in 1981 but is strangely under cited:

'Despite their similarities, research and design are not interchangeable. Design training tends to emphasize being able to present concepts; research training emphasizes testing them. ... Design training teaches people how to take risks; research training, how to minimize them. Curiously, however, if you were to tell a successful researcher that he does not know how to take risks and present ideas, he would laugh. An easy way to insult a designer would be to tell her that she is uncritical or takes uninformed risks' [Ziesel 1981:226-7].

While remaining unresolved, design research discourse from the past decade leaves a legacy that this thesis observes. In exploring the investigative, creative, visual projects that are the focus of this thesis, I am open to the possibility that they are insightful but cautious of overstating these insights (for example claiming their equivalence to research processes). Rather the explanations I present aim to be both theoretically informed and directed through actual project examples.

Undoubtedly the design research debate has raised the reputation of design and its level of self-understanding and self-analysis. This dialogue continues to underpin design's aspirations to earn a reputation among the more established disciplines of knowledge. Despite the important groundwork achieved by committed scholars, there are many areas for further development in the field of design. The research reported in this thesis is a case in point: ultimately, to find a sensitive language to wrap around these peculiar, vivid, purposeful but un-instrumental, creative, investigative, visual projects, I needed to look elsewhere. As we shall see in Chapter 2, dialogues more specific to the specialisation Visual Communication Design (a sub-field of design) brought considerable insights to projects such as *Lipstick*, which were complemented by further explanations provided by the approach in sociology of Visual Research. Subsequently, finding these explanations still partial and not attentive enough to the peculiarities of *Lipstick* and others, I searched further still, and it was by this exploration of diverse and disparate discussions concerning, for example, the anatomy of the human heart, the origins of the encyclopaedia, photographic archiving, natural science taxonomies and vernacular cartography, that I derived the language proposed in this dissertation.

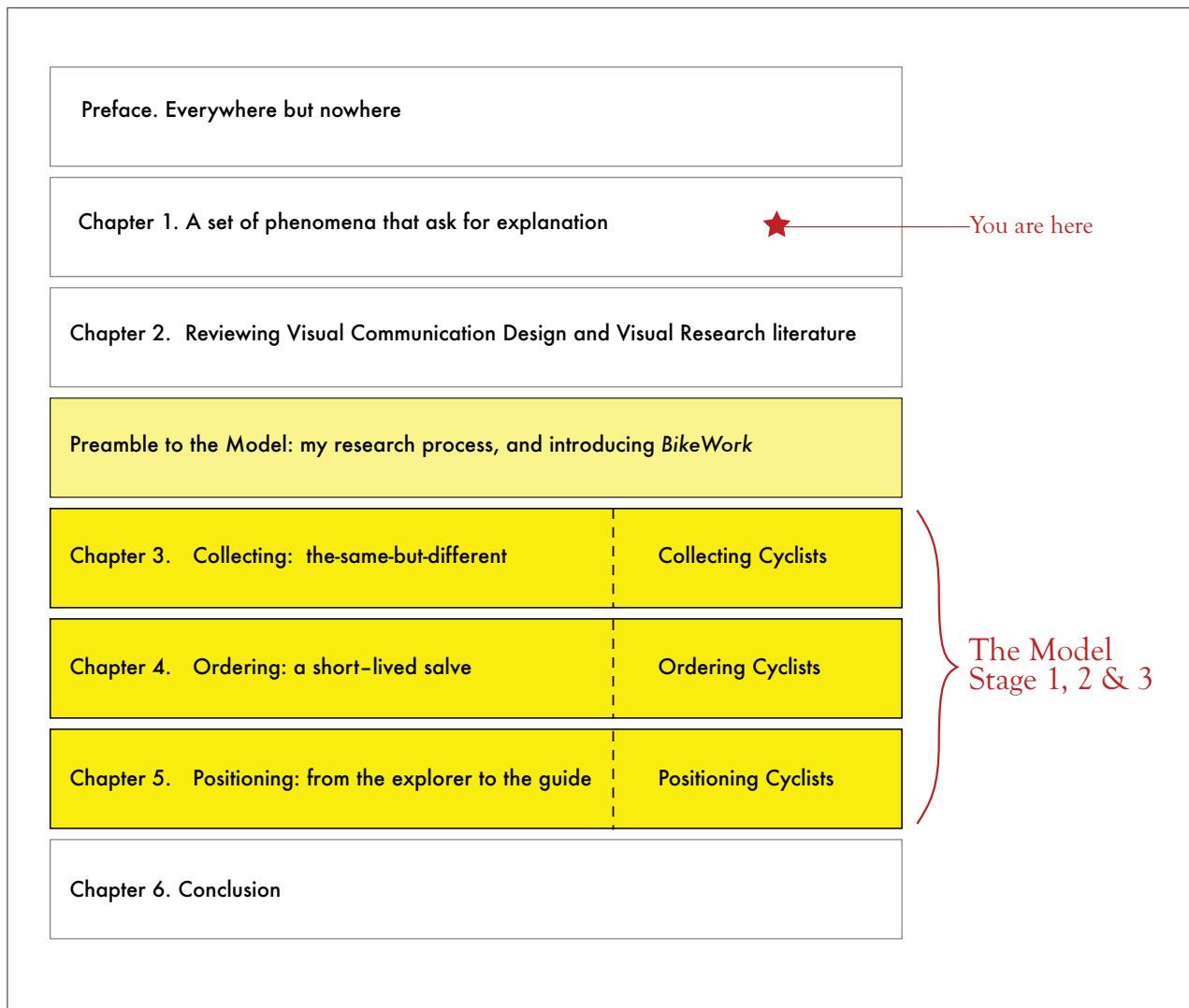


Figure 2. Map of thesis

Chapter 1 identifies the puzzle of ‘sticky’ ‘homeless’ projects; Chapter 2 achieves partial but inadequate explanations for these puzzling phenomena by drawing on Visual Communication Design and Visual Research; Chapters 3,4 and 5 put forward the model – Collecting, Ordering and Positioning.

By exploring disparate literature and bringing these to bear on projects, a more appropriate language is derived, which is subsequently, iteratively, adopted and applied as strategy for creating an original project, *BikeWork*.

Section 3. Overview of this dissertation.

This introductory chapter has set about to evoke the puzzle that is the research problem: phenomena exist which are prevalent and interesting, but ambiguous and for which an appropriately attentive language does not yet seem to exist. Although at this point we have examined only a couple of projects, we take these as representative of a whole body of similarly puzzling work that I have uncovered, which we will more comprehensively examine in the model.

In Chapter 2 we carefully review literature that, though more attentive than the design research debate, ultimately provides only a partial understanding of *Lipstick*, *Periodic Breakfast Table*, and *Newsmap*. In this discussion, substantial insights are gained by exploring these projects in light of Visual Communication Design and Visual Research.¹⁸ Despite this, aspects of the projects seem to resist explanation and even contradict these authorities. As a result of this analysis, we are able to more closely identify the confounding aspects of the projects: visually refined but without a client or audience; outward looking but conducted without theoretical framing.

By the end of Chapter 2, we are clear about our inadequate and ambiguous understanding of the projects, how they can't be explained, and how they are 'homeless' or 'nomadic'. Neither 'Visual Research' nor 'Visual Communication Design' can accurately serve as an adequate label. Therefore, I have created the tag 'creative, investigative, visual projects' as a crude spacer to signal their commonalities with, yet distinction from, these established discourses. 'Creative' signifies that these projects have *some* likeness to Visual Communication Design; while 'investigative' indicates their correlation with Visual Research practices; and 'visual' conveys the common concern of the two. So, 'creative, investigative, visual projects' will refer to the puzzling work – in the absence of a existing term, and preferring not to create a neologism – in the following chapters, where we undertake a more sensitive, close interrogation.

As shown in the diagram (←FIGURE 2), in Chapters 3, 4 and 5 I derive and put forward a Model to more comprehensively, meaningfully and faithfully unpack the puzzling work. As I will explain in the Preamble to the Model, by drawing on diverse discourses at the same time as maintaining a close examination of the work itself, I arrive at a typology of processes and outcomes, comprised of three parts: Collecting, Ordering and Positioning. This

¹⁸ The choice of these two discourses will be explained in Chapter 2.

terminology provides a tangible, critical language for understanding creative, visual, investigative projects, that we have had so much trouble accounting for.

Of course in the end, ironically, as a result of gathering and considering *practical* projects, I propose a *theoretical* model of design. Therefore to maintain a connection with *practice*, I also conducted an original work that empirically explores the model, which is reported on iteratively in each stage of the model. This work vividly expresses the practical understanding imparted by the model. That is, my Model does not just introduce new terms as labels but identifies specific strategies that can be adopted – it is not only descriptive and analytical, but prescriptive and constructive.

BikeWork is prefaced in the Preamble to the Model, and subsequently incorporated in each of Chapters 3, 4 and 5. It takes advantage of the different kinds of insights offered by each stage, by adopting or following the 'rules' outlined in the model, so to speak. *BikeWork* carries out the stages in sequence – Collecting, Ordering and Positioning – in order to creatively, visually investigate an issue related to cycling advocacy. Perhaps because the subject involves human participants or because the subject relates to advocacy, not only do we see how the model is usable and constructive, but we more keenly observe *the kind of appeals* such an approach makes. It becomes patently clear that the creative, visual, investigative approach delineated in the model (Collecting, Ordering and Positioning) is partial, non-comprehensive and leads to no generalisations. Instead of regarding such qualities as flaws to be corrected, my research considers the *value* of the idiosyncratic and fragmentary, leading to my speculation that the validity of this approach, while not its accuracy, is its *agency*.

Finally, in Chapter 6 I review how the puzzle of this 'set of phenomena that ask for explanation' has been resolved, and discuss the limitations of my findings, as well as suggest directions for future 'sticky' researchers.

CHAPTER 2.

REVIEWING VISUAL COMMUNICATION DESIGN AND VISUAL RESEARCH LITERATURE.

THE PARTIAL EXPLANATIONS OF PUZZLING PROJECTS PROVIDED BY SELECTED KEY SOURCES

In the previous chapter I examined the design research debate as the backdrop for the conceptualisation of the thesis as a whole. This discussion was undertaken largely in the spirit of a conventional literature review of contemporary researchers in my field. As I discussed, my own research does not identify and directly build upon specific previous work and instead draws on and has been shaped by the ideas in design research *indirectly*. That is, it was my encounter with the design research debate that crystallised my commitment to maintain relevance to thoughtful, practising visual communication designers, and to undertake research that was grounded in *actual projects* and that was also theoretically informed and not 'anti-intellectual'.

In this discussion essentially we continue to examine literature, although this review differs in several significant ways and should not be confused with the former (expected, standard) literature review. Chiefly, the kinds of literature discussed in this chapter are different: here we have set broader design research discourses aside, and now focus on Visual Research and Visual Communication Design. Furthermore, unlike the design research debate that is the intellectual context in which I find myself (as an academic researcher in design), the sources we will examine here were *sought out* and selected in order to gain their particular insights. Therefore this discussion is probing with a particular purpose in mind: to specifically bring these sources to bear on the puzzling projects. Indeed this review could be described as more of an idiosyncratic excavation into what seemed to be promising seams in the literature, rather than a comprehensive systematic orientation of the fields of Visual Communication and Visual Research. By the close of this chapter, by drawing on these sources, we will have unpacked our creative visual projects and see them a little more clearly (but we realise not completely).



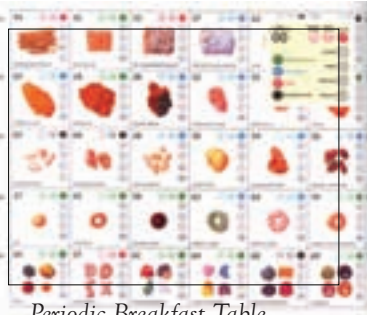
A good place to begin to understand projects that don't fit anywhere and for which there is no language, is by looking at the categories that they don't fit within, and the languages that seem to be too blunt an instrument to use to talk about them. Another way to say this is, although we don't yet know what these projects are, we can begin by knowing what they're not. Therefore in this chapter, I will be considering discourses that, although relevant and which increase our understanding of the projects in some ways, fail to accommodate them in others. Arriving at ultimately unsatisfactory explanations for creative, visual, investigative projects is the goal here.

To condense and sharpen the argument in this chapter, I have restricted its scope in several ways: both with regard to the creative projects we try to understand and the literature we use to (partially) understand them (as shown in → FIGURE 3). In the first regard, rather than stepping through a range of projects in a broad but cursory review, I have chosen to focus on three exemplars to enable a more in-depth analysis. In fact I will be revisiting the three projects with which we became acquainted in the preface: *Lipstick*, *Periodic Breakfast Table* and *Newsmap*. These three projects, that so far we only know as 'sticky' and 'homeless', will be taken as representative of a whole body of creative investigative visual projects. With regard to the literature, I selected Visual Communication Design and Visual Research as the two most salient discourses to bring to bear on the puzzling creative projects. Drawing on the field of Visual Communication Design is more or less expected, but why did I choose the essentially marginal sociological methodology of Visual Research? A brief explanation for how I came to select Visual Research as the second sphere of literature follows.

Three 'sticky' projects.



Lipstick
(Greene 2001)



Periodic Breakfast Table
(Weese 2001)



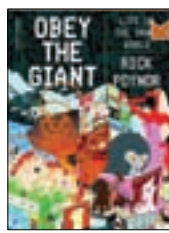
Newsmap
(Weskamp 2004)

Two fields of knowledge

Visual Communication

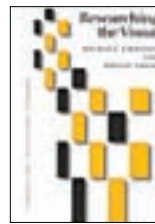


Frascara
(1997, 2004)

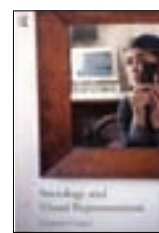


Poyner
(2001)

Visual Research



Emmison & Smith
(2000)



Chaplin
(1994, 2006)

Figure 3. A diagram of the discussion in Chapter 2: 3 projects, 2 disciplines.

We will recall that I had initially cited *Lipstick*, *Periodic Breakfast Table* and *Newsmap* as epitomising the distinctive power of Visual Communication Design.¹⁹ In fact during the course of this research I came to revise this judgement and eventually conceded that these were not actually Visual Communication Design after all. Undoubtedly these projects are visual, inventive and engrossing. However - irrespective of how 'sticky' I find them - they do not fulfill other fundamental expectations of Visual Communication Design. For example, they do not convey a message directed to affect a particular outcome in a target audience. Instead, these projects are outward-looking, open-ended and exploratory, and even experimental. Consequently, with these attributes in mind, I began to search for their 'home' elsewhere. I found that these same qualities that cast the three projects in an uncertain light in terms of Visual Communication, made them promising for categorisation as Visual Research. Visual Research prioritises the pursuit for understanding above communicative agency, and (as a sub-field of sociology) is particularly interested in unpacking and 'de-naturalising' everyday phenomena. (However, as shall be revealed, despite displaying these defining qualities of Visual Research, when I considered other features, such as the absence of an accompanying sustained theoretical explanation, I realised that these projects were similarly only partially accounted for by Visual Research.)

To further concentrate the argument I have focused on two notable contemporary thinkers from each discourse, whose key texts are particularly relevant to the task at hand.

Accordingly, the structure of this chapter is divided into four: the ideas of each thinker will be

¹⁹ At this point, it is helpful to make some comments regarding the people who created these works. While I have co-opted these projects as examples of Visual Communication Design, are the creators in fact Visual Communication Designers?

Catharine Weese (designer of *Periodic Breakfast Table*) is an award winning graphic designer (Society of Environmental Graphic Design 2006).

Marcos Weskamp (designer of *Newsmap*) is an authority in the specialised area of information visualisation and interface design (Weskamp 2003-2007).

Stacey Greene (creator of *Lipstick*) is actually a contemporary artist who works with video and photography (Buchanan-Smith 2001:215). However for the purposes of this research I assert that that Greene is not strictly a Visual Communication Designer is beside the point. What does matter is that she is using the very same visual language (refined word-image compositions) to achieve the same effect (visual impact and viewer engagement.) Accordingly and furthermore, *Lipstick* appears to be of considerable interest to designers. *Speck* (the book in which *Lipstick* features), was curated by an *art director* at the New York Times. Subsequently, *Speck* was enthusiastically reviewed by a *designer*, Anna Gerber, for the *design* magazine, *eye*. Gerber is a designer as well as a design writer – she curated another visual communication design anthology, *All messed up: Unpredictable Graphics* (2004). Her book review of *Speck* appears in *eye* magazine, the London based self-proclaimed 'international review of graphic design' (<http://www.eyemagazine.com/home.php>). And finally, demonstrating the relevance of work such *Lipstick* and *Speck*, Gerber's review is gushing: she appears to recommend unreservedly to her *eye* readership:

'Every once in a while, a book comes along that you love so much you want to buy a copy for everyone you know' (Gerber 2002).

briefly reviewed, and then with their various viewpoints in mind, we will iteratively turn back to consider the projects. In other words, we will make several 'passes' of the creative projects, and each time see what more we can see in them. A brief introduction of each thinker follows, beginning with the two representing Visual Communication.

Jorge Frascara is both a professor of design and a professional practitioner. He has most notably worked on the research and development of visual communications for safety and other social concerns. Recognising the seriousness and urgency of issues requiring attention, Frascara's consideration of Visual Communication Design is careful and at times grave. Frascara is impatient with 'discussions between modernism and postmodernism, an obsession with computers [and] the tricks seen in the last annual' and warns that '[a] technically excellent but ethically and socially irresponsible designer is a social, cultural and ecological hazard' (1997:32). Instead, according to Frascara, the core concerns of Visual Communication Design should be 'what really matters: life, death, pain, happiness and the welfare of people' (Frascara 1997:32).

Rick Poynor is a critic of visual culture who describes himself as an observer from outside the design industry. Poynor contemplates our simultaneous immersion in, seduction by and alienation from a visual world. He is neither a scholarly theorist nor a practising designer, and rather describes his position as a 'street level participant, an image consumer, a tuned in viewer'. *Obey the Giant: Life in the Image World* (2001) is a compilation of his musings from many years as an 'acclaimed design writer' for *eye*, *Blueprint* and other similarly critically engaged professional design magazines. He has described his motivation for writing as to understand his own experiences in the 'image world' and his personal encounters – albeit 'a kind of repelled fascination' – with the 'posters, billboards, books, magazines, websites, record covers, tourist attractions, exhibitions and shops' (2001:12-13).

Sociologists Michael Emmison and Philip Smith are the authors of *Researching the Visual* (2000) (so technically we have five separate thinkers.) This is an enthusiastic introduction to observational visual research, positioned as an 'accessible' student text that includes 'small-scale and low-budget exercises and projects' (2000:xii-xiii.) Although in this chapter I put forward Emmison & Smith as the more conventional view in visual research, as visual researchers they are themselves marginal in the wider context of sociology.

Elizabeth Chaplin is also a sociologist who is acclaimed for her progressive approach, distinguished by her recommendation for a 'visually aware sociology' that actually produces visual representations (1994:229). Mainly we will be considering *Sociology and Visual*

Representation (1994) written with university students in mind 'who are thinking of pursuing their interest in sociology and visual representation at postgraduate level' (1994:2). In addition we will consider her report *Photographs in Social Research: The Residents of South London* (2006 [2002]).

Emmison & Smith, and Frascara provide perspectives and interpretations that are characteristic of their disciplines more generally: their texts are good introductions that we will use to crystallize the concerns of their respective fields. In contrast Chaplin and Poynor provide more adventurous, less typical ideas: and so we will use them as counterpoints to add complexity to the more straightforward versions.

At this point in order to be transparent about the personal and idiosyncratic (albeit considered and deliberate) manner they were selected, I will relate how each came to my attention, and why I judged their perspectives as pertinent for my discussion.

Poynor has persisted from my undergraduate design education, having offered the inspiring, exciting challenge that a designer could aspire to function as a type of journalist. In my day, Rick Poynor (among others, such as Ellen Lupton) was the thinking design student's choice. He was a regular contributor to the London based *eye magazine*, which actually had (and has) articles in it, and was not just a glossy for flicking through for ideas to rip off to keep in with the latest (edgy or slick) visual styles. Poynor didn't restrict his conversations to formal concerns such as new trends in typefaces or logos, and instead tackled subjects such as how visual culture – productively *and* adversely – impacted society. Articulating what many others were thinking, Poynor emphasised that being capable of such power entailed responsibility, and the excuse 'I'm just a designer' was no defence: he insisted that design's area of expertise was content, not just form. But admittedly – intended for critically engaged professionals rather than research scholars – these were short, pithy, 'cool' essays, and not substantial, comprehensive dissertations. It was my pursuit of more ideas like Poynor's – critical, visual, societal – that lead me to Emmison & Smith.

Emmison & Smith were in many ways the impetus for this research. I shared their passion for the visual, but was dismayed by their stance on visual representation: their enthusiasm is strictly limited to the seen and observable and so precluded any role for a designer. So I became intrigued by how I related to them. How could they espouse the visual as so rich a source of research data and capable of providing such unique insight, yet disqualify exploiting the visual in research analysis and synthesis? I simply felt that this was illogical. Put even more bluntly, as a designer, I wondered how a book espousing the use of the

visual in research could be so dull and full of words, and not sensitive, persuasive and engaging, which were the priorities for any designer working with visuals. In fact as my research progressed I found Emmison & Smith's outright rejection of visual representation so provocative, that it inspired my reconnection with Visual Communication Design.

My reservations about social research saw me turn back to and aim to more carefully understand where I came from – Visual Communication Design. This time I connected with the principled, considered and practical voice of Jorge Frascara, who emphasised the important work that Visual Communication Design could do – for public health, driver safety, ecology, et cetera. Nevertheless, Frascara also represented a return to client-driven, service-providing design – away from the (Poynor's) conception of a designer with agency, as an investigative, communicative journalist. While Poynor seemed to offer independence, Frascara to some extent restores the image of a designer waiting for a client's call.

Meanwhile, my mission to uncover social investigations that harnessed visual representation was finally answered by Chaplin. Ironically I first encountered Chaplin in Emmison & Smith's *Researching the Visual* (which rejects the use of visual representation in visual research) Chaplin stood out to me as a *social scientist* thinking about *word image* relationships: although a sociologist (just like Emmison & Smith) Chaplin recommends and herself embraces using visual representation in visual research. As I familiarised myself with her work, it was the reports of her own projects that were of particular interest (and where I found unexpected solidarity). As we shall see, in her projects *Visual Diary (1988-1992)* (Chaplin 1994:224-232) and *London St (2006[2002]:87-132)* Chaplin experiments with the effect word and images have on each other, and uses iterative, heuristic, creative, reflective processes: epitomising how designers work.

In summary I selected these sources because of their distinctiveness and partiality. When brought together these perspectives give rise to an acute sense of the ways that the puzzling, 'pointless', 'sticky' projects resist explanation. In this chapter, to encapsulate the insights that distinguish each 'thinker' and to trace our gradually deepening appreciation of the projects in view of the various verdicts, I have included a checklist of sorts (complete with ticks for fulfilled requirements, crosses for contradictions and question marks for uncertainties) typeset in grey. This simple graphic device summarises the key points and introduces each section as well as features at punctuation points throughout the discussion in this chapter. The ticks, crosses and question marks condense the key agreements and disagreements that occur within each discipline, and interestingly also indicate the viewpoints that are shared by the two disciplines.

Section 1. Could these projects be Visual Communication Design according to Jorge Frascara? Design is about actions and people: not graphic forms.

'The visual communication designer works on the interpretation, organization and visual presentation of messages. Sensitivity toward form should go hand in hand with sensitivity toward content....Their work concentrates on the effectiveness, appropriateness, beauty and economy of the messages' (Frascara 2004:3).

☒ Visual invention and dexterity, originality and beauty, visual sophistication.

☒ Process, organize, and present information in verbal and non-verbal forms.

☒ Deployment of graphic forms and objects.

☒ A view toward having an impact on the public / effect / actions / people.

?? The effectiveness of these projects is difficult to evaluate. (There is no clear purpose [not to 'educate, inform, or persuade', but to explore? notice?], nor commissioning client seeking a defined outcome in a particular audience.)

?? Self-initiated yet outward looking?

Frascara's work is a useful place to start. After years working as a professional designer committed to producing design that was truly effective, he has arrived at some pithy ideas about what Visual Communication is really all about. His writing is some of the most rational, succinct and categorical that I have encountered in my reading on the topic. Consider the last sentence in the quote above – here he has deftly evoked the profoundly simple yet demanding balance of qualities, each remarkable on their own, required in visual communication design. Elsewhere, he superbly summed up the supreme aspiration for the information designer for 'solutions that are visually simple, but rich with information and eminently comprehensible' (2004:138).

He is probably most well known for *User Centred Design* (1997) which is the key text in the area: Frascara stands out for discussing at length how to produce design that actually addresses social change, and while dense it is straightforward and pragmatic. More recent is his lesser-known *Communication Design* (2004). What this lacks in new ideas, it makes

up for as a comprehensive introduction to Visual Communication Design, encyclopaedic in its scope.

So what does Frascara have to say about design? In addition to providing some helpfully fundamental definitions which introduce us to the scope of Visual Communication Design, Frascara's most distinctive discussions emphasise the affect-iveness of design and that a visually refined language is only ever meant to be at the service of this. As he insists on numerous occasions, Visual Communication Design is 'done with a view toward having an impact on the public's knowledge, attitudes, or behaviour in an intended direction' (2004:2). and so for Frascara design is about *people* and bringing about *change*.

'Every piece of [visual] communication design arises from the need to communicate a specific message, and to obtain a desired response; in other words, it comes to exist because someone wants to say something to someone else, so that this someone else does something in particular' [Frascara 2004:12].

This may seem to an obvious and uncontroversial point, but as Frascara notes:

'Sometimes, the concern for originality and beauty has contributed to the development of visual sophistication and cultural value, but it has not promoted the communicational function of design, and has often distracted designers from the fundamental purpose of their work' (Frascara 2004:12).

With these thoughtful, critical recommendations now in mind, let's turn to Frascara's more basic and fundamental definitions. Beginning with the most rudimentary, Frascara explains that the term 'visual communication designer' captures the 'three essential elements of the profession: a method (design); an objective (communication); and a medium (vision)' (2004:4) but that the 'three words put together ... overflow the sum of their individual meanings' (2004:2).²⁰ Nevertheless, a more or less unambiguous but perhaps crude way

²⁰ Visual Communication Design, like the design discipline as a whole, eludes easy reduction. However, defining visual communication entails particular complexity, since it is difficult to delineate visual communication design mastery over *form* (style and presentation of visual messages) from *content* (the internal meaning of the visual message, which is conventionally provided by a client). In a way, all discussions about visual communication are underpinned by an assumption about design's role as more or less concerned by content as well as form.

Visual Communication Design can be the least ambiguously defined *formally*. Ellen Lupton has provided an account of visual communication design as expertise in 'visual language' characterised by 'a "vocabulary" of design elements (dots, lines, shapes, textures, colors)...organized by a "grammar" of contrasts (instability/balance, asymmetry/symmetry, soft/hard, heavy/light)' (Lupton 1996:64). To create visual communication design 'type, photographs, and simplified object drawings are cropped, angled, colored, and textured into pleasing arrangements' (1996:63).

Even more elementally design has been exquisitely reduced down to the principles of 'type, space, colour and imagery' (Fletcher 2001:inside front cover), and elsewhere summarised as the synthesis of words and images (Buchanan 1995:7). The simplicity of such definitions encompass the huge range of possibilities.

often used to delineate design, is *formally*. Frascara is no exception, providing a roll call of the various forms design outcomes can take. His list includes: advertising, alphabets, banknotes, book covers, charts, diagrams, flyers, forms, graphic symbols, logotypes, maps, posters, signs, timetables, visual identities; as well as layouts such as for brochures, manuals, and magazines; digital media such as CD-ROMS, websites, TV: and finally exhibitions, signage and packaging (2004:167-8).

But of course not everyone who produces a flyer or logo would then be esteemed as a visual communication designer. This is when definitions invariably move from a roll call of the practical manifestations of Visual Communication, and tackle the more difficult task of defining what expertise in Visual Communication is about. Instead Frascara asserts that 'visual sensitivity, dexterity and sophistication, developed well beyond the ordinary person, are indispensable components in the formation of the graphic designer' (1997:4).

So at the most elemental level, Frascara's Visual Communication Design draws our attention to the refined visual language employed by *Lipstick*, *Periodic Breakfast Table* and *Newsmap*. Across the three projects, we can begin to observe the kind of sensitive, dexterous and sophisticated graphic language and presentation that he stipulates. Considering the three as a group, we can observe: restrained organised compositions; the use of a structural grid; confidence with white space; thoughtful, meaningful word image relationships (including photographs, captions, typographic elements and graphic elements); the controlled use of colour and scale. Referring again to the opening citation, we can also appreciate beauty and economy. And thinking about their media forms, each either fits directly or can easily be imagined in Frascara's list: *Newsmap* already is an interactive website, while the others lend themselves to the cover of a magazine, as posters, illustrations, or in exhibitions, and so on.

So at first, in this regard, Frascara accords a certain level of recognition to these projects as Visual Communication Design.

Visual sensitivity dexterity and sophistication 

But when we consider Frascara's central, pertinent condition, the status of *Lipstick*, *Periodic Breakfast Table* and *Newsmap* becomes uncertain. Frascara insists that 'visual communication does not end in its deployment, but in its *effect*' and so visual

Accordingly, another strategy frequently used to define Visual Communication Design is to 'roll-call' the variety of practical manifestations, as Buchanan enumerates: 'the traditional work of graphic design, such as typography and advertising, book and magazine production, but has expanded into communication through photography, film, television and computer display' (Buchanan 1995:7).

communication ‘has to do with *people* and not graphic forms’ (1997:3). Therefore to ‘understand visual communication design properly, we have to think more about *actions* than about objects’ (2004:13).

This emphasis on ‘people’, ‘effect’ and ‘action’ is consistent with how Frascara categorises professional practice: according to the various *functions* of visual communication design. His four areas (which blur and overlap) are: design for *information* (which includes publishing, teaching aids, and manuals); design for *persuasion* (including not-for-profit advertising and ‘social interest communications’ such as for health and safety, as well as commercial advertising and marketing); design for *education* (including teaching aids and public health and safety campaigns); and design for *administration* (including forms and bills) (2004:129-168). (Notably, according to Frascara there is no design for *entertainment*.)

Frascara’s central contention is that it is only sensible to judge ‘excellence in the *form* of a message [when it] confers power to the *communication*’ (1997:4) of the message. In other words, if excellence in visual form is achieved in isolation from some communicative intent, then it is of little interest. While Frascara grants that there ‘is no doubt that visual invention and dexterity are important dimensions in the creation of effective communications’ he maintains that:

‘excessive attention paid to aesthetics in design, defined by the designer’s values, leaves aside many genuine concerns that should be addressed in the production and evaluation of visual communications’ [1997:4].

Instead he insists, and not without derision, that visual communicators ‘need to study the interaction *between messages and people*, not only the interaction of visual elements with one another, which has absorbed the attention of designers so much in the past’ (2004:13, my emphasis). It is on these grounds that the status of *Lipstick* et al. seems rather more uncertain: do these display the ‘excessive attention paid to aesthetics in design, defined by the designer’s values’ with which Frascara is so impatient with and dismissive of?

Frascara expresses sustained disapproval of the tendency toward a ‘style conscious practice’, where design is misconceived as ‘a field for self-expression and aesthetic enjoyment’ and designers concentrate on ‘developing a recognisable personal style’. In fact, Frascara evokes *the* most orthodox conception of design practice, when he characterises it as a ‘service’ (1997:4).²¹ Although he does not explicitly refer to designers being at the

²¹ A usefully ‘crude’ account of this conventional role for the visual communication designer is provided by Noble and Bestley:

'service' of a *client*, it seems to be implied: – previously we saw how he characterised the *raison d'être* of design as 'because *someone* wants to say something to someone else' (2004:12, my emphasis). Thinking about this from a different angle, if not at the service of the client, Frascara has effectively mounted a case for design at the service of *the audience*, or rather, at the service of *the effect of the message* (on the audience):

'political propaganda communications are expected to *affect opinions and actions*; traffic signs are intended to *organize traffic flow*; teaching aids are supposed to *improve learning performance*, and occupational safety signs are supposed to *reduce injuries*' (Frascara 1997:3, my emphases).

Either way we can summarise Frascara's position as: he espouses the importance of the visual form on the proviso that it is at the service of an affective message. Therefore at this point, we can turn back to the projects and consider them in light of Frascara's final estimation of Visual Communication Design: what communicative intention can we understand in them? What action or change do they engender? Or are these the suspicious matters of formal style? Have these descended into self-expression?

Discerning the communicative agency of these projects is a lot more involved than finding evidence of visual dexterity or not. For absolutely, these are not uninformative and not uncommunicative: we come to know something more based on viewing these projects: but it seems that it is not *much* more, and certainly I am not directed to any kind of action, or persuaded to adopt a new attitude, in the kinds of ways that Frascara stipulates. We will consider more about this in a moment. For now, I want to speculate on what I know based on viewing these projects?

Lipstick tells me about the differing shapes in the used lipstick of several women. *Periodic Breakfast Table* tells me something about the variety of brands of cereal and their differing nutritional content. *Newsmap* provides me with news headlines and conveys trends in different genres of online news stories in different countries. Reviewing these interpretations, we can observe that the comprehensiveness and gravity of the messages

'Traditionally, graphic designers are involved in a process of facilitation: put concisely, the business of design is to communicate other people's messages to specific audiences.... While this may be a crude definition, it is clearly applicable to the broad majority of design practices in the commercial arena: graphic designers are commissioned to employ their skills as communicators in the service of a client' (Noble & Bestley 2005:42).

Although, solely attributing this service-provider conception of a design to Frascara is to misjudge him, for ultimately he is aware of the limitations of such a passive role, and identifies the same issues that (we shall see) trouble Poynor: Frascara recognises that '[it] would be unrealistic to keep on exclusively responding to market needs, reactively allowing the market to define the designer's role. This would keep graphic design exclusively at the service of short-term commercial interests' (Frascara 1997:32).

tends to *increase* for each subsequent project: first, in *Lipstick* there are *several* instances, about *cosmetics*; next, there are *numerous* cases, about *nutrition*; and finally in *Newsmap*, *vast* sources, about *news*. Nevertheless, it would be difficult to sustain the claim that comprehensive and significant understanding is actually imparted, and instead I feel like I have a sense of these phenomena: to paraphrase one observer ‘they *hint*, but just hint’ (Levin 2006:unpaged).²² But is it the lack of comprehensiveness and significance that makes the assessment of the communication in these projects difficult? When we think more carefully about what Frascara is saying that distinguishes Visual Communication, it is that visual communication messages have *utility*. It seems to me that in all three projects there is still a question of *agency*: these projects impart insights but they do not direct me as to the relevance of these insights: what do I do now that I have received these messages?

For sure, I don’t buy this lipstick over another, but having viewed *Lipstick* I don’t even feel inclined to now more closely observe the colour of women’s lipsticks and connect this colour to the women’s names. But the verdict that this message directs me to no action, does not disqualify or lessen its appeal: it’s still striking, provocative and perverse. The same for *Periodic Breakfast Table*: using this to make sensible dietary decisions is inefficient: I would be far better off with a table of figures and percentages and the Recommended Daily Intakes for fat and sugar. But realising this lack of efficiency does not discount the pleasing orderliness and amusing analogy. Obviously *Newsmap* is not intended as a tool for gaining daily news (it would be fair to say that, for news, most web users go straight to familiar, reputable sources, such as bbc.co.uk). But even if I take *Newsmap* as communicative of trends in online news, this is not presented in a way where I can make accurate statistical comparisons. Yet again notwithstanding this lack of accuracy, *Newsmap* provides a clear engaging intelligible expression of the world of online news.

Despite these insights, as standalone communications, it is clear that these do not serve the communicative purposes for which Frascara espouses Visual Communication.

An outcome driven message 



²² Commenting on the photographic series of *Lipstick*, the prolific digital visual and sonic artist Levin observes

‘Each unit hints, but just hints, at a highly multi-dimensional redaction of many personal features, encoding such factors as personal style, complexion, tidiness, a specific gestural motion.... We observe each lipstick and suspect we know something vague about its owner—or perhaps we know something quite specific about who they are *not*’ (Levin 2006).

Leaving interpretation of the projects and speculation aside, can we refer to the creators themselves to find out what they were intending when they produced these projects? Did they have an affective message in mind? Did they indeed have a client or target market in mind? Or do they concentrate on form construction, revealing a style-conscious practice?

As published in their respective anthologies, each work was accompanied by a brief written explanation provided by the designer. These comments reveal that each *Lipstick*, *Periodic Breakfast Table* and *Newsmap* were projects initiated by the creator, and not developed in response to a client brief. In spite of this, as we review these explanations, we learn that the intention is not to express a personal formal style. Although each project is not 'un-authored'²³ (i.e. each is not without some idiosyncratic input on behalf of the creator), a faithfulness and concern for the *content* of the communication seems to be the top priority. Indeed, the projects begin to remind us more of how Frascara characterises information design, rather than what he says about self-expression. Above all, curiously, we learn that these projects are outward looking and investigative of some phenomena in the world.

Consider *Lipstick*. Greene recounts how it all began:

'I was walking out of the 1991 Whitney Biennial [prestigious art show] opening, when my friend Rosie dropped her lipstick. I picked it up and unscrewed it for her. Rosie's lipstick excited me more than anything I had seen at the Whitney' (Greene; statement in Buchanan-Smith 2001:165).

Elsewhere she has explained more specifically what it is about used lipstick that particularly excites her:

'Though completely unintended, the daily private ritual of applying lipstick had turned these utilitarian...objects into sensual mini-sculptures of bold colors and shapes impossible to duplicate or imagine' (Greene, 2005[1992-1993]:unpaged).

But what is particularly unexpected and interesting is how her supporting written material conveys her experience in the field, calling to mind an empirical field study report. Greene explains,

'Most women ... readily [handed] over their lipsticks; others could not part with them; others would unscrew their sticks, knowing they had incredible shapes and tease me by not giving them up....It was also a curious thing when women were too embarrassed and apologetic

²³ Kate Sweetapple (2003) has created an excellent model which characterises the authorial distance of such ambiguous work as 'implicit'.

because they thought their lipsticks too simple and boring' [Greene; statement in Buchanan-Smith 2001:165].

Turning to the *Periodic Breakfast Table*, having recognized that the shape of breakfast cereal is 'one of the few distinguishing factors in a market flooded with products', Weese explains:

'The Periodic Breakfast Table displays these typologies of shape, allowing readers to note certain patterns: [for example] intensity of color is usually accompanied by intensity of sugar content, and protein value generally decreases in proportion to the "realism" of visual references' (Weese 2001:unpaged).

So French Toast Crunch, which 'really' looks like pieces of Toast, is low in protein. By contrast,

'Aesthetic and culinary purists will note with pleasure the presence of Puffed Rice and Puffed Wheat: their shape is wholly determined by mode of manufacture [puffing] and their sugar...and sodium content is non-existent' (Weese 2001:unpaged).

It is interesting to note that despite not appearing to be 'done with a view toward having an impact on the public's knowledge, attitudes, or behaviour in an intended direction' Weese does bear various 'readers' in mind.

In a similar vein as *Periodic Breakfast Table*, *Newsmap* aims to provide access to otherwise 'unseen patterns', although as a live and interactive website it 'visually reflects the constantly changing landscape' of online news. It is useful to think about *Newsmap* as a kind of portal, since it pulls its content from the Google News aggregator. A news aggregator is a convenient way to (thinly) grasp simultaneously on one webpage the latest headlines appearing on the home pages of various online news sources around the world. Weskamp stresses that he does not intend to replace Google News, but to *visually demonstrate* the relationships that it generates. He explains that *Newsmap* is

'a tool to divide information into quickly recognizable bands which, when presented together, reveal underlying patterns in news reporting across cultures and within news segments in constant change around the globe' (Weskamp 2004:unpaged).

After reviewing these stated motivations, a few curious features of these projects begin to really stand out, which were not drawn to our attention when reviewing Frascara's criteria. Firstly, these seem to be self-directed, and secondly, they are outward-looking. In fact it is Poyner who can help us to understand work that is self-initiated, yet not 'invented' from

inside the makers imagination, but rather based on observations and their curiosity about something out there in the world.

Self-directed

Outward looking

??

Section 2. Could these be Visual Communication Design according to Rick Poynor? A counterpoint: the designer as journalist.

'What if the designer were to function more like a journalist? In other words, develop a sphere of knowledge and expertise, select a subject, conduct research, gather material, then create an appropriate final form, using all the resources of design, both words and images, to communicate the story or argument' (Poynor 2001:187).

- ☒ Design thinking and dexterous visual language (concurs with Frascara).
- ☒ 'Self-willed' and 'inner-directed' investigation (rather than outcome focused affective message).
- ☒ Brings greater clarity to a small corner of the world, (notably a commitment to a matter outside of design).
- ☒ Says something definite to someone definite for some definite reason. (Seem to be more the 'oblique gesture', rather than 'coherent' subject matter.)
- ?? Everyday even banal subject matter.

Poynor, as I have mentioned, is widely published and has all sorts of interesting ideas about design. However, it is his exploration of the 'designer as journalist' that provides a useful counterpoint to the more conventional expectations for Visual Communication expressed by Frascara. Accordingly, in this (briefer counterpoint) discussion, we will specifically draw on the two most salient essays from *Obey the Giant* (Poynor 2001): 'The Designer as Reporter' (2001:185-188)²⁴ and 'Here is Me!' (2001:64-67) which shed light on the aspects of our three projects which seemed to exceed Frascara's conception.

²⁴ Republished as 'The Designer as Reporter' in *Obey the Giant*, this was originally published as 'The new visual journalism' in *Graphis* (Jan/Feb 2000 vol 56, issue 325, p 12)

But in the first place, we can note that Poynor absolutely concurs with Frascara's account of and regard for the designer's essential and distinctive dexterity with visual language. In the quote used to open this discussion, Poynor refers to 'the resources of design' which involve the communicative composition of words and images (2001:187). Similarly he attributes the 'deeper, less obvious, level of organisation and structure' to 'design thinking', and Poynor asserts that such visual presentation can achieve 'a pungent, enlightening and accessible commentary' (2001:188). In this regard – visual dexterity and sensitivity – Poynor reinforces Frascara's sentiments.

'[All] the resources of design'



But what Poynor distinctively brings to the discussion is the possibility that designers could be investigators, as well as communicators. Poynor explains that visual communication design journalism would be a 'self-willed' and 'inner-directed' activity:

'A fully engaged visual journalism....would proceed from the designer's commitment to, and knowledge of, subject matters, themes, ideas and causes outside design. Design would be an essential part of the story-telling process... but it would not be the point of the exercise anymore than a [regular text-based] journalist would undertake a story ...solely for the satisfaction of stringing words together on paper' (Poynor 2001:187).

The designer-as-journalist concept on first pass looks promising for *Lipstick*, et al. All three creators seem to have instigated the projects themselves, apparently motivated by their own interest in a subject matter. And in all three the subject is 'outside of design' – not self-consciously about a style or technique, where the form *is* the content, so to speak, (more on this later). All three have used *design* strategies to convey their investigation. All three have used these design strategies in a way that maintains focus on the *subject* of their investigations. The primary purpose of the work is *not* to demonstrate design strategies or techniques in photography, diagramming and interactivity. (In which case the subject matter is incidental and could have been anything so long as it can be photographed, tabulated or amenable to treemap visualization algorithms).

But do these actually convey a *story* or *argument*?

The concept of the designer-as-journalist is in fact a *critique* of the concept of the 'designer as author',²⁵ which had been previously established in design discourse, as Poynor explains:

25 For more consideration of the 'designer as author' concept see Michael Rock (1996) and Ellen Lupton (1998).

'In the 1990s, progressive members of the profession made an articulate case for the development of graphic design as a form of authorship. Their demands implied that design could be more than fancy window dressing' (2001:65-6).

Notwithstanding their professional expertise as communicators, it seemed that designers had become tired of just conveying the client's or copy writer's message. What about the *designer's* message? Could 'designers too...have something to "say", some point of view to express' (2001:66)? The 'designer as author' argument is about the ambition of some designers to be recognised as experts in *content* and not just *form*. Subsequently, as Poynor observes,

'A parade of fiercely articulate theorists has proposed one new model of design practice after another. We've heard about the designer as author, as editor, as producer, translator, performer, director and information architect' (2001:185).

However, despite this authorial ambition, and despite the potential for sophisticated, complex content creation, Poynor explains that most designers have (mis)construed the possibility of the 'designer as author' as suggesting an 'automatic right to self-expression through the process of design' (2001:66). Furthermore, as Poynor claims with some dismay, a 'desire for "self-expression" goes hand in hand with a deep reluctance to take up a position, *to say anything definite about anything*' (2001:66, my emphasis).

'So much graphic design...seems to jettison coherent subject matter at the first opportunity, favouring instead the oblique gesture, the disconnected fragment, the abstract sensation and the studied *non sequitur*, and deluding itself that this navel gazing "graphic language" is communication enough for the viewer' (2001:187).

In proposing the designer-as-*journalist*, it strikes me that Poynor is borrowing from the 'designer as author' concept, but at the same time working hard to distance himself from the sort of work that is 'passed off' under its guise. 'Journalist' shifts 'author' away from the tendency to 'self-expression' towards reporting with rigour and vigour:

Lupton summarises that '[behind] this phrase is the will to help designers to initiate content, to work in an entrepreneurial way rather than simply reacting to problems and tasks placed before them by clients. The word *author* suggests agency, intention and creation, as opposed to the more passive functions of consulting, styling, and formatting' (Lupton 1998:159).

Rock explains that although design authorship was a rather well-intended honourable attempt to renew a sense of responsibility and legitimacy for design and reject design's confinement to service provision, instead of engendering work that was social and investigative, the designer as author ultimately promoted the cult of the 'hero' celebrity designer. Design increasingly became about *who made it* and not what for. As Rock observes, ironically the 'author' metaphor inadvertently de-emphasised the viewer and audience, and advanced the concept of design based on individual brilliance celebrating above all else their distinctive personal style (Rock 1996).

'Responsible journalism questions and investigates. It pieces together a story and by doing so endeavours to bring greater clarity to a small corner of the world....one thing effective journalists never lose sight of is "point of view". Why are they researching, writing and running a story? What are they trying to say to whom? What do they hope to change?' (Poynor 2001:187)

Thus, interestingly enough, ultimately Poynor's unconventional concept of designer-as-journalist echoes Frascara's expectations for graphic design in a conventional role: for even the designer-as-journalist is required to maintain a robust, communicative intention, with an audience in mind, and to engender change. Although Poynor's point of view helps us understand the three projects as self-directed and investigative, ultimately Poynor upholds the condition that to qualify as Visual Communication Design, the projects are expected to convey an intentional message. And as we considered in our discussion of Frascara, while these do not say *nothing* – and they *do* each bring some light to some small corner of the world – it is difficult to discern a 'story' or 'argument' in the journalistic sense to which Poynor aspires.

Of course, these could be *developed* into the sustained, directed, visual stories that Poynor describes – which mount a clear argument and reached a definite conclusion. But taking them as stand-alone projects as they are, they seem more reminiscent of the 'oblique gesture, the disconnected fragment, the abstract sensation and the studied *non sequitur*', rather than demonstrating a commitment to coherent, questioning, researched and responsible journalism.

'[Saying] something definite'



Frascara and Poynor unanimously stress that visual communication design is done *for whom*. In view of this, we might try to *imagine* the particular (target) audiences for which these projects could be relevant and affective. Perhaps a materials scientist or a product developer might require a vivid understanding of the variations in shape and texture of in-use lipstick. Perhaps a paediatric dietitian could benefit from a vivid understanding of the relationship of appearance (colour, shape) and nutrition in cereal. Perhaps a media analyst at a rival news service could benefit from a vivid sense of patterns of bias in different cultures for different genres in online news coverage.

Thinking about all this starts to highlight something else about these projects – their unremarkable, even banal, subject matter. A specific audience *could* have explained a

close, sensitive consideration of, when all is said and done, a banal topic. But if *Lipstick* is not directed to a materials scientist, why investigate lipstick? Similarly with no paediatric dietitian nor media analyst, why look at, why select, gather information, detect patterns and present cereal or online news headlines? What kind of undertaking is this?

Furthermore, since they do not definitely direct me to do or think something differently (even though I have gained a vivid sense about these matters) they remain undirected, indefinite and open-ended. Rather than instrumental and affective, they seem, *existential*, or substantiative: to be offering some kind of evidence of matters. And if they are indefinite and undirected, how will they ever actually be *effective* messages, as is necessary to qualify as design. That is, how can you judge how good (effective) a message is if the message is without an audience and without an intended outcome?

In summary, it is understandable why we might initially categorise this work as Visual Communication Design, since they use 'all the resources of design': a 'dexterous, sensitive' visual language of word and image. However, in consideration of the full definition and expectations of Visual Communication, according to both Frascara and Poynor, without a target audience and outcome / change in mind, questions about the projects persist. In particular, that the messages are undirected and open-ended, and that the subject matter dealt with is so everyday and perhaps trivial and banal.

Everydayness
Open-endedness

??

In the next section we will turn to Visual Research to address some of these unresolved issues, since – according to both Chaplin and Emmison & Smith – sociology is actually a visually oriented discipline. Emmison & Smith explain that 'our social world confronts us above all as a visual experience' (2000:2), while Chaplin notes that 'most sociological research involves the visual domain...in large part we theorise what we see: social contexts, spatial arrangements, people's appearances and their actions' (2000:1-2). The study of observable everyday phenomena such as lipstick, cereal and news headlines would seem appropriate as a matter for social research investigation from the perspective of both Emmison & Smith, and Chaplin.

However, this is the extent of their agreement and from here their views diverge significantly. Emmison & Smith would condemn these projects for the very same reason Chaplin would be excited about them: their image-based quality. Chaplin proposes that social analysis *should* make more use of visual representation, including visual depiction,

unconventional typography and page layout. In complete contrast, Emmison & Smith argue strongly against an image-based visual social science. We will come to understand that these views correspond with their differing understanding of 'visual': Chaplin implies a conflation of the visual as seen (the observable social world) with the visual as image (representation), while Emmison & Smith explicitly maintain the distinction between the two.

Section 3. Could these be Visual Research according to Michael Emmison & Philip Smith? The observable features of a phenomenon can tell us something else about the phenomenon.

'Visual research is not just about the photograph or conducted through the photograph. It is the study of the visible domains of social life and the visual languages and sign systems through which we communicate with each other. It includes objects, buildings and people as well as images. We [argue] that direct observation, interpretative skills and a powerful theoretical imagination [are] the core resources for doing good visual research, not the camera nor the photograph' (Emmison & Smith 2000:229-230).

- ☒ Investigation into banal matters.
(No expectation for a communicative intention or affective, impactful message.)
- ☒ Theoretical framework required.
(Instead remains hermetically about banal things.)
- ☒ Image-based visual research,
(deemed as cosmetic illustrations).
- ?? But is seeing so straightforward?

Michael Emmison and Philip Smith are enthusiastic proponents of Visual Research and can explain some of the features that confounded Frascara and Poynor. The above quote is an excellent summary of their text *Researching the Visual: Images, Objects, Contexts and Interactions in Social and Cultural Inquiry* (2000) referring to the three inter-related propositions that underpin and distinguish their thinking. According to Emmison & Smith Visual Research is about observation; is not about images; and requires theoretical framing. Having failed as intentional, affective, communicative messages required by Visual Communication, we come to recognise alternative merit in *Lipstick* and others – in the spirit of social inquiry. However despite the possibility of admission as Visual Research in this regard, according to Emmison & Smith, ultimately this work does not qualify as visual research, not only because it is untheorised but also, principally, because it is image-based.

As a speciality within sociology, which itself is a sub-discipline of the social sciences, Visual Research is centrally concerned with making make sense of the social world through systematic study.²⁶ What distinguishes Visual Research, according to Emmison & Smith, is that it is the study of the 'seen and observable' 'visible domains of social life' (2000:ix), and as such, there is a *huge* array of visual data available for investigation. In this arena, anything observable is acceptable as the data for social investigation, the most everyday things can be adopted as objects of social analysis. Phenomena in the everyday social world 'as diverse as wedding albums and pornography, living rooms and waiting rooms, living bodies and stony statues...museums and ... shopping malls' (2000:xi), can be studied as 'indicators of wider socio-cultural processes' (2000:xii). As they explain, Emmison & Smith

'understand visual data to encompass any object, person, place, event and happening which is observable to the human eye....the list of possibilities is enormous, perhaps endless. Newspaper headlines, cartoons, magazine advertisements, billboards, traffic signs...gardens, parks, shopping malls, parades, fast food outlets...seating arrangements, glances, hair styles, clothing accessories, body decorations' [Emmison & Smith 2000:4].

And so we gain a new appreciation of the projects. Lipstick and cereal and online news seem fitting in this roll call of diverse data. In fact the ubiquity of the phenomena investigated in the projects – cosmetics, food, media – seems to make them only more apt in social inquiry.

A focus on unspectacular, everyday subject matter.



However, despite fulfilling the expectation to focus on some taken-for-granted aspect of the everyday, these projects do not address other crucial requirements of Visual Research, which are particularly stressed by Emmison & Smith. Having asserted that potentially any visible feature of the social world 'readily available to the naked eye' (2000:4)²⁷ can qualify

²⁶ For an excellent summary of the history of visually oriented social research, see Peter Hamilton's 'Editor's introduction', the prefatory essay to a four volume series he has edited, *Visual Research Methods* (2006). The series includes essays by Chaplin, Emmison & Smith, as well as H. S. Becker, who is frequently cited by both, and is probably *the* original and enduring authority in visual social research (Hamilton 2006:xxi-xi).

²⁷ Whether seeing is so straightforward is a question for another thesis. For now it might be useful to keep James Elkin's doubts in mind:

'At first, it appears that nothing could be easier than seeing. We just point our eyes where we want them to go, and gather in whatever there is to see. Nothing could be less in need of explanation. The world is flooded with light, and everything is available to be seen. We can see people, pictures, landscapes and whatever else we need to see, and with the help of science we can see galaxies, and viruses and the insides of our own bodies. Seeing does not interfere with the world or take anything from it, and it does not hurt or damage anything. Seeing is detached and efficient and rational. Unlike the stomach or the heart, eyes are our own to command: they obey every desire and thought. Each of those ideas is completely wrong...' (Elkins 1996:11).

for inclusion as the raw data of visual research Emmison & Smith temper this, stressing 'it is only through a conceptual framework that a given "object" can become "data" for investigation' (2000:4).

'The objects, persons, events or happenings which provide the raw materials for visual investigation must be also viewed, understood, or placed in some analytical framework before they can be regarded as data' [Emmison & Smith, 2000:4].

In order to conduct a 'theoretically informed exploration of social life' (2000:109) Emmison & Smith recommend that such phenomena be investigated in 'theoretically and methodologically disciplined ways' (2000:190). Scholarly visual research gains social scientific understanding when researchers connect theory to observation: visual inquiry must have a strong analytic purpose, must be grounded in and driven by social and cultural theory (2000:4). Without a framework the observable everyday is only the 'raw materials' and not data that lead to any significant social science understanding.

Indeed theory is central to sociology. The intention of sociologists is not to simply draw attention to everyday phenomena hermetically in order to prevent it from being overlooked, but to understand its greater significance. Sociologists use what's known as the 'sociological imagination' to question what 'seems natural and obvious', the ordinary and the everyday, in order to reveal the 'many social connections, the histories that shape our world and the ways we live in and understand it' (Bessant & Watts 2002:29). As Bessant & Watts explain, while sociologists agree that 'sociological imagination' is how the greater significance of otherwise overlooked everyday phenomena is unpacked, sociologists can produce vastly different interpretations and ideas, because they can connect to such a variety of theories.

This has been superbly evoked in Giddens' introductory sociology text which imagines a conference that focuses on the question: 'what is the social significance of a cup of coffee?' Here we could hear 'Marxists tell feminists that the morning cup of coffee is not a symptom of patriarchal oppression but a commodity reflecting changing global class relations' and 'postmodernists tell functionalists that there is no such thing as a 'social fact' like the 'average rate of coffee consumption'. When theory is brought to bear, a cup of coffee, (or indeed lipstick or cereal or a news headline) takes on complexity and seems to be indicative of 'larger patterns of history and social processes' (Giddens 1997;cited in Bessant & Watts 2002:28-29).

And so, in another way, theory resolves the other question mark that persists over these projects, for it seems that multiple interpretations (rather than arriving at something definite)

are tolerated and expected in social inquiry. That is to say, the functional requirements of Visual Communication – to produce effective messages, to engender change in their audience – are beside the point in the context of Visual Research, since it is an intellectual pursuit where the priority is to investigate and illuminate some phenomenon. (Obviously sociology is not without its intentional messages and social researchers would be resentful if they were characterised as uncommunicative. Nevertheless, the distinction is made here based on the compromised reasoning that visual communication messages are centrally concerned to communicate, while social research is centrally concerned to gain understanding.)

Open-ended inquiry rather than outcome driven messages. 

For sociology it seems that the analytical, predictive framework provided by social theory *is what makes the careful observation of everyday phenomena worth doing*. The cup of coffee is no longer a cup of coffee, and instead provides access to deeper insights about wider social issues. The cup of coffee does not provide deeper insights in itself, but only in the context of the wider theoretical framework. Similarly if you were to study used lipstick you are not really interested in used lipstick per se but it as an indicator of larger, social processes. And it is only by using a theoretically informed social imagination that these meanings can be extrapolated out from the everyday.

Researching the Visual includes several such studies. For example, going to a park and observing people walking dogs, is not a study about people walking dogs in a park *per se*, but about observing indicators of ‘civil inattention’ and ‘facilitated’ public interaction described by Erving Goffman (1963, 1971; cited in Emmison & Smith 2000:194-199). Interaction is ‘permissible’ only between dog walkers in the park - and frequently it is the *dog* that is addressed, therefore non-owners are excluded from the possibility of interaction with strangers, but would be accorded with the courtesy of being studiously ignored (Robins, Sanders & Cahill 1991; discussed Emmison & Smith 2000:197-199). Similarly observing a man standing reading the timetable and a seated woman searching her hand bag at a bus stop, is not just a study about people at a bus stop, but rich for exploring Simmel’s (1921 [1908]; cited in Emmison & Smith 2000:192) ideas about the complex public behaviour necessary in the modern world of strangers. When forced together with nothing specific to do as they are in waiting rooms and bus stops, strangers cope with different waiting ‘styles’. Young women (‘sweet young things’) pretend to be absorbed in reading but are in fact intensely alert; older women (‘nesters’) constantly rearrange their belongings; men

(‘investigators’) explore in minute detail inanimate objects at the setting (Lofland 1973; cited in Emmison & Smith 2000:201-202).

So now we might turn back to our creators, to examine if indeed they have ‘theorised’ their projects, and gained social scientific understanding of ‘larger patterns of history and social processes’, thereby satisfying this requirement of Visual Research according to Emmison & Smith.

Greene recognises that lipstick has ‘multiple, even contradictory connotations’, and indeed refers to lipsticks as ‘instruments of gender commercialism’ and ‘yet another tool for sexual manipulation’ (Greene 2005). But ultimately Greene only sketchily notes

‘To improve her appearance and sexual attractiveness, each woman molds her lipstick with her hopes and dreams and fears. Each shape simultaneously evokes and bears the imprint of a complex and secret emotional past’ (Greene 2005).

More substantially Weese observes that modern food is so ‘highly engineered’ that it now ‘constitutes its own mini-language’: ‘food — and its packaging — can now help you express your attitude toward the environment, your body, your family....Few products have such an accumulated wealth of meaning’. Breakfast cereal is a case in point: in fact Weese contends that it is ‘probably the most highly designed food on today’s grocery shelf’. Weese suggests that the *shape* of cereal can indicate the *kind* of consumer.

‘Besides being one of the few distinguishing factors in a market flooded with products, shape enables a cereal to belong to a certain category or consumer: the serious cereal, the frivolous cereal, the child-oriented cereal, and the classic (or purist)’ (Weese 2005).

Turning lastly again to Weskamp, we examine his notes for *Newsmap* looking for ‘theorising’:

‘[Newsmap] is not thought to display an unbiased view of the news, on the contrary it is thought to ironically accentuate the bias of it’ (Weskamp 2004).

In all three cases, while not uncomprehending of the greater social significance of their work, the creators have not applied the kind of theory that Emmison & Smith prescribe. Certainly we could imagine some ‘isms’... feminism could provide analytical purpose to lipstick revealing ideas about fashion and individuality, capitalism to cereal, and globalisation to online news. Social theory could explain that these projects are not about lipstick but about *use*, not cereal but *health*, not online news but *cultural differences*.

So while Visual Research is open to these projects because of their focus on 'obvious' matters, in another way Visual Research rejects these projects because of the uncertainty of the meaning of visuals for social scientists. The analysis of observable visual data *must* be connected with social and cultural theory, in order for taken-for-granted items to be revealed as indicators or manifestations of larger social movements or phenomena.²⁸ Failing this demand of sociology, *Lipstick*, *Periodic Breakfast Table* and *Newsmap*, are restrictively and hermetically concerned – albeit vividly – with lipstick, cereal and news, and speak no further.

Theoretical framework extrapolates greater social meaning. 



Above all, as I have previously indicated, the chief grievance that the projects would attract from Emmison & Smith concerns their *image*-based presentations.

In *Researching the Visual* Emmison & Smith go to considerable lengths to distinguish the *image* from the *seen*. This is not a solely semantic exercise, but instrumental in how they conceive of visual research, and argue for its true eminence in the ranks of social science. Emmison & Smith insist that visual research can be conducted without using images, because all significant sociological information is obtainable from the *seen*. This line of reasoning entails the pertinent and controversial claim that the *image* (i.e. visual depictions, which are predominantly photographic in social research) *makes no contribution to social science understanding*, and are rather only the means used for capturing information.

²⁸ Although I must also point out that sometimes I am uncertain of the value of some of the findings cited in Emmison & Smith, which allegedly demonstrate the 'illuminating' connection of social theory to everyday observation. As a designer – chiefly concerned by impact and engagement – the findings struck me at times as sometimes obvious, thin descriptions, and other times far-fetched and of no consequence.

Asserting that interactions with statues in public places can serve as indicators of the priorities of the general public, Emmison and Smith discover that the statue of a 'kangaroo family ... provides a popular photo-opportunity for locals and international visitors alike' whereas '[by] contrast, in the course of several visits to the city centre, we have yet to observe anyone being photographed with Emma Miller', a pioneer female trade unionist (Emmison & Smith 2000:125-6). Similarly they cite a study that found that in a city park, people sit facing the waterfall, 182 another study discovered that in a cemetery, Jews were in the Jewish section (Emmison & Smith 2000:129-130). Yet another established that farewells at an airport involved 'far more touching' than farewells at university (Emmison & Smith 2000:227). We might comment that these are somewhat self-evident conclusions.

With regard to the second problem, Emmison & Smith *themselves* acknowledge that sometimes interpretations are made that are almost certainly unregistered by ordinary viewers (2000:96). For example social researchers 'might interpret a particular brand of German motor car as a status symbol, or as a marker of a phallogocentric authoritarian personality, but its user might see it simply as efficient, comfortable transportation with a good resale value' (2000:150). But yet even aware of this, based on observations of public interactions with an evidently 'inviting' statue of Oscar Wilde in a reclining position near London's Trafalgar Square, Emmison and Smith allege that reasonable inferences could be made about 'the acceptability of gay-ness in contemporary London' (2000:127-8). Elsewhere, the appearance of the high heeled shoe in pornography magazines was interpreted as 'a kind of surrogate penis' (2000:215), while a 'womb like embrace of the visitor' was attributed to the Vietnam war memorial in Washington DC (2000:127).

Emmison & Smith regard images or representations in much visual research as merely 'cosmetic' or 'helpful additions' that 'assist in the dissemination of...research findings but they are not responsible for generating those findings' and so are deemed inessential (Emmison & Smith 2000:9). In fact they observe the 'widespread tendency to use visual materials (photographs) in a purely illustrative, archival or documentary way rather than giving them a more analytic treatment' (Emmison & Smith 2000:ix) as symptomatic of visual sociology's conceptual shortfalls. Emmison & Smith attribute the under-recognition and marginalisation of visual approaches in social science, to the preoccupation with *images* associated with 'theoretically uninspiring' research lacking in 'intellectual weight' (Emmison & Smith 2000:55).

It is perhaps worth considering this argument at length, since it implies that there is in actual fact no meaningful role for Visual Communication Design in a research capacity (that is, other than providing a 'helpful addition'). On the whole their argument is directed against the widespread use of photography and the use of the camera in social research, although we can extrapolate from this similar views about any predominantly visual means of approaching an investigation (indeed such as the one described by Poynor).

Emmison & Smith contend that 'the features of the social world [do not need to] be *photographed* before they become available as data for investigation' (Emmison & Smith 2000:10, my emphasis). They view the camera as a 'not strictly necessary' means for '[collecting] information' (Emmison & Smith 2000:173). Instead, they claim

'[in] conducting a sociology of the *seen*, rather than a sociology of the *image*, notepads and coding sheets serve perfectly adequately in the majority of cases' [Emmison & Smith 2000:173 my emphasis].

In the first place, this distinction – between a sociology of the seen and a sociology of image – is a crucial one for Emmison & Smith. They contend that the usual conflation of the visual, the image *and* the seen is what has led to the under-recognition of visual research. By contrast, when the visual is limited to denoting the *seen*, visual sociology is no longer marginal in social science. While the routine equation of the 'visual' with the *image* gives rise to the marginalisation of visual researchers, the proposal to connect the 'visual' with what is *seen* (visual≠image, but visual=seen) gives rise to the recasting of mainstream sociology as in fact centrally concerned with visual phenomena and methods. They explain

'many investigators have been exploring data and using visual methodologies but have not been aware that they were undertaking a visual inquiry....Under a diverse collection of methodological and theoretical banners they have explored issues, which, in as far as they

amount to an exploration of the seen and seeing, can be called visual research' (Emmison & Smith 2000:x).

Emmison & Smith explain that the view that the visual has been marginalised in social science can be challenged, when the equation of the visual with the *image* is abandoned (Emmison & Smith 2000:2-5,19-20). Instead, when the visual is understood as data which are *observable*, the history of social thought can be 'reread' as a tradition of visual inquiry (Emmison & Smith 2000:6). When visual data are taken as what is observable this can 'potentially encompass any object, person, place, event or happening' (Emmison & Smith 2000:4). Accordingly it is then possible to argue, as Emmison & Smith do, that many figures in twentieth century social science including the classics, have in fact been thinking about the visual or using visual methods, even if not explicitly or self-consciously (Emmison & Smith 2000:5). Thus, this distinction between the visual as seen and the visual as image is a *crucial* one for Emmison & Smith, since

'it has been the inability to recognize the pervasiveness of the visual *beyond the image* which provides the major impediment to visual research taking its rightful place in the methodological canons' (Emmison & Smith 2000:19-20, my emphasis).

But more urgently for the present argument, we now understand that, for Emmison & Smith, images provide access to no special meaning, or at least no significant meaning that cannot also just be noted down in words or numbers.²⁹ Their reasoning for how they have arrived at this view sounds plausible:

'[while mainstream] social researchers capture their data with surveys, questionnaires and interviews ...visual researchers have traditionally captured images. But unlike the former, who can readily appreciate the difference between the reality they investigate and their means for apprehending this reality, amongst the latter this distinction has become confounded' (Emmison & Smith 2000:2-3).

And it probably *would* be absurd if conventional text-based social researchers intently examined their field notes, code sheets, transcripts and audio recordings etc. *per se*, rather than the content that they held. In other words, mistaking their field notes, code sheets, transcripts and audio recordings etc. as the object of their inquiry, rather than just the means they employed for undertaking their inquiry. Emmison & Smith articulate in 'its bluntest form' that their

²⁹ As Emmison & Smith themselves note throughout the text, this makes their visual sociology incredibly democratic and accessible: no special equipment or skills are required, apart from keen observation and a good theoretical grounding. Not to mention the lower production costs, as well as completely avoiding the ethical and legal problems that photography in public places entails.

'reservations about an image-based visual social science rest on the view that photographs have been *misunderstood as constituting forms of data in their own right* when in fact they should be considered in the first instance as means of preserving, storing, or representing information' (Emmison & Smith 2000:2-3, my emphasis).

This is an understandable and more or less rational line of reasoning, but is it a sensible one, or even an accurate one? (Are images really 'analogous' to field notes? A means of capturing information, but in no way constituting data in themselves? Can everything that can be known in an image of a scenario, be captured in a code sheet? Can you separate the content of an image from the image itself? And what can be known through an image anyway? While these kinds of questions are outside of the scope of Emmison & Smith's work since it is concerned by observation and not the image, as we shall see these questions are central to Chaplin's visual sociology.)

In the final judgement, it seems clear that Emmison & Smith would disqualify the three projects as Visual Research. As visual representations, *Lipstick*, *Periodic Breakfast Table* and *Newsmap* – although tackling appropriately diverse and everyday subject matter – are simply *records* of data collection: cosmetic illustrations that contribute nothing substantial. In fact, no meaning would be lost if these image based records were replaced with a coding sheet. The sociological understanding that could be extrapolated from a visual investigation of used lipstick, cereal varieties and news headlines is *not* reliant on imaging or depicting lipstick, cereal and news. Instead all the pertinent features of lipstick, cereal and news, which could constitute data and contribute to a sociological argument, are *observable* in a sociology of the *seen*. As they stand, it would appear that according to Emmison & Smith, these projects are decorative fluff which convey no special meaning.

Non-visual representation.



As it happens, Elizabeth Chaplin, also a visually oriented sociologist, maintains the exact opposite view, insisting that image-based representations are not outside of the domain of visual research, but in fact *central*, rich and unique opportunities for researchers. Therefore, in assessing our three projects, she provides an interesting and useful counterpoint.

Section 4. Could these be Visual Research according to Elizabeth Chaplin? A counterpoint: the uncertain, multiple meanings of visual representations are rich for social scientific understanding.

'[There] is still a widely held assumption that though sociologists may study and analyse visual representation, the resultant analysis itself is separate from the visual domain: the verbal analyses the visual... But...the distinction between social analysis and visual representation is becoming less clear-cut...social analysis is beginning to make more use of visual representation, and indeed *should* make more use of visual depictions, unconventional typography and page layout in its analysis' (Chaplin 1994:2, emphasis in original).

- ☒ Visual representation as rich with meaning for social analysis: including word and image compositions, page layout, even diagrams and typography.
- ☒ 'In conjunction with sustained, textual, sociological analysis.
- ?? Self-reflexivity.

The final section of our discussion in this chapter will consider Elizabeth Chaplin's views on Visual Research that provide an useful counterpoint to Emmison and Smith's. This counterpoint is especially relevant for visual communication design, for Chaplin's version of Visual Research could co-opt *Lipstick*, *Periodic Breakfast Table* and *Newsmap*, for exactly the same reason Emmison & Smith's Visual Research would reject it: by virtue of their being visual representations.

But before we go any further, we need to clarify terminology here to avoid confusion. When Chaplin espouses 'visual representations', in fact she is not just talking about the richness of *photographs* for social meaning (although admittedly there is a lot of talk of this.) Instead Chaplin's visually oriented sociology includes the deployment of word and image compositions (e.g. captions), typography and page layout, and even diagrams and exhibitions. For Chaplin, a carefully constructed page layout and different typefaces, working with text, images of different sizes, caption and subtext – can make a significant sociological contribution, shaping a dynamic, analytical story: so much so that 'the visual organization of the page' can be in fact be 'integral to the methodology' (1994:237, 240). Indeed, her account of visual representations in sociology is reminiscent of Visual Communication Design according to Poynor and Frascara. (Consider that Chaplin recognises 'a combination

of image and text constitutes one of the most effective means of communication' and even that 'written text itself includes the visual dimensions of typography and page layout' [1994:3].)

So now returning to Chaplin's central polemic, she contends that visual representations are never just illustrations that 'merely reflect' reality and which can thus be deemed subsidiary to written text (which is what does all the work of arguing) (1994:3, 276). Instead, Chaplin asserts that visual representations contribute to the social argument in themselves, capable of '[telling] us a good deal we did not already know about a particular society' (1994:219). We will shortly review several of the ways that visual representations achieve this, for now it is important simply to note that according to Chaplin, this meaning is irreplaceable and accessible only via visual representations (and not by the seen, nor by words alone).

However, notwithstanding the rich meaning made available by visual representation, Chaplin warns that this meaning is 'fraught' (1994:206):

'the meaning of a photographic image for social scientists is rarely straightforward, yet ...this complex matter is an important one to explore since photographs are able to capture and convey aspects of society which words cannot – and are therefore clearly capable of altering or adding to our social scientific understanding of it' [Chaplin 1994: 232].

And so the point that the meanings of visual representations are not fixed and simple, and are rather complex and unstable, is an opportunity rather than a problem, and all amount to a richer sociological understanding. Thus when sociologists, such as Chaplin herself (we will be reviewing two of her own projects), generate visual representations they can uniquely harness this rich meaning.

These views are all consistent with her 'post-positivist' framework, whereby she rejects a 'sociology of' and instead instates a 'sociology and' (1994:10-16, 276-278). Chaplin strongly objects to sociology that analyses the visual world in words (think Emmison & Smith.) Chaplin explains that such an approach is typical of the conventional 'sociology of' something, whereby a sociologist works on his or her subject matter, and distance is maintained between the two: thus the verbal analyses the visual (1994:1-2, 207). Such an approach has been largely discredited as an approach in social science, since the actuality and desirability of 'objective' 'truth' and a 'definitive' account of reality have been rejected.

The privileged, distanced sociology has been replaced by multiple, coexisting realities and a democratic, collaborative sociology. Consequently Chaplin reasons that it no longer makes sense to maintain the distinction between verbal sociology and visual phenomena, that the

distance between the two could be reduced. Her book title, 'Sociology *and* Visual Representation' (and not a sociology *of* visual representation) is a deliberate but subtle signal that she challenges the (outdated) conventions. Rejecting the idea that a clear distinction must be maintained between social researchers and the social life that they analyse – and 'that an attempt to [maintain such distance] is morally and politically undesirable' (1994:12) – Chaplin recommends that sociologists interested in visual phenomena should use visual strategies (and should not be preoccupied with the criticism that they have 'simply turned "native"' [1994:12]).

Before going on to identify the various insights that Chaplin suggests are provided by visual representation, I want to look more closely at their purported rich uncertainty: for example, in what ways are photographs not straightforward?

Chaplin explains that images have whole 'careers' of meaning (2006[2002]), and that the meanings evolve and shift depending on their context, such as juxtaposition with words, other images, the media viewed etc., as well as the paradigm of the researcher - empirical or cultural. Above all, Chaplin (and others, e.g. Becker (2006[2002]) and Hamilton 2006) emphasises that an image has a complex relationship with reality:

'One can say that the photograph is a record of reality; it is existential proof of something out there. But it is not a neutral record because it is differently interpreted in each viewing context: the meaning of the photograph – like that of all images – floats, and is never finally fixed' (Chaplin 2006[2002]:88).

Following from Chaplin's argument, we might crudely divide the epistemological status of visual representations into two broad groups: more faithful, or more biased. On the one hand, there can never be pure objectivity – for despite the detail and accuracy and vividness in the image, it is ineluctably dependent on a human decision to take the photograph at that moment (and not another) and at that angle (and not another) and so on. Similarly and simultaneously there can never be pure subjectivity – for no matter how biased and interested a photograph seems, it does provide with undeniable mechanical accuracy a reproduction of something that is out there in the world beyond the photographer. So, even though photographs are 'constructed arguments' that 'convince', 'persuade' and 'privilege' (i.e. they are biased and can be falsified).³⁰ Chaplin explains that '*some* photographs – in conjunction with captions and written text – *do* give a less fictitious, more empirically

³⁰ Of course as Chaplin notes '[any sociological] account whether it involves photographs or not, is *constructed*' (1994:206).

informative account' and that 'the information we obtain from such images and accounts increases our existing knowledge and understanding of the world in a relatively straightforward manner' (1994:206, my emphasis). (It is not insignificant that here Chaplin stipulates 'in conjunction with captions and written text', but we will come back to this.)

More specifically, (in addition to Emmison & Smith's visuals that are *seen*,) Chaplin (1994, 2006[2002]) explains that visuals can be *taken*, *made*, *found*, *show* and *mean*, each entailing different implications with regard to the social scientific understanding imparted.

In one way, photographs are 'taken' for providing sound, objective evidence. At the same time, photographs are 'made' by a photographer and the context they are viewed in. It is Chaplin's contention that social scientists, rather than taking one side at the loss or the benefit of the other, 'can take advantage of this dual situation', and '[combine the] objective physical properties and the subjective input of the photographer'. The researcher can 'take account of the fact that photographs are socially constructed, whilst acknowledging that they can also provide detailed information'. The photographer can both take and make the image: they can exploit the technical properties to 'preserve the detail' and allow removed distanced seeing, and they can construct the image by '[selecting] the subject matter and choosing the type of shot' in order to best suit their intended purpose of the image (1994:199-200). Empirical researchers are those who 'take' photographs and regard them as records that 'show' something. By contrast a cultural studies approach analyses 'found' photographs (and cultural studies researchers would view their own photographs as such) and asks what they 'mean', which is uncovered by interpretation such as semiotic analysis. What photographs 'show' is considered objective and definitive, while the 'meaning' of photographs is regarded as plural and partial (2006[2002]:87-88).

Notwithstanding their complex and multiple meanings, what kind of special, sociological understanding can images impart according to Chaplin? At this point we will review more specifically some of the qualities useful for sociologists, which Chaplin attributes to visual representations. Chaplin ranges across many, many ideas: indeed it is sometimes as if she is searching for words adequate enough to express all that she comes to understand based on viewing the various visual representations that she examines. However, we will limit our discussion to four of her most salient ideas, which we can most closely bring to bear on our projects.

Firstly, Chaplin describes the special qualities of images in general. She finds that images are confronting, immediate, detailed, striking, vivid, memorable (1994:219); can capture the

subtleties, as well as the 'specific yet complex' (1994:222); they can be poignant, and ideologically hard-hitting; as well as powerful tools for *particularising* (rather than generalising, which is probably better done in words) (1994:277).³¹

Secondly, in consideration of a special case of how images have been used in several social science texts, Chaplin unpacks the impact made by an 'array' or 'massed images' (1994:207-219). She explains 'when shown together in large numbers...sequences of images and juxtapositions of images ...acquire a visual autonomy which the reader cannot ignore and must take on board' (1994:207). And when she is talking about large numbers she is referring to one anthropological study that includes over 700 images (selected from a whopping 25000) (1994:207). She explains that these amassed images achieve detail and wholeness, breadth and depth, which creates a 'micro-world' and imparts a sense of the 'ethos' of a society (1994:212), possibly unattainable any other way:

'The sheer detail which is brought to the viewers attention by the arrays...forces home the truth of the statement that this world is 'complex', and indicates that the tendencies to subject data to a numerical categorisation, to generalise and construct grand narratives have produced a type of social science which leaves a great deal to be desired' (1994:217-8).

The effect of captions on the meaning of an image, is the third area that Chaplin provides some highly relevant commentary for. She recognises that conventional sociology is dominated by verbal conventions, and accordingly conventionally 'a photograph depends on caption...to give it authentic and precise social scientific meaning'. In this regard an image seems to lose its 'autonomy' and any claim to make a contribution in 'its own right' (1994:207). However, influenced by Stuart Hall's (1973/4) ideas, Chaplin explores a less disparaging and more constructive way of thinking about captions in social science. Hall explains, 'the caption selects one particular meaning for the image and then *amplifies* it'. (Hall 1973/4, cited in Chaplin, 2006[2002]:97) Thus, Chaplin recognises that when images and words are combined (as Visual Communicators are surely aware), there is the potential for dynamic layers of meaning, since we literally 'read more into' the image after we read a caption (2006[2002]:97,126,129).³²

³¹ Hamilton attributes the particular advantage of images in social science as able to 'rounds out' meaning not expressed in words or numbers (Hamilton 2006:xxv). Similarly Becker explains that images provide 'specific generalisations' – detailed yet not definitive. Instead images provide particular, detailed, concrete, specific, flesh and blood instances that show that the abstract general idea discussed in the text is possible (Becker 2006[2002]:394).

³² By contrast, without a caption, the meaning of the image floats. (2006[2002]:129) Citing Patricia Holland, the most straightforward photograph of 'basically just being there' is strangely actually the 'least readable of

Finally, Chaplin is particularly interested in the social science potential of 'unconventional' typography and page layout (1994:13,232,242). By *unconventional*, she is referring to overtly designed, typographic treatment and word image compositions, which *call to attention* their constructed-ness. This is in contrast to conventional sociological texts that, although similarly, inescapably constructed, *seem* neutral and unconstructed, and indeed authoritative and objective. By contrast page layout and typography can be deployed as a tool to 'deliberately and systematically inject uncertainty' (1994:232) into a text and dispel any 'taken-for-grantedness' (1994:13) and rather encourage an active reading of the text (1994:242).

So, in light of these ideas – the immediacy and vividness of images, further potential by their sequence and juxtaposition in large numbers, the yet richer meaning made possible working with captions, and even overtly designed 'unconventional' typography and page layout – how might Chaplin regard the projects *Lipstick*, *Periodic Breakfast Table* and *Newsmap*?

We might guess that she would understand *Lipstick* as being not merely a decorative, inessential illustration (as Emmison & Smith might contend) but rich with sociological meaning – massed images, captioned, at once mechanically accurate and subjectively constructed. On the one hand they are taken: vivid, precise, concrete, detailed records of the shades of colour, detail of texture, and the various shapes of a several used lipsticks. But on the other hand, they are 'made', inviting questions such as what have they left out? Were boring shapes and repeat colours omitted? What if the woman approached used lip-balm or a lip pencil or nothing, instead of lipstick?

With regard to the *Periodic Breakfast Table*, as a vivid parody or homage of The Periodic Table of Elements, it may prompt Chaplin to note that by working from within the conventions of how scientific understanding is constructed, it dispels the taken-for-grantedness of *all* scientific systems. In any case, drawing together numerous photographic images, as well as textual elements (words and numbers), in a carefully considered page layout, *Periodic Breakfast Table* seems to be rich with exactly the sociological understanding that Chaplin has discussed, and again is not a superfluous illustration. Its insights into the relationship of appearance (colour, shape) and nutrition in cereal are made available as a visual representation, which does not just repeat what could have been observed by our eyes and theorised in words.

the images, depending heavily on the knowledge of the subject, on why the picture was taken and on its context.' (Holland 2001; cited in Chaplin 2006[2002]:95)

And although *Newsmap* has no photographic elements at all, it is not outside of Chaplin's visually oriented social science. For example, Chaplin is sensitive to scientific diagrams and even opens *Sociology and Visual Representation* with a discussion of the instructions for the installation for a Dimplex heater (1994: 3-5). Chaplin acknowledges that, indeed while she has been writing *Sociology and Visual Representation*, an increasingly sophisticated and democratic visual literacy is expanding. She accounts for the growing ability for *anyone* to create visual representation using computer graphics, and create more and more sophisticated layout, typesetting and desktop publishing, (although she seems to just predate the internet, and rather notes 'video' and comics) (1994:276-7). So perhaps *Newsmap* might interest her as a contemporary, digitally-enabled, visually-refined instance of a visual representation, which constitutes a vivid, detailed micro-world with multiple layers and 'careers' of meaning.

Image-based representations rich as social analysis.



However, despite her enthusiasm for the active use of visual representation in sociological analysis, ultimately we must concede that Chaplin recommends that the use of visual representation must be in *conjunction* with sustained textual analysis (again informed by theory). After all, a central concern of *Sociology and Visual Representation* is to examine, as she phrases it, the

'evidence of a growing appreciation among social scientists of the role played by visual representation [depictions, typography, layout] *in* textual argument and analysis' [Chaplin 1994:15, my emphasis].

It is an understated – and easy to overlook in all the excitement about the elevated status Chaplin accords to visual representations – but persistent point in her text, traced only through more attentive reading. Consider the following account: 'images which have both documentary reach and aesthetic quality...can – *in combination with verbal text* – generate a type of social science understanding which is very rich' (1994: 222).³³ It seems that without accompanying textual analysis, as stand-alone projects, *Lipstick*, etc. cannot impart sociological understanding by themselves.

In conjunction with sustained textual analysis.



³³ And we find that such qualifying expressions made by Chaplin are numerous: 'It is difficult to even think about [this social phenomenon] at first, yet its values become more familiar as we pore over the sequences and juxtapositions of images, *backed up by verbal explanations*' (1994:211). Similarly, '[their] work thus enables us to broaden our exploration of what photographic images – *with accompanying textual material* – can tell us about the social world that words alone cannot' (1994:218).

But, before we leave Chaplin, let's consider what kind of textual analysis she has in mind. We will review these expectations by studying her own sociological projects where she works with visual representations. These are *Visual Diary (1988-1992)* (1994:223-232) (→IMAGE 4) and *The Residents of South London Road* (2006[2002]:87-132) (→IMAGE 5). In both of these projects, Chaplin carries out her own recommendations to more actively use visual representation, and not just photographs (although predominantly this work is photographic) but also she works with word and image synthesis, as well as layout and exhibition. A consideration of these projects, quickly reveals how Chaplin fulfils the sociological expectation for theory highlighted by Emmison & Smith, since Chaplin iteratively and explicitly draws on various social theorists, in order to both reflect on the images she has made and inform how she makes them.³⁴ But then we notice a matter quite unexpected to do with self-reflexivity: the findings of these projects seem to be more about 'how it was to use images', rather than the actual object of the study.

The first project (IMAGE 4) is a photographic diary consisting of sequences of photographs she has taken daily and captioned – to explore sociological ideas of routine. The other project (IMAGE 5) involved her taking photographs of the people (who were then invited to then caption their image) living in her street in London in order to gain insight to a slice of life in UK society at the start of the 21st Century.

Interestingly enough, at a cursory glance her projects could qualify as visual journalism: using design to investigate something in the world. However, there is an unexpected but key distinction between the two. While Poyner promotes the use of the design synthesising word and image to investigate some matter in the world, and emphasises that the point of the project is not to 'create design' but explore some story and convey some argument, Chaplin seems to draw few conclusions with regard to the matter under investigation (routine, snap shot of UK life). Her discussion seems rather to explore how effective the use of visual

³⁴ In her account of *Visual Diary*, Chaplin explains 'A remark by Goffman in *Gender Advertisements* set me off' (Goffman 1979; cited in Chaplin 1994:223). Goffman's claim that routine can not be shown in an image is taken up as a challenge by Chaplin. The project *Visual Diary* ensued and lasted four years. This project was continually adjusted and refined as Chaplin brought more sociological theorists to bear, such as Bateson & Mead (1949), Berger (1972) and Sekula (1982) to name a few.

For example, the decision to begin photographing herself daily arose because she wanted to engage with feminist ideas on one hand as well the fraught issue of representing others: 'I decided that I would have to stand for other women, to represent them. I therefore began to photograph myself' (1994:229).

Similarly she decides to take two photographs of the same subject each day (one 'arty' close-up and one 'documentary' long shot, influenced by Sekula's *On the invention of photographic meaning* (1982)) in order to explore the distinction between photography as art or ethnographic information (1994:229). In the end – in light of Becker *Exploring Society Photographically* (1981)– she realised that 'the aesthetic and the documentary facets of a photograph are virtually impossible to separate' (1994:229).

representation has been. This kind of reflexivity – where creators don't just create, but reflect on how they create – is part of what has led design authorship to be disparagingly regarded as a 'self conscious and maudlin experiment' (Beatrice Ward undated; cited in Moline 2006). This is why Poyner goes to such lengths to stress that the concerns of visual journalism must be 'outside of design' and why design though essential is not the point of the exercise. While design authorities insist that design is at the service of a message, Chaplin's sociological approach to designing seems to lose focus on the message, and instead has become preoccupied with the design.

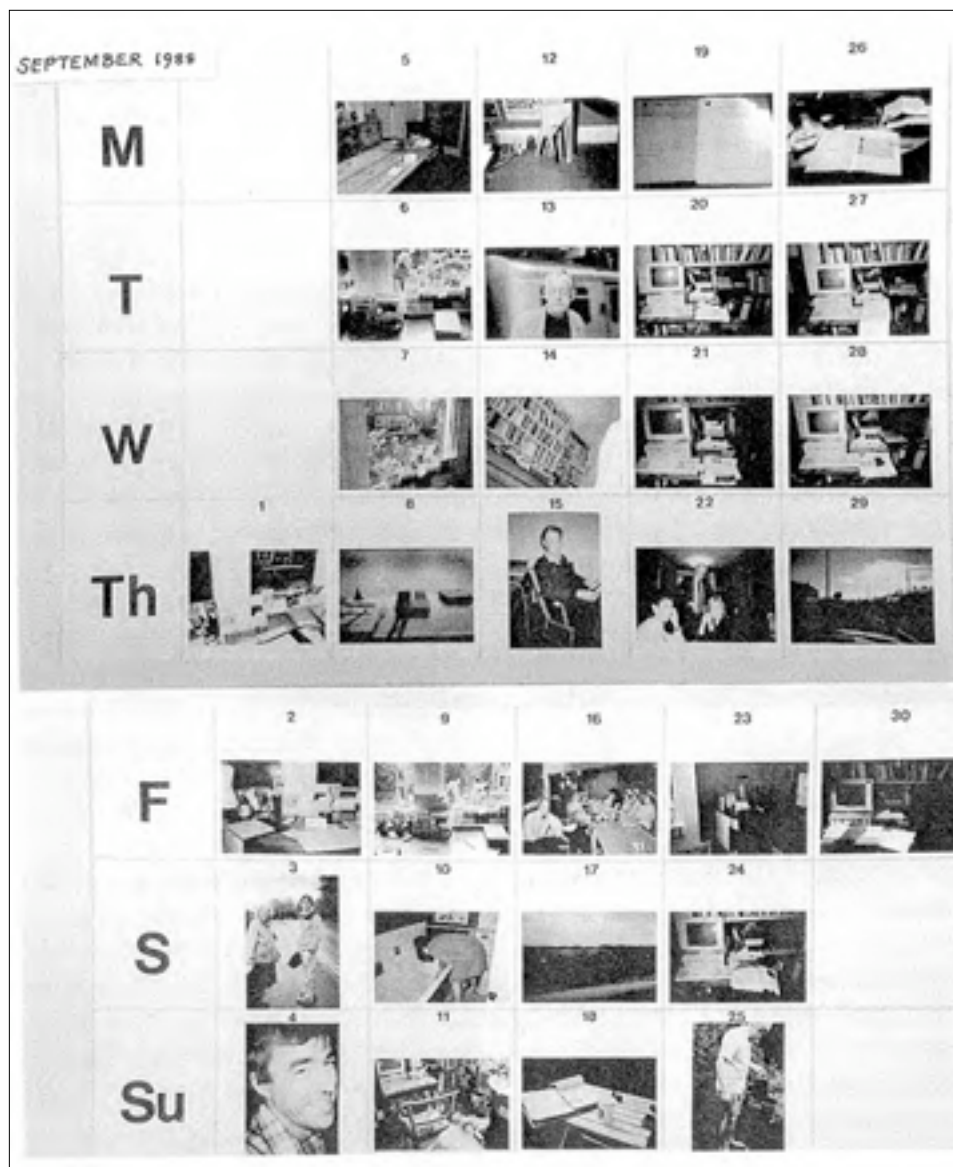


Image 4. *Visual Diary* (1988-1992) (Chaplin 1994:223-232)



Image 5. *The Residents of South London Road* (Chaplin 2006[2002]:87-132)

So interested is Chaplin in the questions of what relation an image has to reality, that in her own projects the sociological phenomena under investigation seem to become a secondary and even forgotten concern of her research. Instead her focus is redirected to the question of the efficacy, uncertainty and legitimacy of the use of images – the subject of study becomes the tension between the different ways an image can be regarded, ‘taken’ or ‘made’, ‘show’ or ‘mean’.

For example, in her research project *The Residents of South London Road*, intended to capture a slice of life at the turn of the century (as part of a comparative and longitudinal study) the document that reports this project seems rather more interested to examine the effectiveness of creating a photographic visual inventory with captions supplied by the participants. Rather than drawing any significant conclusions or even discussing the slice of

London life she has captured, Chaplin reviews and speculates on the 'long careers' of shifting meaning of the images based on differing interpretations depending on the context of their viewing (as a record in an archive, as a security risk, in light of the written caption, as a copy in a family photo album, as a slide show). Similarly in *Visual Diary*, intended to investigate daily routine, Chaplin's reporting of the research project in fact reaches few conclusions about routine, but extensively contemplates whether it is possible for a sociologist to take advantage of the dual status of images – both taking and making, and whether documentary and aesthetic intentions are at odds with each other. While Poynor would regard such self-reflexivity as characteristic of navel gazing, Chaplin regards overlooking such reflection as uncritical.

Conclusion.

We now appreciate these three projects exhibit both design dexterity as well as a systematic investigation into everyday phenomena, but also understand that without a sustained narrative or theoretical underpinning, they are incomplete as either Visual Communication Design or Visual Research. As stand-alone works it is clear that these projects do not convey persuasive clear messages nor enlightening social analysis. While we can *guess* at the kind of work they *could* do as fully-fledged Visual Communication Design or Visual Research, we are ultimately left with nothing more than a vivid *sense* of used lipstick, shapes of cereal and bias in online news. If no client has commissioned it, if no theory is brought to bear, if no comprehensive argument is decipherable and if not created in the spirit of self-expression, how can we make sense of these detailed, striking, explorations of trivial matters? This question is addressed in the following three chapters where a three-part model is proposed that categorises and theorises these kinds of projects. But before we begin this examination, let's more carefully review what we have come to understand in light of our exploration of the four sources.

Firstly, we have a stronger understanding of these projects in two key ways: as striking displays of skilful visual language (receiving a unanimous 'tick' from our representatives of visual communication); and as a systematic study into observable everyday, (similarly receiving a unanimous 'tick' from our representatives of visual research).

Furthermore, by drawing on more progressive counterpoints within the disciplines, there is agreement across the disciplines that the visual probably has some role to play in pursuit of

knowledge and to uncover new meaning. Resolving some of the doubts raised by the more conservative Visual Researchers Emmison & Smith, Chaplin proposes that an image-based sociology (rather than one strictly based on observations that are converted into words and numbers) is apt and rich and even crucial for undertaking and presenting social analysis. Similarly, the more adventurous ideas about Visual Communication put forward by Poynor resolve some concerns from Frascara's more uncompromising version of Visual Communication, explaining that self-directed design does not necessarily descend into expressions of personal style.

However in other ways these projects fall short of expectations, and this is with regard to both Visual Communication and Visual Research. Visual Communication, even when self-directed, is still expected to communicate a message and have something definite to say to someone. And to be recognised as Visual Research, even an image-based approach needs to be accompanied by a sustained theoretically informed, critical textual analysis.

Failing these expectations, therefore, these projects resist (or exceed) the explanations provided by Visual Communication and Visual Research. A theoretical framework (feminism, consumerism, globalisation) or a target audience (a cosmetics material scientist, a museum of food manufacturing, a business pitch for a media analyst) could have accounted for the banal focus of each project. But failing either theory or audience, these projects are ambiguous. How can we make sense of (justify) the detailed striking explorations of trivial matters? What is a meaningful explanation for what is going on when such vivid expertise is used in such an ultimately inconsequential way?



In this chapter we have considered only these three projects. In subsequent chapters (Chapters 3-5), we revisit each of these projects once more. However this time they are recognised as not isolated instances. In fact these projects are representative of a whole body of similarly hard-to-place work, which can be divided into three sections.

In Chapter 3, *Collecting*, we will find that while Greene was methodically photographing used lipsticks, elsewhere Hassink was carefully documenting mugs in various corporations. Others were Collecting books with orange covers; comparing the enlarged final fullstop of numerous books; deciphering perfectly proportioned plus signs (+) in the desert landscape (just as one might see animals in clouds). This was more than a stylistic theme: these people seemed obsessed. What is going on in these projects? What happens when you photograph things that are the same but different *en masse*?

Similarly, while Weese was meticulously organising cereal by shape and nutritional content, Daly was sorting love heart logos into industry and colour, and Wurman was sorting silhouettes of dogs by size. Again the projects are all visually dexterous and labour intensive, perhaps insightful but certainly lead to no comprehensive understanding. Exploring what is going on in these projects is the subject of Chapter 4, *Ordering*.

And what about *Newsmap*? How can we understand its distinctive appeals? When is a selectively detailed and partial view of things – as revealed in *Newsmap* – useful and desirable? In Chapter 5, *Positioning*, in considering this we trace unexpected links between Weskamp's web-based, treemap algorithmic representation of online news, and the quintessentially low-tech, undetailed yet effective hand drawn map (usually on a serviette or the back of a business card) of directions to 'my place'.

When considered together as a body of work it becomes clear that focusing on the banality of the subject matter dealt with in the projects is misguided, and in fact what is interesting are the visual strategies used. *Lipstick* is less interesting because of what it tells us about used lipstick, than how it creates a constrained, photographic inventory; *Periodic Breakfast Table* is less interesting because of what it tells us about cereal, but the way it classifies and arranges; and *Newsmap* is not about news but the representation of a selective and distorted but telling view on the world.

PREAMBLE TO THE MODEL.

I have established that Design Research, Visual Communication Design and Visual Research can only partially account for projects like *Lipstick*. Consequently these projects have been given the spacer 'creative, investigative, visual' to indicate their partial associations, but ultimately such work has been tagged 'homeless'. In the following three chapters I propose a Model consisting of three stages, Collecting, Ordering and Positioning, which was derived as a result of my search for more attentive ways to talk about these 'sticky', 'homeless' projects.

However before we commence our discussion of the actual Model, I will contextualise this with a three part Preamble. Firstly, I account for the design and research processes that gave rise to the Model. Secondly, I outline the structure of the argument in the following three chapters. Finally, since the exposition of the Model also includes an original project that deals with an aspect of cycling advocacy, some background to this issue and project is provided.

a. The process: detecting chimes across the disciplines.

I focus on two aspects of the process undertaken to develop this model. In the first place it is important to understand how this model emerged inductively by the ongoing close examination of the projects in question (rather than 'top-down' from theory). In the second place, it is significant to observe the performative nature of this research. Here I reveal that the processes, which led me from an assortment of peculiar projects to proposing a tripartite model of Collecting Ordering and Positioning, were in fact themselves Collecting, Ordering and Positioning.

Chimes between kooky projects and disparate literature

The 'straight' account of my 'method' might be something along the lines of: to develop a language, terminology and typology of particular design projects, I reviewed various literature to explain and explore the formal features of the work, the kinds of insights they provide access to, as well as the processes, intentions, outcomes and experience of creating them. But what this kind of account does not reveal is how this process was both intuitive (as I was 'drawn' to 'sticky' projects and literature) and methodical (whereby I conscientiously generated a dense inventory of literature as well as projects, and thoroughly

annotated the interrelationships). And that the model emerged by a heuristic, iterative and cumulative process, moving back and forth between eclectic literature and the kooky projects. To illuminate this aspect of my process, I will reference a quirky but smart visual cartoon-like essay *Constellations from the Milk Museum* (Blegvad 2003) ‘curated’ by the professional illustrator and writer, Peter Blegvad (→IMAGE 6).³⁵

Blegvad explains, ‘The Milk Museum is what I call the hoard of quotes, notes and pictures, most of them passively amassed – found by chance – in the course of my general reading over the past thirty years’ (Blegvad 2003:98). In *Constellations* Blegvad characterises this process of accumulation as one of association and resonance. Excerpts, notes, quotes, pictures, ‘fly’ out of books to each other (like moths to a light) ‘summoned by association’ (Blegvad 2003:102). Juxtaposing these excerpts and tracing their links inspires transcendental constellations for Blegvad, as shown in the illustration. For Blegvad ‘each quote is like a tuned harp which when “strummed” causes certain of the other’s “strings” to resonate in sympathy’ (Blegvad 2003:104). In this example, we see how Dylan Thomas, Aristotle, and others, although ostensibly disparate, are linked for Blegvad by tracing the common references to milk / dairy. Subsequently, he shows ever more intricate constellations, involving larger numbers of quotes (referring to cheese, lactation etc) as well as images (glasses of milk, breast feeding in art etc). And so we see how Blegvad animates the practice by which unexpected but remarkable and convincing associations can be traced between the most varied matters.

In exactly the same way that quotes were summoned by association and ‘flew’ from books for Blegvad, I was drawn to ‘sticky’ projects, (which I had initially cited as exemplary of Visual Communication Design). The criterion was straightforward enough: anything that was ‘creative, visual, investigative’ was gathered. So for example, in the same way *Lipstick*, *Periodic Breakfast Table* and *Newsmap* had appealed to me as vivid, systematic, labour-intensive yet uninstrumental, so did William’s *Mapping the trivial / How do I get to the Art Gallery of New South Wales?* (a series of hand drawn maps provided by passers-by at the request of an artist/ethnographer posing as someone from out-of-town needing directions). Not to mention Waller & Beards *Readers Before Us* (the evocative meticulous inventory of the impromptu bookmarks – scraps of paper, train tickets, etc. – found in the books held in the RCA library, London), and *Endcommercial: Reading the City* (a tome of over one

³⁵ Interestingly, Blegvad’s *Milk Museum* essay appears in yet another intriguing compilation edited by Peter Buchanan-Smith, (this time co-edited with Dan Nadel).

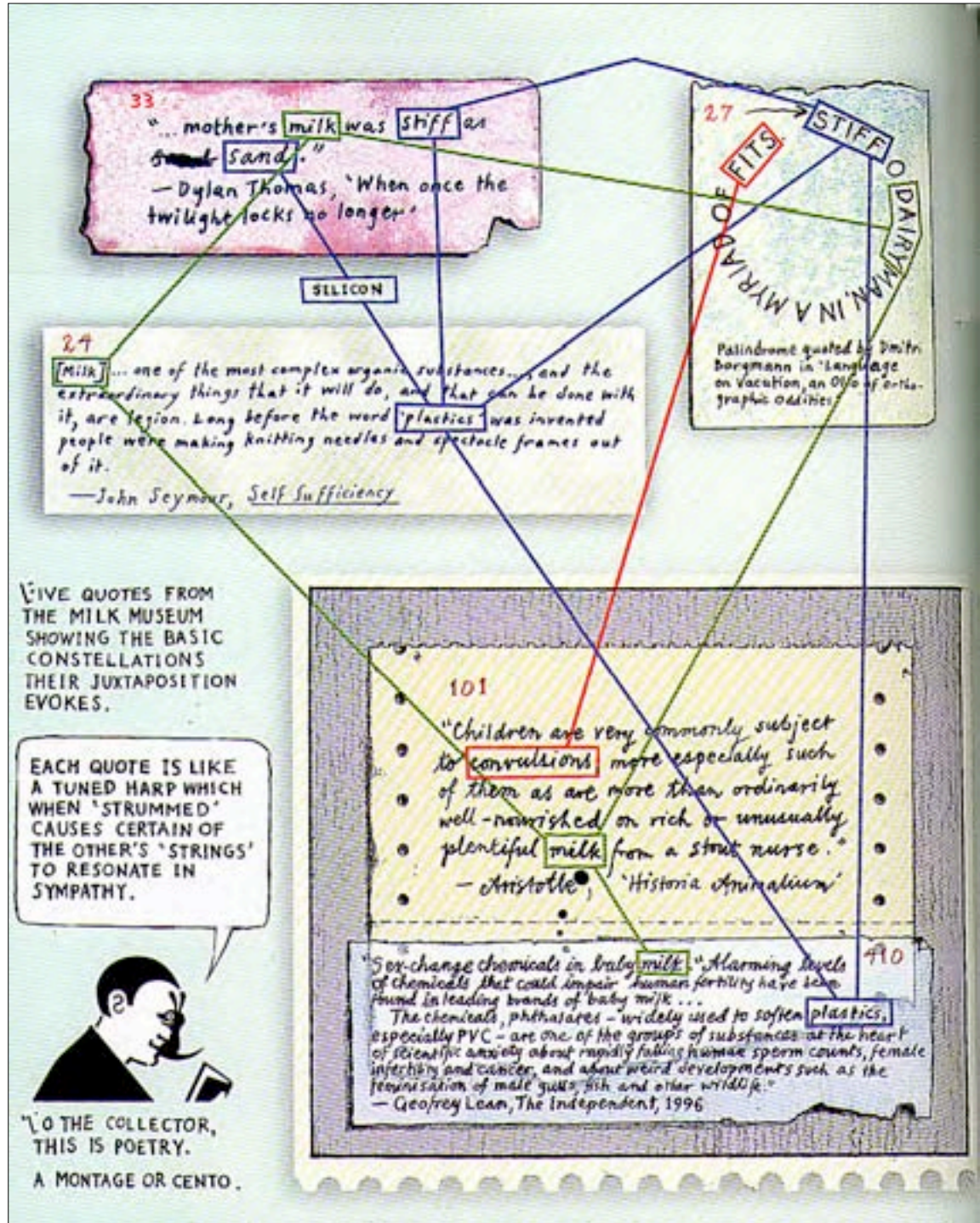


Image 6. Constellations from the Milk Museum (Blegvad 2003:104)

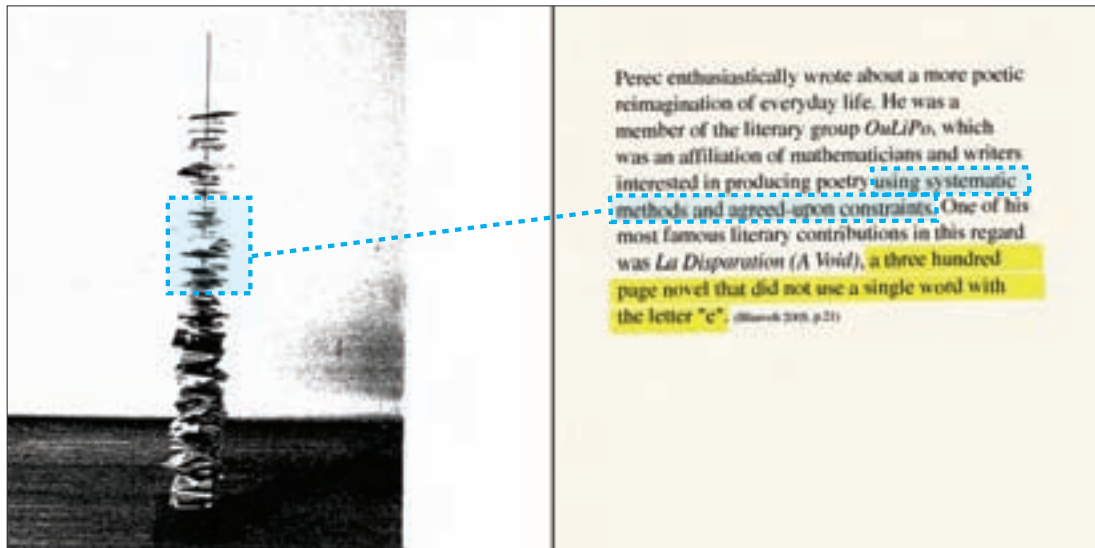


Figure 4. Waller & Beard (2002) 'chime' with Perec (1997[1985]; cited in Blauvelt 2003:21).

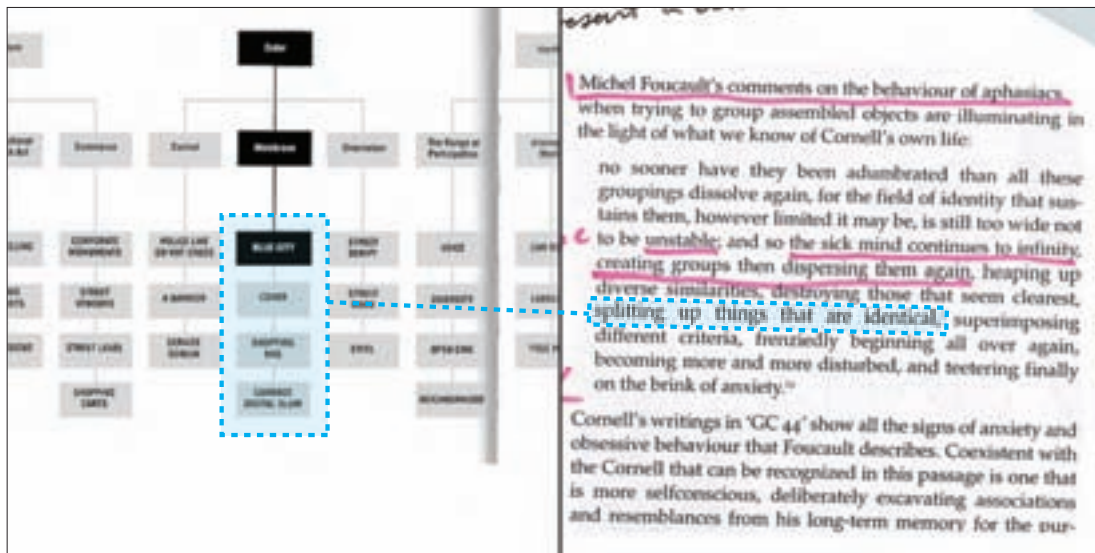


Figure 5. Böhm, Pizzaroni & Scheppe (2002) 'chime' with Foucault (1986; cited in Blair 1998:37).

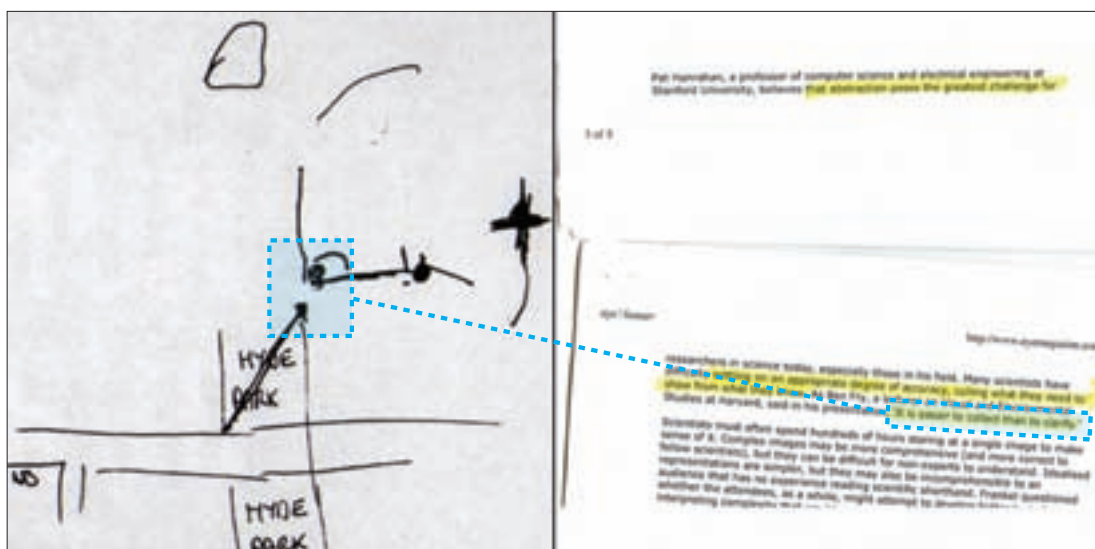


Figure 6. Williams (2003:44-45) 'chimes' with McKee (2005).

thousand photographs of the street level adaptations observed in city settings sorted into a taxonomy of thirty-two categories).

So I had assembled a whole body of work, to which I had established that Design Research, Visual Communication Design and Visual Research discourses could not adequately attend. Thus I cast out into more diverse and eclectic bodies of literature and textual sources to see if more robust and relevant explanations would bite. And, in a fashion very similar to how I had indiscriminately, openly gathered any projects that seemed 'sticky', *any* literature – regardless of discipline or pitch – that spoke (more) closely (than Visual Research etc) to any of the projects was inventoried. I considered, to name a few areas explored: the origins of the Encyclopaedia, the tendency towards list making, psychological explanations for collecting, scientific visualisations, Dewey Decimal Classification, French poetry, experimental travel, where to file UFOs in a picture archive, information management, documentary photography and post-modern cartography.³⁶

In the same way as for Blevgard in *Constellations from the Milk Museum*, things started to chime and resonate. An account by the French experimental poets, the *Oulipo*, (who deliberately deploy constraints in creative work in order to awake the imagination and subvert the terror of a blank page,) seemed to provide some insight to Waller and Beard's *Readers Before Us* (2002) (← FIGURE 4).

Similarly, it was a passage citing Michel Foucault's description of aphasiacs, which seemed to shed light on *Endcommercial* (← FIGURE 5). Foucault explains that aphasiacs obsessively sort and re-sort collections of objects, each time grouping items according to different sets of criteria in pursuit of some elusive ideal arrangement, seemed to correspond with reports that Böhm, Pizzaroni & Scheppe had taken over fourteen months to create their taxonomy.

And a comment made in an article about scientific visualisations found in *eye* magazine (McKee 2005), seemed to suggested why the kind of insight imparted by a scribbled map of directions (such as those gathered by Williams 2003), could be set apart from

³⁶ So there is no formal 'Collecting, Ordering and Positioning' body of literature 'out there' and it is only by drawing on disparate discourses, that I have assembled this Model. There is certainly no official, discrete 'Positioning' or 'Ordering' literature. 'Collecting' is the exception, although I have not explored conventional institutional museology and material culture genres of Collecting literature. Instead I have considered Collecting literature that explores how photography relates to Collecting (e.g. Edwards 2001), and some of the psychological explanations for the Collecting 'urge' (e.g. Baudrillard 1994). Significantly, my conception of Collecting as a 'productive constraint' is not an idea found in the existing Collecting literature.

Endcommercial and *Readers*, despite being far less detailed and far more selective (←FIGURE 6).

As I gleaned insights from the various literature I would return to the projects to more closely examine their attributes, and this more guided seeing revealed commonalities and distinctions between them. Like Blevgard, constellations of associations were forming, themselves attracting more literature and more projects. Which brings us to the question of how I managed and organised all this eclectic literature and projects.

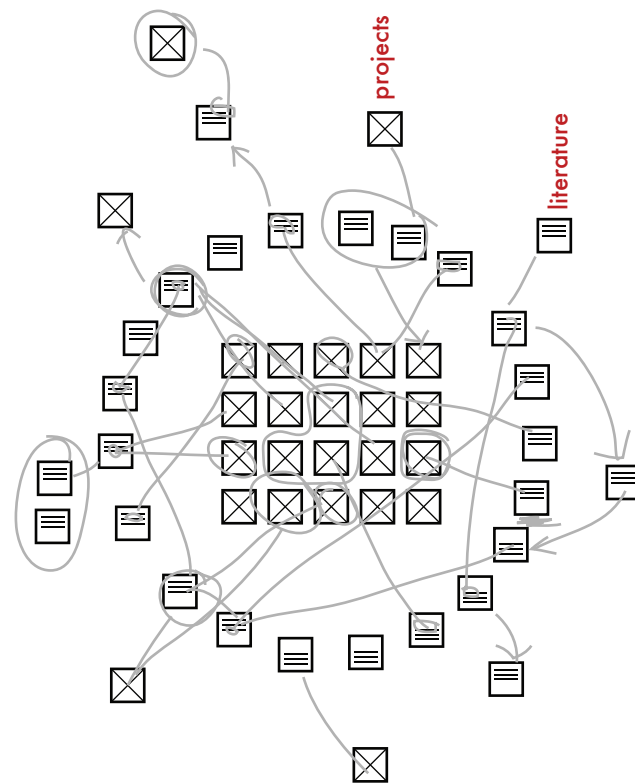
How I Collected Ordered and Positioned, Collecting Ordering and Positioning

An even more detailed if anecdotal account would explain that – without intending to sound too iconoclastic – the strategies I used to derive this model of Collecting, Ordering and Positioning, were indeed Collecting, Ordering and Positioning.³⁷ The set of diagrams shown in ◊ FIGURE 7 illustrate how the three stages of my process correspond, with the stages of the Model I propose (and carry out in *BikeWork*), and indeed reflect the kinds of projects I examine. This performative account is detailed as follows.

As I have already mentioned, in the beginning, (like Blegvad's *Milk Museum*,) these 'kooky', 'sticky' projects 'flew' to me and I conscientiously gathered them. I accrued an enormous and eventually unworkable image file. I started to look for solutions for what to do with all this stuff, at the same time as investigating how these projects were working, and started to notice interesting parallels between some of the *projects* (such as *Lipstick*) and my own accumulation of images and literature. Above all I started to realise that the projects weren't all quite the same. My initial Collection of 'sticky' projects is shown in ◊ ITEM 1 of the Appendix.

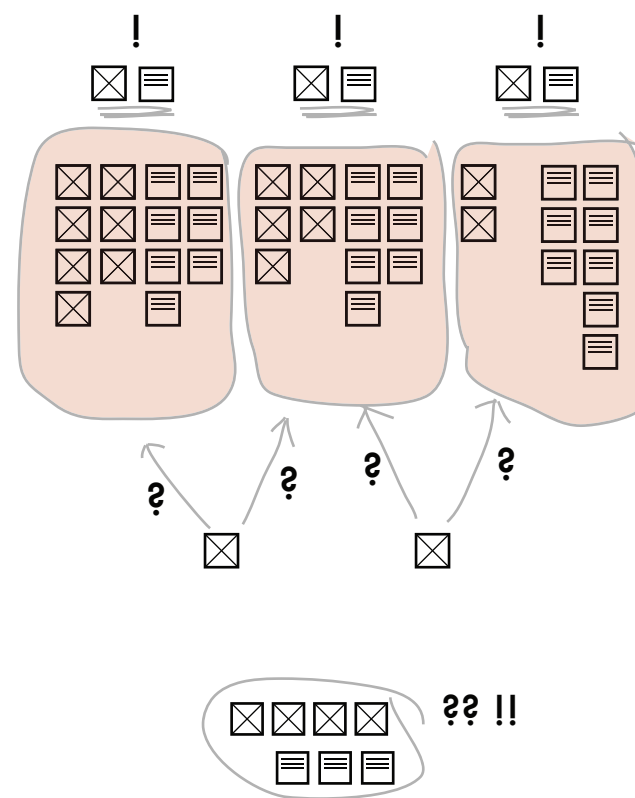
At about this time, I had learned from the venerable social researcher Howard S. Becker, that to organise his material he 'intuitively' sorts his ideas simply according to the principle of 'seem to go together' into 'piles' (Becker 1986:59-61). (Interestingly enough, I noticed that although Becker was talking about written research, this seemed to describe how the designers behind *Endcommercial* created their visual project.) Similarly I started to sort all the projects and literature into categories. But I noticed that sometimes it was very hard to decide which category – they might fit in two categories equally and at other times they fit into none. I set about investigating this strategy of categorising and arranging and especially

³⁷ This process could be described as 'grounded-theory action research' (Tonkinwise 2007).



Stage 1. Collecting: The-same-but-different

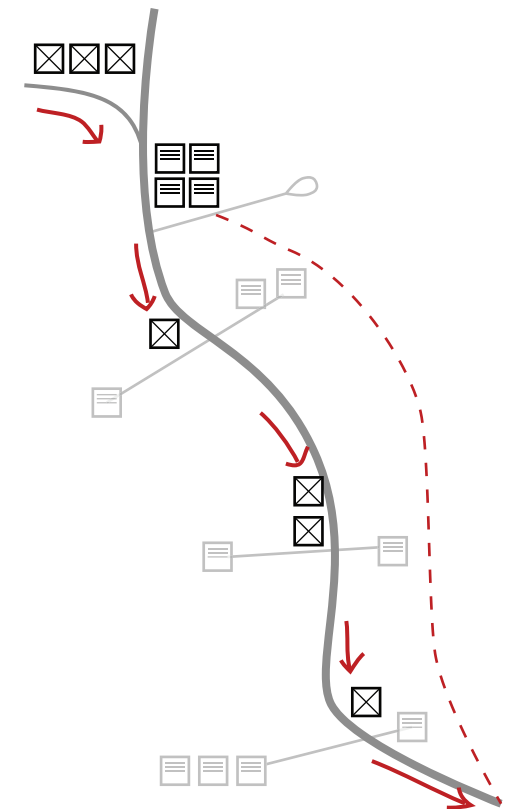
Initially a free, stimulating, and productive time. I was fabulously busy, and immune from the requirement to be discriminating, since beyond the 'stickiness' qualifying criteria for projects (and the 'explanatory of stickiness' criteria for literature), every thing was considered potentially just as useful as the next. Interesting clusters were emerging, but I realised that it would be impossible to manage all this literature and all these projects and pay homage to all their associations, in the 'flat' structure of the collection.



Stage 2. Ordering: A short-lived salve

The projects and literature were categorised according to themes emerging from the Collection. Although some sense is being made, Ordering has its own dilemmas. Some particulars epitomise their group (!), while others can't fit in just one (?). Others still don't fit in any (?!!).

Is there a problem with my taxonomy, or the projects...? It is becoming clear that tweaking until everything can fit perfectly is probably endless and futile.



Stage 3. Positioning: From the Explorer to the Guide

To make the insights gained (by the original Collection and subsequent process of Ordering) clear, all that is considered has to be reduced, and one path must be selected: in other words a position needs to be taken. You don't need to see the whole city, when you just want the the way home. We begin and end our journey with chief reference to the projects, while the selected literature appears at the intersections only in relation to those projects (and indeed some literature leads to deadends).

(Finally, the dotted line is included to suggest the parallel corresponding processes – my research process, the model derived, and the strategy carried out in *BikeWork*.)

Figure 7. My process: how I Collected, Ordered and Positioned Collecting, Ordering and Positioning

the dilemma I was suffering. A selection of my own attempts sorting and resorting the things [that made up my Collection] which ‘seem to go together’ into ‘some order, any order’ [Becker 1986:59-61] is shown in ♪ ITEM 2 of the Appendix.

I read on looking for ways to solve this and realised that hanging onto everything was not sustainable, informative, or even helpful. At this time Mark Tredinnick’s advice that to achieve readable writing, the reader must be *spared* the researcher’s dilemmas – ‘stumbling’, ‘staggering’ and wandering (Tredinnick 2006:223) – seemed to chime with accounts of librarians being prone to ulcers and insomnia from trying to find a perfect shelf location for every book (Chan & Hodges 2000:114, Dawkins 1991; cited in Maltby & Marcella 2000:25). This all seemed to evoke the problems I was having with ordering my material, (not to mention ordering my cyclists). I learned that it is far better to choose and let go and take a stand to convey what you think you have learned. This was by far the hardest step: I struggled to resist the compulsion to list and link and realised a choice must be made. In the end, to say something, a position must be taken.

b. Overview of the Model.

Each stage of the Model consists of two related parts, as shown in the diagram in → FIGURE 8. The first part of each stage derives (proposes) a way to talk (a language) about existing ‘puzzling’ projects, such as those we considered in previous chapters, such as *Lipstick*, *Periodic Breakfast Table* and *Newsmap*. The second part of each stage pertains to how this language can be *adopted* and deployed to create an original project. This project, *BikeWork*, is iteratively developed in three stages. Before going on to provide a background for *BikeWork*, I would like to clarify the terms Collecting, Ordering and Positioning, and elaborate a little on the three stages proposed in the Model.

Clearly Collecting, Ordering and Positioning are common terms that have been adopted to serve a much more specific purpose in the context of this research, (as is signaled by capitals). From each strategy or process (verb), a type of project or outcome (noun) has been derived, also signaled by capitals: Collection, Order or Position. It is worth noting that these labels have been deliberately selected because they are not specifically visual, and are therefore flexible and adaptive. Using non-visual terms and associating these projects with non-visual disciplines is not intended to demote the visual as a superficial decorative approach. Instead these non-visual terms lend themselves extremely well to describe categories of visual projects, and at the same time, these terms can work as adept feelers into diverse literature and discourses. Thus I am not actually inventing these three types of

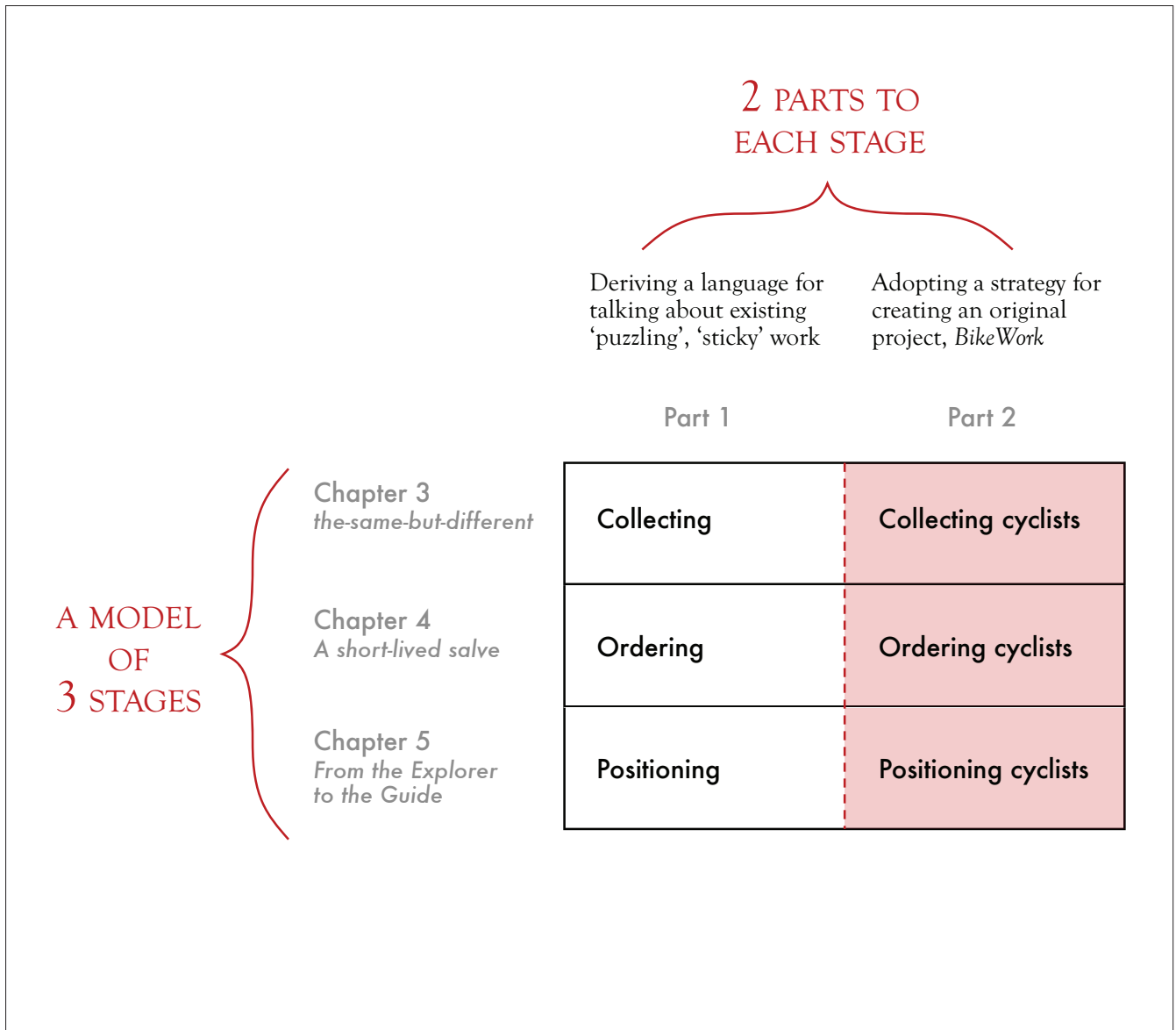


Figure 8. Structure of the Model proposed in Chapters 3–5.

projects or processes, but formalising already existing concepts: Collecting Ordering and Positioning were observable 'out there' in diverse literature which was productively brought to bear on puzzling projects.

Briefly, *Collecting* encapsulates the initial exploratory and creative process of noticing and accumulating, and emphasises the counter-intuitively productive deployment of constraints. At the beginning of many research or design projects, is a huge, open process of hoarding: that's not what I mean by Collecting. Instead the Collecting I conceive of is a way to approach and begin to deal with that daunting process. Collecting deals with the widening process, taking the world with wide embrace, being open to possibility and full of potential – which is frankly overwhelming – so in fact Collecting provides a way to approach enormous possibilities, by not attempting to gather them all.

Ordering is the rather more fraught process of getting everything organised, determining the conditions for 'like' and 'same', and then sorting 'like' from 'unlike', 'same' from 'different', and having no 'not sure' left over. Ordering is an indulgence in control and pursues the unlikely satisfaction of finding a perfectly logical, suitable, indisputable place for everything, but despite not achieving this, Ordering ascertains finer distinctions: while Collecting finds trails of similarity in the enormity of the world, Ordering finds and articulates patterns of distinction in the similarity of the collection.

Finally, *Positioning* is a time for making some even harder decisions in order to commit and put forward a restricted, but patent, point of view. Positioning is far more desirable and practical than indiscriminate accumulating and endless rearranging when you just want to know the way home. Positioning is a commitment rarely made, and noticeably less examples are available, and so there is a significant change in gear in chapter five, following the realisation of the limitations of Collecting and Ordering. Indeed, Positioning is more of a recommendation for future potential, rather than a typology of existing work: my research makes the firm but gentle suggestion that achieving a Position could be a preferred direction for Collectors and Orderers. A Collection is valuable as a Collection, but cannot be mistaken for a Position. However, as we shall see, it turns out that Visual Communication Designers may well have a particular propensity for putting forward a Position.

c. Contextualising *BikeWork*.

The purpose of BikeWork is to demonstrate and reflect on the experience of carrying out each stage of the Model.

The primary goal of *BikeWork* is to explore a creative, investigative, visual strategy. As a model, the sequential strategies of Collecting, Ordering and Positioning can be thought of as a lens through which to view, or a conduit through which to 'run', some external issue. (In fact we can think of the Model as akin to a recipe that outlines the method for the preparation of a meal, but does not specify the ingredients.) Thus I could have 'applied' my model to any number of matters, (used any number of ingredients), but given my personal interest in cycling, in *BikeWork* I iteratively Collect, Order and Position cyclists.

In conducting this project, it is not my purpose to achieve some kind of persuasive, comprehensive argument about cycling, nor to produce a concrete contribution to cycle advocacy, such as a resolved campaign that can be implemented.³⁸ My chief intention is to creatively, visually investigate a subject, in order to see what insights seem to arise from using the Model and observe what kinds of things seem to become apparent through this 'sticky' approach. In other words, the inclusion of this investigation into cycling in this thesis, is strictly on the grounds that it is an original exercise in applying and reflecting on the Model.

Why I selected this topic: my cycling related activities, cycling as a polarising issue, and the image / visibility of cycling.

At the outset I will disclose that I cycle. I commute daily by bicycle and my bicycle features a 'one less car' and a 'one less 4WD' sticker. I originally started cycling because it cost nothing and helped me to quit smoking; and I continue to cycle because I find the movement, freedom and outdoors of cycling calming and up-lifting.

In the past, I have taken quite an active interest in various cycling promotion activities in Sydney. *BikeWork* – while above all a project conducted to explore Collecting, Ordering and Positioning – is conducted against the backdrop of the development of a 'Bike Plan' at my local council (local government), and that for a time I served the voluntary role of interested 'resident' and member of the local 'Bicycle User Group' on that council's Bike Plan Action Group. A Bike Plan is a spearhead, aspirational, guideline document intended to encourage more cycling in the region in recognition of the benefits for a community when the amount of

³⁸ Cycling advocacy and promotion is a specialised, involved and complex field, concerned with improving conditions for cycling and encouraging more people to cycle, in recognition of the numerous benefits both for the individual and the community. An excellent cycling advocacy resource is the Danish *Collection of Cycle Concepts: Catalogue of Ideas* (Road Directorate 2000).

cycling is increased. It is relevant to the present discussion to explain in a little more detail how a Bike Plan is developed.

Bike Plans are produced by local councils in consultation with various experts such as traffic engineers and public health researchers. Indeed, it is conventional for a Bike Plan to cover two main areas incorporating two different but complementary perspectives. In the first place Bike Plans detail 'bike friendly' *infrastructure* and propose facilities from an engineering perspective (e.g. bike lanes, bike route signage, bike parking, bike friendly roundabouts and traffic signalling). In the second place, Bike Plans feature a consideration of *behaviour*, identifying target markets and how to promote cycling as an activity (e.g. coordinating initiatives in schools, holding bike festivals, local newspaper advertising campaigns, producing bike maps of the area).

As a committee member for the development of this council's Bike Plan, I was very interested to note that the original brief put together by council when tendering for consultants, expressed the desire that the Bike Plan would create a 'celebratory culture of cycling' (Leichhardt Municipal Council 2005:2). However, after the consultant was appointed and as I reviewed the subsequent drafts of the Bike Plan distributed to committee members for comment, it began to dawn on me that somehow this Bike Plan was 'sucking' the cycling out of cycling. Despite being a document wholly committed to facilitating and encouraging cycling, I had no sense of the verve of cycling. I began to wonder if what was missing was some 'stickiness'? Could this be a scenario where a creative, investigative, visual approach could help? Could a fragmentary, idiosyncratic approach begin to restore the cycling – the joy and people and freedom of cycling (specified by the brief, but missing in engineering drawings and focus group tables) – in cycling?

In speculating about this, my interest is not to challenge or replace conventional methods, but instead to consider the Model as an approach that potentially could provide access to *different* kinds of information, which may be useful to augment or sit alongside established approaches. In other words, although *BikeWork* is not interested in actually fulfilling council's brief, the possibility that such a 'sticky' approach could collaborate with and complement established approaches strikes me as a promising area for future research.

With this broader context in mind, I will now return to the specific decision to Collect, Order and Position cyclists. Despite my own enthusiasm and activities in cycling promotion, I am also aware that, as one cycling journalist put it, urban commuter 'cycling...polarises the

community. It's a love or hate thing' (Bone 2007:40).³⁹ The differing views are well summarised by another cycling journalist:

'The bicycle, depending on your point of view, either offers boundless and exhilarating opportunities for the sheer thrill of exercise and movement – or an infernal contraption designed to infuriate those who reckon the motorcar is the only way to go' (Coombs 2005:31).

It may well be the case that cyclists compared to motorists cause less road fatalities, are fitter, cost the health system less, cause no damage to tax-payer-funded road surfaces, and do not produce emissions (Harper 2004), and that providing no alternative to the private car will promote 'endless sprawl' and 'be one sure way to destroy the liveability of Sydney' (Pucher & Bauman 2005). However, and notwithstanding my own enthusiasm for cycling and activities in cycling advocacy, when I hear cyclists explain that they 'feel sorry' for motorists who spent their money on a car that gets stuck in traffic jams and has to be filled up with petrol (*Bicycle Heaven* 2006), or assert that cyclists are 'a whole lot smarter, fitter and better looking than the poor saps stuck in their cars' (Coombs 2005:31), I can also begin to sympathise with the more unkind characterisations of cyclists as 'pious' (Devine 2006) and 'sanctimonious' (Lewis 2004) portrayed in the media.

This problem does not appear to be unique to Sydney or even Australia: apparently even in Denmark 'cyclists are also perceived as "holier-than-thou" types who believe that they have the right to ignore the rules of the road' (Road Directorate 2000:17). In fact, one study identified cyclists 'as the most irritating group of road users' (Road Directorate 2000:17). Interestingly enough the Danish Road Directorate's 'Collection of Cycling Concepts' report specifically identifies that '*perceptions* attached to cycling...play a part in preventing cycling from becoming more wide-spread' (Road Directorate 2000:17, my emphasis). This is particularly relevant to my project as creative, *visual* investigation. Thus I will consider two additional problems associated with cycling, identified by the academic, columnist and cyclist Elspeth Probyn, that can be understood as 'image' problems: 'humiliation' and 'fear' (Probyn 2006:24).

With regard to 'humiliation', just as Probyn asserts that young people worry about their 'dignity' and 'maturity' as cyclists (Probyn 2006:24), elsewhere it is noted that '[perspiration] and the sloppy, slightly grubby clothes do not project a streamlined, business-like image signalling success' (Road Directorate 2000:16). While the 'car can be a status symbol', by

³⁹ In fact another way that I have characterised the impetus behind this project is to ask, 'why do people glaze over when I mention that I'm a cyclist?'

contrast the 'bicycle does not enter into people's picture of a future, richer world or into their dreams of winning the National Lottery' (Road Directorate 2000:17).

Meanwhile, with regard to the 'fear' associated with cycling, Probyn relates that '[people] comment on how brave or crazy I am to brave the city traffic' (Probyn 2006:24). In fact, in view of the statistics, the 'danger' attributed to cycling can also be understood in part as a perceptual problem. The '20:1 benefit-risk ratio of cycling' explains that people are far more likely to die from *not* cycling (because of the associated health benefits) than *from* cycling (British Medical Association 1992; cited by Rissel 2006:19). (A fuller discussion of this, and the related statistical 'conundrum' of 'safety in numbers', which leads to the controversial conclusion that compulsory helmet regulation actually makes cycling less safe, are included in Appendix *Item 3*.)

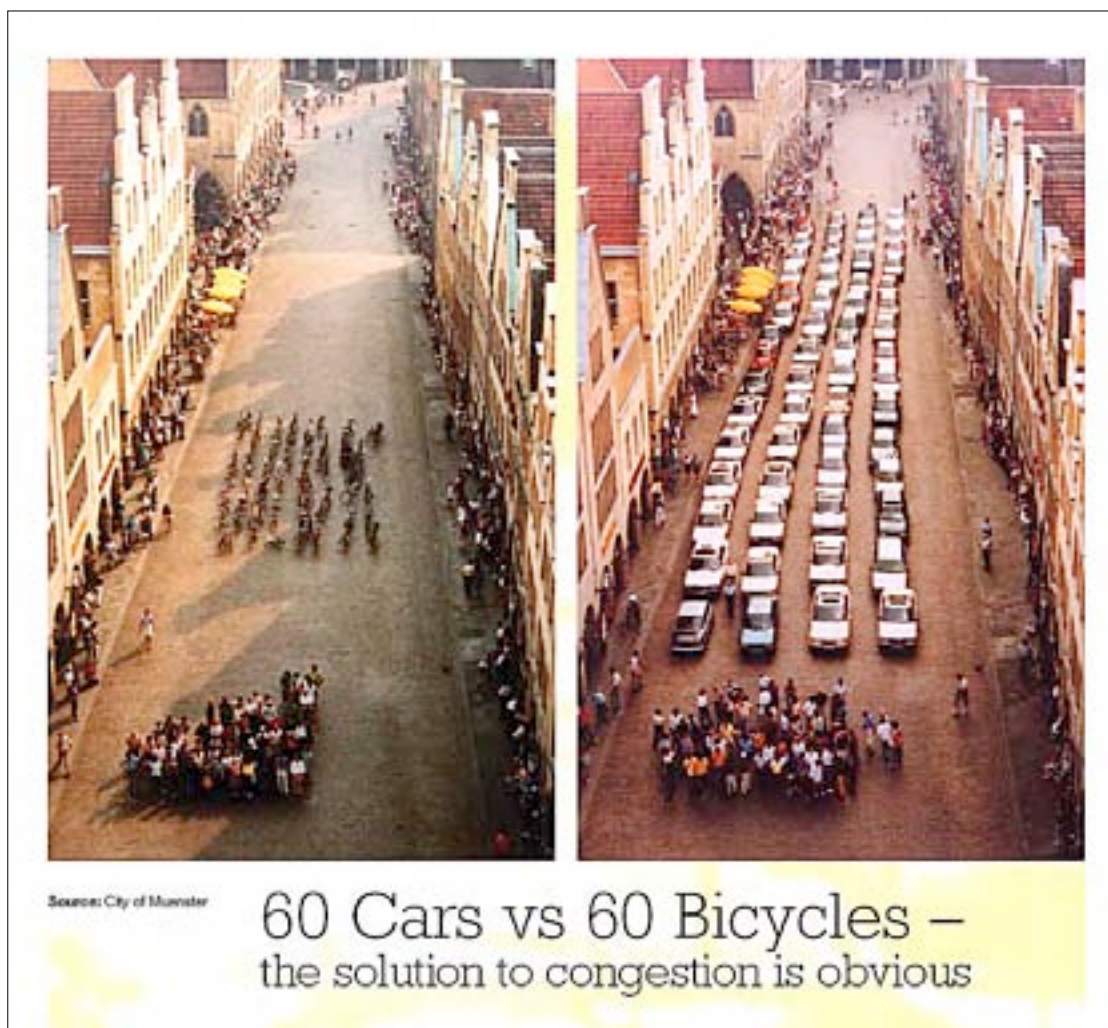


Image 7. 60 Cars vs 60 Bicycles (City of Münster; reproduced in Cycling Promotion Fund 2007:8)

So at the same time that I was thinking about how a ‘celebratory culture of cycling’ could be created (that the council brief had called for), I started to wonder if there is a kind of ‘visibility’ problem related to cycling. In attempting to make ‘obvious’ that more cycling is ‘the solution to [traffic] congestion’ (Cycling Promotion Fund 2007:8), the photograph shown in ←IMAGE 7 suggests the kind of ‘(in)visibility’ problem that I am putting forward. Are the cyclists who acquire the most attention, who ‘preach’ in letters to the newspaper or ignore red traffic light signals at busy pedestrian intersections, in fact a minority? Do the majority of cyclists remain ‘invisible’ because they take the backstreets home each night bothering no one?

In summary, in conducting *BikeWork* I am interested to explore the image of cyclists, with the unmet aspiration of council for a ‘celebratory culture’ of cycling in the back of my mind. I have conducted and discussed *BikeWork* as a *designer*, not as a cycling advocate, nor as a social researcher. And yet, even as a designer, my goal is not to produce a campaign (although perhaps this approach, alongside social research, may be useful as the rationale or basis for informing one). Instead, as a designer carrying out this project, my intention is to explore a strategy: to ‘see what happens’ when I Collect, Order and Position cyclists. Ultimately *BikeWork* is an experiment, and an experiment conducted not to find out something about cyclists, but to find out more about the Model.

The discussion describing and reflecting on the deployment of the Model has been separated into three components – Collecting cyclists, Ordering cyclists, and Positioning cyclists – which are located in their respective chapters. Thus *BikeWork* spans Chapters 3, 4, and 5 (as shown in the diagram at the beginning of this Preamble, FIGURE 8). Each stage in the discussion draws in additional resources relevant to and useful for reflecting on the experience and efficacy of using that particular strategy. To develop the discussion surrounding *Collecting* cyclists, I will introduce the significance of a ‘ludic’ component in design related research espoused by Bill Gaver (1999, 2004) most noted for his work with ‘cultural probes’, which informs my own playful approach to Collecting ‘fragments’ about cyclists. To develop the discussion surrounding *Ordering* cyclists I draw in Becker’s (1979) shrewd contemplations concerning the problems and advantages of a visual approach in social research. Finally, my reflection on *Positioning* cyclists will outline some of the more absurd stereotypes about cyclists that can be traced in mainstream press and establish these preconceptions as a particular point of departure for my own position.

CHAPTER 3.

COLLECTING: 'THE-SAME-BUT-DIFFERENT'

STAGE ONE

In Part 1, we address a series of questions that a group of puzzling projects seem to provoke: for example, how can we talk about the prevalence of seriality in *Lipstick* (and others)? By this unpacking, we will derive a series of expressions that describe the creative, investigative, visual strategy of Collecting: these include 'the-same-but-different' and 'all falls into line'.

Subsequently, in Part 2, I experiment with adopting these principles as guidelines / instructions for creating an original work, *BikeWork*. I conclude by reflecting on the experience of carrying out these strategies, and comment on advantages as well as frustrations.

Part 1.

Deriving a language for wrapping around projects like *Lipstick*.

Section 1. Establishing a trend: *Lipstick* is not alone

Here I show how *Lipstick* is not an isolated, curious, anomalous case, but in fact has a remarkable correspondence with numerous other contemporary creative projects. While Greene was carefully photographing the used lipsticks gathered from her friends, Buchanan-Smith was enlarging fullstops (periods), Siegel kept noticing books with orange covers, Weed kept seeing crosses in the desert; and McMullen was inventorying references to *The Catcher in the Rye* in fiction books at Barnes and Noble. Elsewhere, Beard & Waller were also pulling down books, but this time from the shelves of the Royal College of Art Library in London, and inventorying the ephemera used as impromptu bookmarks found in the pages. Shortly I will fully introduce these five other works created by designers and/or published in design publications, that I have grouped with *Lipstick*, for developing my argument about Visual Constraints. But first, let's make some observations about how these kinds of projects initially 'chimed'.

In particular I want to emphasise that these projects correspond not only by a formal or aesthetic similarity, but by a similarity in terms of the strategy or process, (or method, if you will,) carried out in producing such work. Some bear a stunning visual similarity to *Lipstick* as they also feature the repetition of almost identical forms; others have a very similar sense of getting out and exploring some aspect of the world: from a group of your female companions to your own favourite books; from the London Royal College of Art library to the Sonoran desert in Arizona.

Like *Lipstick*, we can understand each of these projects in terms of Chapter 2: homeless, puzzling, ambiguous, creative, investigative, visual projects. The result of design expertise and industriousness, but yet without commercial purpose. A systematic outward-looking approach to some everyday phenomena, but yet without a theoretical framework. In large part the puzzling ambiguity can be attributed to the incongruous juxtaposition of what we

might call 'high and low': a trivial aspect (the scraps of paper used as impromptu bookmarks, the final fullstops), to a matter of complexity and significance (the RCA library; James Joyce etc.) and yet a terribly forensic approach is taken to the trivial topic; systematic inventorying of scraps of paper; microscopic enlargements of black dots.

Even when we take the view that not all visual design must serve a commercial purpose to be valuable, but is adept at a critical or informative function, it is very hard to overlook the banality or triviality indeed the ephemerality of the subject of the projects: it would be difficult to sustain the case that this work is urgent or weighty. And yet despite this they have been produced by skilled designers, and published; although not in peer-reviewed journals, these do appear in peer-esteemed magazines and anthologies.⁴⁰

With these initial observations in mind, let's now take a better look at these five projects, and see what generalisations we can make of them as a group, before considering some possible explanations.

a. Introducing five projects that are like *Lipstick*.

Why Are All These Books Orange? (Siegel 2004:42-45) (→ IMAGE 8) simply features the images of four book covers, front and back, that are as the title suggests, orange. It is accompanied by the following explanation, provided by the creator, Dmitri Siegel.

'As I drift through the Philosophy section of a used bookstore, I scan the shelves for a certain strain of books. They have ambitious titles like 'THE MEANING OF CONTEMPORARY REALISM and DIALECTIC OF ENLIGHTENMENT. My interest in reading them is marginal, but I'm fascinated by their uniform style' (Siegel 2004:42).

⁴⁰ This curious work is prevalent, published and, it seems, reasonably popular.

Both *Why Are All These Books Orange?* and *A Coming of Age Reading Checklist* were published in *Dot Dot Dot* (Autumn 2004:42-45;19-24). *Dot Dot Dot* is a New York-based magazine 'deeply concerned with art-design-music-language-literature-architecture', although along the continuum of design writing we could safely say *Dot Dot Dot* is at the hip and 'indy' margins. McMullen is a designer/writer and Siegel a designer, both based in New York (according to the credits in *Dot Dot Dot*).

The last periods of some books (magnified 4266%) was a 'special commission' published in Gerber's *All Messed Up* (2004:22). Buchanan-Smith is the instigator and editor of *Speck* (Buchanan-Smith 2001), and has been an art director at the New York Times (Buchanan-Smith:undated).

The bicycle, the cross, and the desert was first presented at the *5th European Academy of Design Conference* (Weed 2003) and subsequently published in *Design Issues* (Weed 2005:64-70). Weed himself is a graphic designer and graphic design educator (College of Design Arizona State University 2007).

Sophie Beard and Allyson Waller are both graduates of the Royal College of Art Masters in Communication Arts (School of Communications 2002), and *The Readers Before Us* was submitted as their final major project for the degree. The work also appeared in Gerber's *All Messed Up* (2004).



Image 8. Why Are All These Books Orange? (Siegel 2004:42-45)

The 'relentless orangeness' of these books would be particularly unremarkable if they were part of a publisher's series, (in the same way all 'Dummies' guides are a distinctive raincoat yellow). Therefore it is worth noting that in fact these books are published by disparate publishers: MIT, Cambridge University; Continuum; and a fourth (unidentifiable) British publisher.

The Last Periods of Some Books (magnified 4266%) (Buchanan-Smith 2003 [2002])

(→IMAGE 9) features twelve more or less round black blobs, which we learn from the title are the enlarged fullstops of a series of books. To create this work, Buchanan-Smith magnified the full stops of the last sentence of his favourite books. Although we might assume that all full-stops are perfectly round, black circles, Buchanan-Smith's work shows us that they are full of variation, interest and flaws (Gerber 2003:23). (Buchanan-Smith's work is the subject of further examination in later discussions.)

The Bicycle, Cross, and Desert (Weed 2005) (→IMAGE 10) features seven black and white photographic images of cross shapes, which we presume, based on the title of the work,

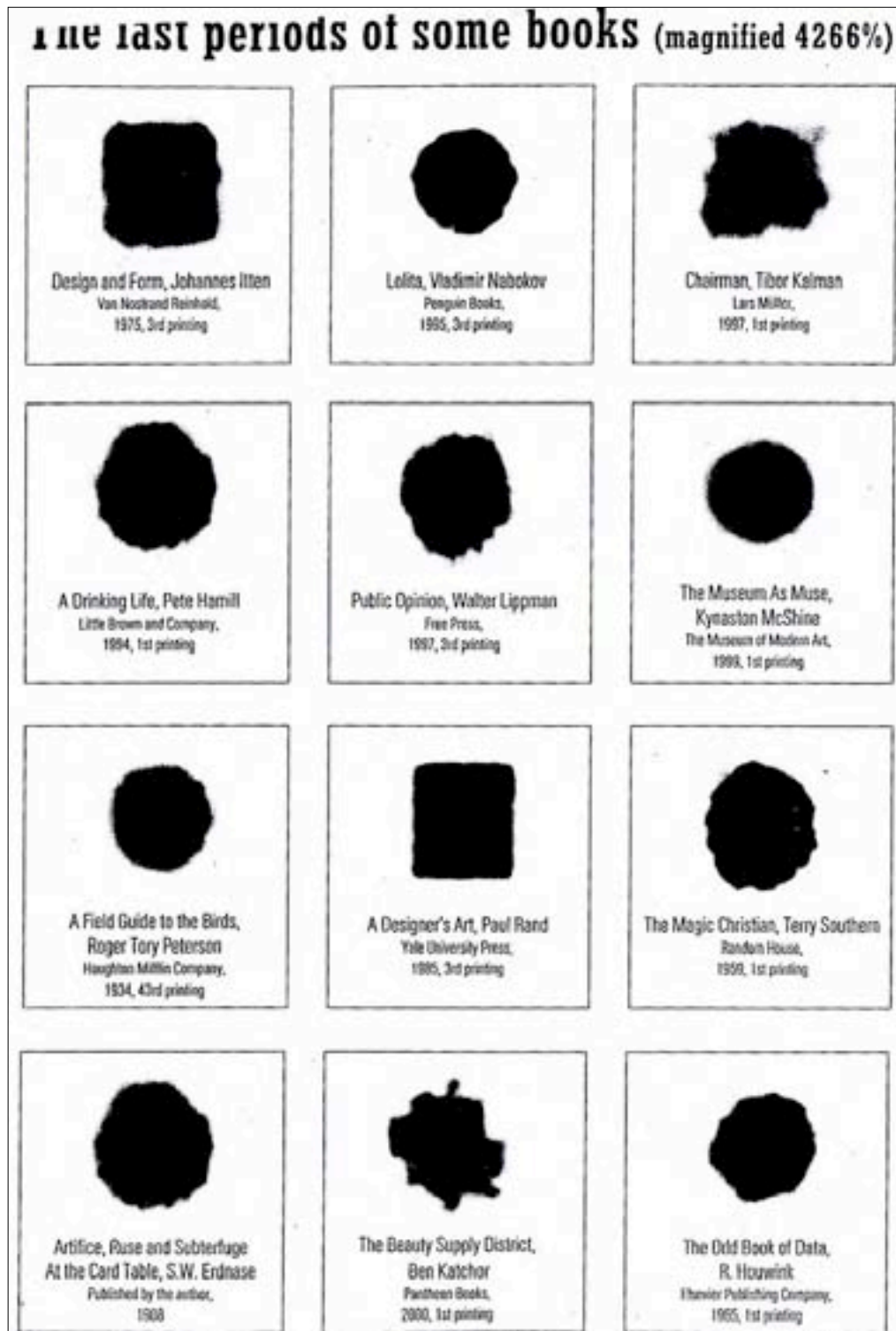


Image 9. *The Last Periods of Some Books (magnified 4266%)* (Buchanan-Smith 2003 [2002])



Image 10. *The Bicycle, Cross, and Desert* (Weed 2005)

have been taken in the desert. These cross shapes are not actual structures but have been formed impromptu by various objects and views: for example while a *Cast Iron Irrigation Valve* is a circle from above, when viewed from the side the handle and the shaft of the valve intersect and form a cross shape. In the accompanying statement, the creator Andrew Weed relates the clarifying, meditative experience that results from the culmination of cycling, being in a desert, and photography: 'The bicycle does for my mind what the camera does for the photograph. It provides a frame of reference, a lens, a process of looking that determines what is seen' (Weed 2005:63), and by this focused kind of seeing he began to notice the form of the cross.

'Questions arose: Is it an accident that a post is the same weight as the mark on its sign? Do telephone poles need horizontal bars? Fascinated with the proportion of the cross, I made these photographs, hoping to show the beauty I find in simple common objects' (Weed 2005:63).

He explains that in order for the objects in the desert to be 'read as signs, it was critical to align the horizon with the centre of the object'. Additionally he deliberately restricted his images to black and white in order to emphasise the equivalent dimensions across the series of images. He goes into considerable detail describing how the images were created, documenting what time, where exactly, the height of the camera from the ground, the length of exposure, the proportion of the horizontal component of the cross, and the compositional ratio (Weed 2003: 20-21).

A Coming Of Age Reading Checklist (McMullen 2004:19-24) (→ IMAGE 11) draws on the common practice whereby in order to promote a new book, publishers will often defer to the reputation of a previous book. It consists of sixty identical white bookmark shaped figures, marching along in three rows across five pages. Each features a repeated typographic simple hierarchy, however the details change. The maker, Brian McMullen explains:

'Blurbs of praise on the covers of books often use comparisons: "If you liked that book, you'll love this book." "If you loved that character, you'll adore this character." In college, I began to notice one particular book - *The Catcher in the Rye* - appearing in blurbs everywhere. ... I wanted to test my observation. ... I spent three days in the Literature section of a Barnes & Noble bookstore northwest of Chicago. I pulled every book from its shelf and recorded all blurb references to 1. *The Catcher in the Rye*; 2. Holden Caulfield, the book's archetypical disaffected teen narrator; and 3. author J. D. Salinger' (McMullen 2004:24).

Each bookmark features the author's name, the title of the book (in the largest sized type), the excerpt of the blurb with reference to *The Catcher in the Rye*, and the source of the



Image 11. A Coming Of Age Reading Checklist (McMullen 2004:19–24) (excerpt spread: pages 20–21)

reference. For example, the *Kansas City Star* declares Melissa Bank's *The Girls' Guide to Hunting and Fishing* is 'A coming of age story that is one of the best since *Catcher in the Rye*.' Meanwhile, *The New York Times Book Review* hails Patrick McCabe's *Butcher Boy* as 'Stunning...part Huck Finn, part Holden Caulfield, part Hannibal Lecter.' Finally, the *Editorial Copy* speculates with regard to his book *Sorrow Floats*, that Tim Sandlin is the J. D. Salinger of Wyoming.

The Readers Before Us (Waller & Beard 2002) (→ IMAGE 12) is a smallish white book set in fine black type and approximately sixty pages long (limited edition run of 300) that features a list of the ephemera found between the pages of the books shelved at the RCA library (from 001 POP to 779.0924 NAC).⁴¹ The creators Sophie Beard and Allyson Waller meticulously

⁴¹ *The Readers Before Us* (Waller & Beard 2002) featured in the anthology of design work edited by Anna Gerber, *All Messed Up: Unpredictable Graphics* (Gerber 2004:100–101). However, for my first encounter I was fortunate enough to see the original work at the 2002 RCA MA graduating show in London. Finding it the stand-out work, I bought a limited edition (mine is 153/300). I was amused that this forensic kind of thinking (albeit absurdly applied to scraps of paper) – especially contrasted with the overt creativity of

catalogued each item of ephemera as it was discovered, documenting the book's DDC number and bibliographic details, the pages it was found between, and the item recorded by a short descriptive text. In the preface, Frank Cartledge muses,

'Do you merely discard the ephemera left behind by others? Or carefully replace it in the romantic belief that they will one day return? Do you search for the significance of an object placed within the book – its location signifying some content you yourself have failed to see?' (Frank Cartledge cited in Waller & Beard 2002:unpaged)

A black and white photocopy of a fish found in *Japanese Detail: Traditional Table and Kitchen Ware* seems considerably more congruent than two 6"x4" colour photographs of a girl kissing a dog on a black leather sofa found in Manzini's *The Material of Invention*, which presents a rather curious association. It's almost too obvious that a tobacco advertisement was found book-marking pages 358/9 in Chomsky's *Necessary Illusions: Thought Control in Demographic Societies*. But how do we make sense of a scrap with handwriting stating simply 'please leave' found between pages 56/7 of *The Tower and the Bridge: The New Art of Structural Engineering*?

branding and digital media projects also exhibited – was passed off as visual communication design at all. Therefore I was thrilled to see *The Readers Before Us* appear in the kind of large, glossy anthology that designers in a studio or students in a bookshop flick through for ideas. Although, in fact it is difficult to capture the joy of the choreographed serendipity of *The Readers Before Us* only in the spread of Gerber's book. Let me see if I can convey this here briefly.

I had noticed before I bought my copy the tall thing spike that suspended presumably held the various ephemera found in the library. But I had not noticed a large white poster covered in scrawls of small messages, and dated autographs. As I handed over my £18, Allyson or perhaps it was Sophie pulled the top scrap up and off the spike and inserted it in my newly purchased copy of their book, before inviting me to sign the poster. And so in the first place this ephemera that they had so systematically and forensically removed from the library, was now somewhat wantonly being redistributed into the universe by being inserted in the pages of their sold books: the three hundred items found, now dispersed in the three hundred copies printed and sold.

After I signed the poster, she flicked on the switch of the light box that the poster, it was now apparent, was mounted upon. Illuminated, the image printed on the reverse side of the poster was revealed: now visible was a large photograph of the pile of scraps on well-worn floorboards (presumably of the library?) She explained that this poster (by demonstration slipping off the jacket cover on my own copy) folded down to be the cover of the book. And so each book did include a visual sense of the ephemera, which I had vaguely worried was sorely lacking from the list. The particular poster that I signed was to be the cover of the final 300/300 copy, which was to be held by the (very same) Royal College of Art Library, shelved at 702.81 BEA (Waller 2003). According to the schedules (Dewey 1996) 702 is *Miscellany of fine and decorative arts*, and 702.81 specifically refers to those using *Mixed media and composites*.) And so in another way the ephemera were finally returned to the library.

Thus a large part of the pleasure and interest in *The Readers Before Us* is the circularity of the experiment and the elements of chance: accepting what chance may bring (what is found, how many items, etc); reigning in this uncertainty and diversity presenting the items in lists of fine black type that march down each spread, moreover according to the indisputable sequence of their Dewey Decimal Classification; and finally intervening with chance - wantonly redistributing the items.



Image 12. *The Readers Before Us* (Waller & Beard 2002).

above – book spread with an original scrap (the one I was bestowed).
below – postcard showing the presentation of the scraps (when exhibited).

b. Preliminary generalisations.

So now let's understand these projects in light of each other: what preliminary generalisations can we make about them as a group?

The most striking feature is that each project features *serial* items: whether orange books, or scraps of paper, or fullstops. Without exception, the projects do not involve just one or even two instances, but *gather* and assemble a collection: four orange books, ten lipsticks, twelve fullstops, forty-four references to *The Catcher in the Rye*, three-hundred scraps of paper.

The second common characteristic among these projects, especially when we review the creators' comments, is that each of these projects is a focused investigation into some subject occurring within the creator's surrounds. Each project has arisen by some outward-looking exploration or searching in a delimited context: scanning for the orange books in used book stores, noticing cross shapes in the desert, searching only for references to catcher in the rye at Barnes and Noble, shaking out the impromptu book marks at the RCA library. And yet this does not mean that they are neutral objective views: instead they are about a particular way of seeing, an obscure idiosyncratic noticing. And then again, their strategies could be easily described to and subsequently carried out by anyone: just look at that final fullstop in your favourite books. These projects are the result of carrying out and adhering to straightforward rules for creating. These ambiguities – projects that are distinctive, but not unrepeatable, investigative yet creative – are compelling.

c. Considering the possibility of a very straightforward explanation.

By characterising these projects as an outward-looking exploratory process, involving Collecting or gathering visual material, carried out by designers, we invite a very obvious explanation. Perhaps all these works are manifestations of the well known tendency of designers to collect all manner of things as potential ideas for inspiration. There are several instances in recent design literature that document this professional propensity.

This is possibly best characterised by the Pentagram designer Peter Mayle when he speculated that all good designers 'seem to be equipped with a subconscious sponge, capable of absorbing a wide and unrelated range of stimuli to be tucked away at the back of the mind for future use. A builder's yard or a factory are as likely to provide a fruitful scrap of inspiration as a book on Islamic calligraphy or a visit to the Louvre' (Peter Mayle 1986; cited in Fletcher 2001:422-3).

The fashion designer Paul Smith (2001) entitled his book in a similar spirit, *You can find inspiration in everything* (*and if you can't, look again). Demonstrating the point, this book includes a large pink poster insert identified as 'My personal possessions', which lists the disparate and various objects Smith keeps at his various studios. These number in the thousands (the poster appears to be set in *half* point type), and includes anything from rubber chickens to fashion catalogues.

When the US based graphic design trade magazine, *How*, polled its online forum members, it found that 83% collect at least one thing 'from thimbles to teapots' (Whitman 2007). The article, which showcases the collections of five professional designers, theorises that '[designers] seem to be predisposed to Collecting objects, likely because of their keen eye for details and deep appreciation of aesthetics. Collecting keeps creatives engaged, sharp and inspired....their private collections fuel their creativity' (Whitman 2007).

While Whitman's article features *object*-based collections, the Dutch entrepreneurial academic, Ianus Keller (2005) has completed research that deals more specifically with the collections of visual materials that professional designers tend to keep. In particular his research establishes how these collections span real world physical material – postcards, books, magazines, drawings, as well as virtual digital material - from the internet, digital files, digital photographs.

Keller cites previous research which explains that designers use this supply of visual material for 'moodboards and collages for presentation to their clients' (Kolli, Pasman & Hennessey 1993; cited in Keller 2005:23-24). Others explained that such collections were maintained by designers as a 'source for inspiration' (Eckert & Stacey 2000; cited in Keller 2005:23-24) and to promote serendipity and lateral thinking (Kelley & Littman 2001; cited in Keller 2005:24).

Having observed how unmanageable these collections can become for professional designers, he developed new media technology – a digital visualising 'Cabinet' – that designers can use in the workplace to pull their traversing collections together (Keller 2005:22,121).

In any event, Collecting appears to be a striking trend among professional designers: whether undertaken very deliberately prefatory to a particular brief, or carried out almost subconsciously or involuntarily. We might say that it is an urge apparently central, if not inherent, to the occupation.

d. The counter–argument doesn't hold, so questions about this work persist.

The tendency of professional designers to collect for inspiration goes some way in explaining the sense of *exploration* on one hand (going out and exploring and being open to all manner of things) and the drive to *accrue* on the other (gathering and building a kind of reservoir or bank of things,) that we have observed in projects such as *Why are all these books orange?*

But this explanation does not attend to a couple of the most striking features of these projects. In the first place, this sense of being open to anything from rubber chickens to the *Louvre* to teapots, doesn't actually evoke the kind of deliberate looking that has taken place in producing these projects. Projects such as *Why are all these books orange?* are not characterised by a sense of intuitive, impulsive, casting about, but are rather methodical, restricted, deliberate explorations.

In the second place, 'the Collecting for inspiration' explanation is too blunt a tool for addressing the most distinctive feature of this kind of work – the stunning repetition and visual seriality. The propensity of designers to gather for inspiration goes some way in explaining why you might be interested in and accrue say one or two antiquated orange books, one or two tantalizingly shaped lipstick or a couple of curious scraps of paper. But it does not really attend to why you proceed to accumulating *four* orange books, *ten* oddly shaped lipsticks or *three hundred* scraps of paper. These are extraordinarily tight themes, featuring a series of *exactly* the same kind of thing. Buchanan-Smith does not just enlarge punctuation generally, but just the final fullstops; Weed does not just look at more or less cross shaped views in the desert, but crosses of exactly the same kind of proportions.

Furthermore, this kind of explanation does not attend to the careful presentation by McMullen, Greene, and Beard and Waller of their collections. These projects do not show a row of books, a handful of lipsticks and a pile of scraps (that might for example appear on Smith's inventory of possessions, or fodder for Keller's 'Cabinet'), but these are a designed visual (word and image) presentation: a series of detailed enlarged photographs; clean typographically set out inventory of scraps of paper; juxtaposed front and rear images of orange books.

So, if the designer's tendency to gather for inspiration doesn't suffice to attend to the more remarkable features of the projects – the seriality, the restrictedness –what could be?

e. The structure for the discussion where we unpack this trend.

Questions about form, questions about process

So far we have established some provisional answers. They are creative investigative and visual; ambiguous, expert and trivial; they could also be about how designers are open to all manner of things, as well as about how designers tend to gather a reservoir of things for inspiration. However, particularly when we bring these projects that are like *Lipstick* together, we can see that they share some significant features that have thus far not been attended to, in particular, the striking seriality, and the restricted way of seeing and creating that this seriality seems to convey.

So the similarity among these projects poses two sets of questions. The first set of questions concerns unpacking the *formal* similarity: these projects have a visual correspondence. Thus, the first goal of deriving a language for these projects concerns unpacking the form of the project outcome. Then, since thinking about project outcomes naturally leads to questions about the *processes* undertaken to achieve such outcomes, unpacking the procedural similarities of these projects is the concern of the second set of questions.

(Some clarification is useful here. I am not concerned to uncover the *actual* processes undertaken by Weed, Buchanan-Smith and others: my intention is not to spell out 'how did they do it'. Instead, in view of my purpose to derive a language that attends to such projects, I theorise and interpret the processes undertaken, as evidenced in the form of the projects and in the statements provided by the creators.)

A focus on The last periods of some books (magnified by 4266%)

In addition to the formal analysis and review of the creators' statements mentioned above, in order to explore these questions, I drew on disparate literature and additional creative projects, which resonated with the projects in question bringing about particular illumination and useful insight. To focus the assimilation of such diverse material, I will iteratively examine one particular project, *The last periods of some books (magnified by 4266%)*. As we will make several 'passes' of this project, we will turn it over and look at it from a few different directions. We will consider how this project is, patently, about the final fullstops of some books; but also distils a diverse series of books and authors down to their ultimate keystroke. In addition we will pay particular attention to the practical task of how this project was carried out; envisaging its method, interpreting the kind of process Buchanan-Smith carried out as evidence in the form, and the experience of such an approach.

Section 2. Questions of *form*: talking about that stunning seriality.

At the first turn, to state the blindingly obvious, *The Last Periods of Some Books* (magnified by 4266%) (Buchanan-Smith 2003[2002]) (henceforth referred to as *The Last Periods*) is about fullstops. But I want to draw attention to the fact that we come to know something very specific about fullstops. As a result of viewing this work we come to appreciate the surprising variety of shapes that fullstops come in. By this work Buchanan-Smith dispels the preconception that all fullstops are 'just mere dots' as we might have presumed (Buchanan-Smith 2007). Instead of being all the same little round black circles, it turns out that fullstops can be rectangular and circular; some are more or less exact squares or circles; others oval-shaped or rectangular; and yet others are frankly irregularly edged blobs.⁴²

Clearly, appreciating the diversity in the shapes of fullstops is not a profound or ground-breaking insight, but here our chief concern is the visual form. Because it occurs to me that all that we come to know and notice – the different shapes, indeed what Buchanan-Smith refers to as each fullstop's 'own physical and emotional characteristics' (Buchanan-Smith 2007) – would be seriously diminished if not dispelled should we instead look in turn with a powerful magnifying glass at each in their different contexts. So what is it about how this project *looks*: how does apprehending its *form* make understanding available? Let's turn to a closer examination of the formal features of *The Last Periods*, to extract its distinctive characteristics.

The most conspicuous feature of this work is that it is a *series* of fullstops: there are not just one or two or even five, but *twelve* of them. And not only are they all enlarged, but more precisely, each is enlarged by *exactly* the same percentage: 4266%. Each has a small caption, which repeats the same basic typographic hierarchy and conveys the same details about each book: the title, author, publisher, date and printing. And so although they are undeniably physically separated appearing in completely different books, in this project they are brought together. Furthermore this series of twelve, identically enlarged fullstops is not haphazardly arranged, or so that one or two are placed above or in front of the others: instead they are brought together in neat rows and columns, in a grid. Finally, they are all on exactly the same pure white background, despite the fact that they are taken from different books, the pages of which we might reasonably presume are varying shades of white.

⁴² Of course it is fair to say that the differences in shape are not only a feature of the different typefaces used in different books, but by virtue of the paper stock and printing quality.

It strikes me that what we come to notice and know about fullstops – the individuality and diversity – is because when we apprehend them in this project, we can see them *in light of each other*. In particular, I want to unpack how the formal features of *The Last Periods* make visual *comparisons* available, because it seems to me that the diverse and distinctive personalities of these little dots, with which we are now intimate, could not be revealed if we were not able to compare them.

Consider the seriality. We simply could not appreciate the variety and individuality of fullstops if we were faced with just one fullstop, rather than numerous fullstops. Moreover, in light of theories surrounding collecting (e.g. Baudrillard 1996[1968]; Bal 1994) and the role of repetition in information design (e.g. Tufte 1983; Wurman 2001), we understand that *The Last Periods* does not just feature numerous *identical* fullstops, but fullstops that are 'the-same-but-different', an expression taken from Danet & Katriel's essay, 'No Two Alike: Play and Aesthetics in Collecting' (1989). More powerful comparisons can be made if things *are very similar, but yet not the same* (for no insight about diversity and individuality would be made available by comparing things that are the same.)

If we had say, a fullstop, an apple and a bicycle, it would be very difficult to make meaningful comparisons. Even if we had a *fullstop*, a *question mark* and a *dash* (. ? –) these would still be much cruder comparisons, and in all probability the individuality of the fullstop would not be revealed. But since we have a series of precisely the same kind of punctuation mark – fullstops – and moreover each the *last* one of some book, the comparisons can be finer and more meaningful. Similarly it would be much more difficult for us to make meaningful comparisons – to discern their individuality and the diversity – if these fullstops were presented on different coloured backgrounds; were different sizes; if various type styles were used in the captions; and different details were provided for each, *this one is from Lolita, this one was found on page 135, this one was found in a best seller, this one is from a Russian language book*.

Instead, in *The Last Periods*, the fullstops have each been enlarged by precisely the same proportion; presented against a white background; juxtaposed in a grid aligned precisely in rows and columns; and a consistent typographic style and details in the caption have been maintained. Not only can we compare these fullstops because we have a series of 'the-same-but-different', but because each has been *treated in the same way*. These disparate fullstops have been 'made' (even more) equivalent. Drawing on photography criticism (e.g. Sontag 1978; Edwards 2001), as well as returning to Collecting theory, we will view some of the formal characteristics as strategies or visual tactics for making disparate things

equivalent and therefore comparable: we will say that they have 'all fallen into line', an expression coined by the photographer artist André Malraux (1949; cited in Edwards 2001:55).

a. What happens when we have more than one of the same kind of thing?

The first tool in our language toolbox for talking about projects like *Lipstick* and *The Last Periods* is the concept of 'the-same-but-different'. Here we observe some unexpected but remarkable parallels between psychoanalytic explanations for private/personal Collecting, and recommendations from authorities in the field of information architecture. Most significantly we can bring these ideas, summarised by the expression 'the-same-but-different', to unpack and clarify projects like *Lipstick* and *The Last Periods*.

When we think about a way to place these projects that have a series of things and feature numerous items – 4 orange books, 10 lipsticks, 12 fullstops – it is an obvious place to start by looking at literature concerned with collecting. Notwithstanding the extensive research and writing that surrounds institutional collecting (e.g. museums, galleries etc.), I found literature that theorises a related but different kind of collecting most valuable. These are the personal or private collections kept by individuals. This literature is in large part concerned with theorising or unpacking the motivation behind this 'collecting urge' to accrue sets of things. Evoking the diverse possibilities, Muensterberger contemplates that collecting seems to have a curious 'double function' since 'acquisition acts as both a palliative and a stimulant' (Muensterberger 1994:252).

The prolific writer on museum studies Susan Pearce provides a useful overview of Collecting by inventorying seventeen motivations:

'leisure, aesthetics, competition, risk, fantasy, a sense of community, prestige, domination, sensual gratification, sexual foreplay, desire to reframe objects, the pleasing rhythm of sameness and difference, ambition to achieve perfection, extending the self, reaffirming the body, producing gender-identity, achieving immortality' (Pearce 1992; cited in Bal 1994:103).

Bal provides an eloquent commentary on this disparate array observing that

'Pearce's list is both troubling and compelling. What makes the list so compelling is the sense of increasing urgency in the "collecting drive" from relative luxuries like aesthetics to needs as "deep" as extending the body limits...and, climactically in the final position, achieving immortality' (Bal 1994:103).

Possibly the most influential and extensive account of this 'final position' – the existentially therapeutic motivation for collecting – is provided by Jean Baudrillard. He provides a striking image of the most extreme case where a collection helps someone insure themselves against existential angst.

'Between the world's irreversible evolution and ourselves, objects interpose a discontinuous, classifiable, reversible screen which can be reconstituted at will, a segment of the world which belongs to us' (Baudrillard 1996[1968]: 94).

It seems that collecting objects provides a sense of control and certainty in a world that is uncertain, provides a sense of timelessness in a world where time's march is relentless. And what is particularly notable about Baudrillard's imaginative theoretical work is that it is actually borne out in the field. For example, Martin's research features empathetic accounts of collectors such as Don: 'Don collects old light switches and electrical fittings...He admits that his Collecting helped him through the period of his accident' (Martin 1999:65).

Although this discussion of the therapeutic benefits brought about by collecting is fascinating, I want to draw attention back to Pearce's list to the mention of the 'pleasing rhythm of sameness and difference', for it is this idea that provides a particularly effective way for us to better comprehend *The Last Periods* and others. Significantly, this idea shifts our understanding of collecting away from an emphasis on material objects per se, and instead explores collecting as an *aesthetic* endeavour. Danet & Katriel have paid particular attention to this perspective, coining aesthetic principles such as 'No-Two-Alike' (1989) and the associated concept (which I have drawn on extensively), 'the-same-but-different' (Danet & Katriel 1989:262).

Danet & Katriel explain that in keeping a collection, the collector not only makes the 'more or less conscious decision ... to acquire many items belonging to the same general category', but additionally and far more importantly, is the need 'to acquire many *different* items belonging to this category' (1989:262, my emphasis). This is borne out by the undesirability of 'duplicates' in a collection (Danet & Katriel 1989:262); as Susan Stewart puts it, repetition must be banished (Stewart 1994:254). Danet & Katriel elaborate,

'The items are "the same" because the collector perceives them as belonging to the same...superordinate category....At the same time, each item is in some way discernible to the collector as different from all the others' [Danet & Katriel 1989:262].

Stewart concurs, pointing out that

'To group objects in a series because they are "the same" is simultaneously to signify their difference' (Stewart 1994:255).

And thus this principle is a very simple explanation for how, by bringing together a lot of similar fullstops, Buchanan-Smith achieves a seemingly paradoxical result, whereby we in fact become aware of the individuality among fullstops, and discern their distinct little personalities. As Stewart explains, 'the more the objects are similar, the more imperative that we make gestures to distinguish them' (Stewart 1994:255).

Since these projects each depict a series of things – ostensibly they are visual collections – the fact that we found some useful insights in the collecting literature is perhaps not surprising. However it was very surprising to uncover the practice of Collecting in a classic information design text, *Information Anxiety 2* (Wurman 2001). Ralph Saul Wurman is a forerunner in the field of information design who coined the now ubiquitous term 'information architecture' thirty years ago (Knemeyer 2004; Wurman 2001:v).⁴³ Given this formidable reputation, I was stunned to observe remarkable resonances between his ideas and the official collecting literature we have just reviewed (i.e. Bal 1994; Pearce 1992). Consider the following confession by Wurman,

'I tend to buy things in threes. With only two objects you can see the differences, with three, you begin to see the patterns' (Wurman 2001:259).

How could this uncompromising information designer revered for making information understandable share the same tendencies as Don with his light fittings? Wurman contends that significant understanding is gained *not* by the consideration of a single exemplar, but by the consideration of a *series* of things.

'If I put a cabbage in front of you, you would think that cabbages are round, green and leafy....But if I showed you a red cabbage, a green cabbage and a Chinese cabbage you would begin to understand the essential characteristics – the smell, texture, and density – that define cabbage' (Wurman 2001:259).

In fact this sort of knowing by seriality, is borne out in observation made by Siegel who created *Why are all these books orange?* Siegel accumulated four different items that all

⁴³ In addition to his acclaimed *Information Anxiety* books, which represent the culmination of his ideas for 'making information understandable', we find that Wurman has in fact written prolifically on an array of topics, from health care to travel guides, from understanding money and the stock market, to understanding retirement and wills (Wurman 2006). The interesting explanation for how he came to be an author on such diverse topics, is that each book was motivated by his personal desire to overcome his own ignorance about or inability concerning given topic (Knemeyer 2004).

belong to the 'super-ordinate category' of books that 'are paperback, roughly two hundred pages long, and for some reason, orange' (Siegel 2004:42). In addition, Siegel notes,

'On each cover is a shape or set of shapes that I assume is meant to represent the immense idea referred to in the all-encompassing title' (Siegel 2004:42).

In light of Wurman's comments we might now speculate that if Siegel had only considered one of these books, he may not have noticed these geometric abstract shapes on the covers. As it turns out – along with the 'orange-ness' – these shapes appear to constitute one of the defining characteristics of these books. By having *four* items that are 'the-same-but-different', Siegel in fact refines his 'superordinate category' – he better understands the essence of 'orange-book-ness'. According to Wurman, Siegel simply could not have gained this understanding had he not considered *four* of these orange books.

It seems that genuine insight is achieved by a collection. When items that are 'the-same-but-different' are compiled and juxtaposed, you can *really* see them. We can understand the essence and defining qualities of the group – how they are the same, (the geometric shapes on the front covers in *Why are all these books orange?*), as well as the diversity and distinctions of the individuals in the group – how they are different (the individual personalities of *The Last Periods*.)



Now I want to turn this thinking around, because there is more to *The Last Periods* than being a collection of fullstops. While in one way this project brings together a series of the same kind of thing – (the final) fullstops – and thus we can observe the finer distinctions among them, in a more profound way this project brings together fullstops which were previously physically separated and inescapably disparate: from different books printed in different years, printed in different places, on different pages, made of different papers. The principle of 'the-same-but-different' certainly attends to how Buchanan-Smith gained insight from looking at a group of the same kind of thing. However this does not satisfactorily explain how Buchanan-Smith not only looked at the *same kind of thing* but also he looked at them in the *same way*. To begin to explore these ideas we will draw on the work of Bernd and Hilla Becher, fine art photographers distinguished for their serial imagery.

Bernd & Hilla Becher spent forty years photographing 'imperiled' industrial structures, such as water towers, blast furnaces, silos, high tension pylons, built by anonymous engineers throughout the landscapes of Europe & the US (Rorimer 2001:123). These industrial

buildings are now being progressively destroyed, and driven by the desire to record them for prosperity, the Bechers have been committed to creating photographic inventories or typologies (Rorimer 2001:119-124), such as we can see in this example, *Anonymous Sculpture* (Becher & Becher 1970; in Rorimer 2001:120) (↓ IMAGE 13).

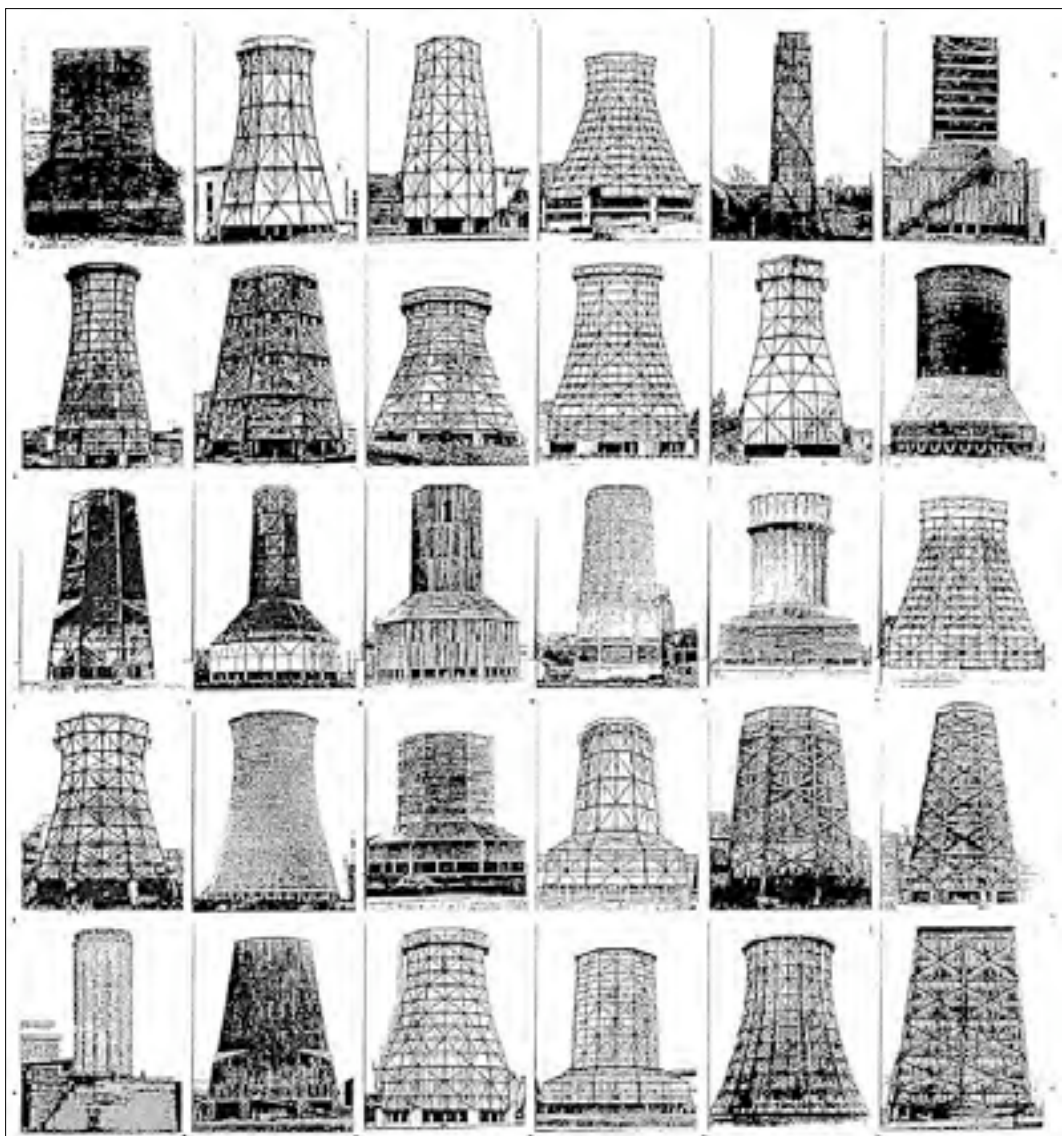


Image 13. *Anonymous Sculpture* (Becher & Becher 1970; in Rorimer 2001:120)

In the first place we can observe that their work epitomises the principle of 'the-same-but-different'. It has been observed that Bernd and Hilla Becher do not place two photographs of the same kind of building type next to each other, but juxtapose six, nine, fifteen (Zweite 2004:16) or, indeed in the example I just mentioned, thirty silos. And in so doing, remarkably echoing Danet & Katriel's and Wurman's ideas, the Bechers can reveal even the most subtle differences: 'individuality and diversity [is brought] into a contrapuntal relationship with similarity and uniformity' (Rorimer 2001:124).

The Bechers' photographic work is particularly noted for its distinctive *style*, and how this formal style contributes to our appreciation of the diversity within uniformity of these building types. Indeed, Rorimer contends that it is the *way* in which the Bechers have presented their series of photographs, rather than the subject matter of the images *per se*, which *gives their work its meaning* (Rorimer 2001:121). I want to draw particular attention to two aspects of the Bechers' style that are helpful for unpacking *The Last Periods*. Firstly, how photography has been used to *bring together* disparate views, and secondly, how photography can make these disparate views *comparable*. Rorimer astutely observes that 'photo-documentation [enables] the compilation of dispersed information' (Rorimer 2001:123). This is a critical point, since it is only by this compilation that we can see the finer distinctions in the silos, (and indeed the individual personalities of the fullstops.) In their own words, the Bechers explain, '[you] only see the differences between the objects when they are close together' (cited in Rorimer 2001:123).

We can explore this point in consideration of Weed's photographs of crosses in the desert (Weed 2005). Again these are undeniably separate views, separate places in the desert, but in his work Weed has exploited this ability of photography to *make* or *convert* disparate dispersed views into 'the-same-but-different'. In fact perhaps it would be more accurate to suggest that Weed has taken this one step further, for in *The Bicycle, Cross, and Desert*, he is not so much *seeing a series of similar things in the same way*, but by *seeing-in-the-same-way* he *creates* a series of similar things. It is only by his very careful framing that we can read all these images as crosses.

Returning to the Bechers, the second aspect of their work that is helpful is revealed when in fact we view *Lipstick*, *Why Are All These Books Orange?*, *The Last Periods*, to an extent *The Bicycle, Cross, and Desert*, and even *A Coming of Age Reading Checklist* and *The Readers Before Us*, alongside the Bechers' work. We realise that these projects have more in common than all being series of similar things. When juxtaposed, we can now observe

the prevalence – indeed a stunning resemblance – in the *style* of image. Each project displays their series of items against a white background, centred, equally scaled and each from the same perspective. Furthermore, we can observe that several of these projects (*A Coming of Age Reading Checklist*, *The Last Periods*, and *Why Are All These Books Orange?*) use a matrix to organise the images (i.e. rows and columns), and although not as blatant, the others similarly use a repeated template organising their images across sequential pages, *The Bicycle*, *Cross*, and *Desert* and *Lipstick*. Notably, these also include repeated typographic captions, leading us to notice similar repeated typographic hierarchies also in *The Last Periods*, *A Coming of Age Reading Checklist* and *The Readers Before Us*. We start to notice that these are visually similar not only because they all feature a collection of similar things, but also because they all display these collections *in the same kinds of ways*.

While the concept of 'the-same-but-different' is on reflection reasonably straightforward (in fact evoked by the vernacular expression 'to compare apples with apples'), in the following discussion, we will explore ideas that are more particularly related to the skills of visual communication designers. In particular we will examine how the various visual tactics just mentioned – framing, matrices, repeated typographic templates – can be used to make disparate items into similar and thus comparable views. To use the language emerging in this dissertation thus far, we will consider how 'bringing all manner of things into line' can further exploit or enhance the insights gained by 'the-same-but-different.'

b. Recognising the formal visual qualities as tactics for 'all falling into line'.

The prevalence of 'deep-etching', grids and repeated captions.

In this discussion, we will unpack the distinct formal qualities that are prevalent among these projects. By drawing on discourses in photographic criticism (Sontag 1978), collecting (Stewart 1984), and analytical information design (Tufte 1983), we will come to recognise *formal qualities* – such as removing the backgrounds (e.g. in *The Last Periods*), central framing (e.g. in Weed's crosses) and repeating type hierarchies (e.g. in McMullen's collection of references to *The Catcher in the Rye*) – as *visual tactics*. These are all devices that further enhance 'the-same-but-different'. By not only looking at the same things (e.g. all orange books), but by *treating things in the same way* (all against a white background, in even light, to the same scale), these tactics create a visual formal consistency which better enables the insights gained by a series of things. In this discussion we specifically borrow from Malraux (1949; cited in Edwards 2001:55) to refer to the effect of these visual tactics as

'all falls into line'. While Wurman's anecdote about gathering and juxtaposing cabbages is about a series of the *same things* (indeed actual cabbages), by contrast this discussion represents the shift towards how similar things can be *seen in the same way*. Even more powerfully, we consider how *different* things can be *made similar* – can be brought 'into line', 'levelled', *made* 'the-same-but-different' – by seeing them in the same way. Of particular interest to Visual Communication designers, is that seeing and treating things in the same way is not limited to how they are imaged (i.e. photography), but extends to typography (e.g. captions). The toolkit of the Visual Communication designer appears to be particularly well suited for and adept at bringing all manner of things 'into line'.

Unpacking the absence of a background.

In her fascinating, dense book, *Raw Histories: Photographs, Anthropology and Museums* (2001) Elizabeth Edwards explores photography in the museum context. Her discussion specifically addresses the often overlooked museological practice of photographing collections of objects. She explains that the 'favoured museum style suppressed interpretation or explanation of the object' and instead stressed the '[removal] of subjective desires and human agency' (Edwards 2001:58). Accordingly, in conventional curatorial practices, Edwards describes that a standardised style emerged – indeed a 'system of representation' – whereby objects were isolated, photographed against a contrasting background, in even light, and so seemed as 'floating objects, removed from both time and perspectival space' (Edwards 2001:59). This description clearly bears a remarkable resemblance to the photographic style characteristic of the Bechers, not to mention *Lipstick*, *Why are all these books orange?* and *The Last Periods*. So it is of particular interest to read how Edwards theorises the effect of such a photographic style. She explains – in a way reminiscent of Danet & Katriel, (indeed highlighting the remarkable correspondence between the collecting and photography literature more generally) – that by removing the context and perspective 'the most dissimilar objects could be transformed into equivalent and hence comparable objects' (Edwards 2001:59).

For an exceptional demonstration of the deployment of a 'standardised style' and its effect, we need look no further than Weed's *The Bicycle, Cross, and Desert*. Weed's meticulous compositions have precisely the same effect as Edwards describes: to transform 'the most dissimilar objects into equivalent and hence comparable objects' (Edwards 2001:58). By his own painstaking 'system of representation', Weed transformed (to name a few) an electrical meter box, a railroad mile marker, a telephone pole, a mailbox, and an irrigation valve (Weed 2003:21) – we could say 'the most dissimilar objects', indeed dispersed throughout

the desert – into identically proportioned cross shapes, and thus, we can now appreciate, made these disparate views and objects equivalent.

As it happens, the ability to make dissimilar things equivalent is not unique to the uniform photographic style we see in Weed's crosses or in the 'deep-etched' photographs described by Edwards.⁴⁴ In fact there is evidence that this is true of photography more generally. Sekula has argued that the 'metrical accuracy of the camera' is central to photography's ability to 'reduce all possible sights to a single code of equivalence' (Sekula 1989; cited in Edwards 2001:59). Further to this precision, another feature of photography that can similarly transform dissimilar sights into equivalent ones, which is also at play in our puzzling projects, is *the frame*.

André Malraux envisaged a museum that could bring together and display side by side the most disparate and diverse items, which were in reality dispersed throughout the world (→ IMAGE 14). Admission to the *Museum Without Walls* (1949) was dependent on just one simple criterion, as the American art critic Douglas Crimp explains: 'any work of art that [could] be photographed [could] take its place in Malraux's supermuseum' (Crimp 1993:54). Thus a Reubens located in Antwerp could 'take up residence' next to a Michaelangelo in Rome (Crimp 1993:54). Just as Weed transformed the electrical meter box, railroad mile marker and telephone pole into crosses, in the artist's own words, Malraux explains 'picture, fresco, miniature, and stained glass, *all fall into line*...all have become colour plates' (Malraux 1949; cited by Edwards 2001:55, my emphasis).

Malraux was not noted for adhering to an overtly uniform, formal style, such as deep etching: instead he made and compiled straightforward photographic reproductions. Yet, spookily echoing Edward's discussion of anthropology's 'floating objects', Crimp observes that in Malraux's museum 'a vast array of heterogeneous objects were reduced to a perfect intellectual similitude' (Crimp 1993; paraphrased in Edwards 2001:59). How is this possible? How does photography *more generally* bring things into line and make things equivalent? One place we can turn for some lucid explanations, is to the influential Susan Sontag, noted for her robust criticism of photography.

In a way yet again reminiscent of Edwards and Crimp, Sontag notes that simply by 'taking

⁴⁴ 'Deep-etch' is jargon describing a specific technique in Adobe Photoshop, where the background of an image is removed. *Technically* the lipsticks in *Lipstick* and the silos in Becher's *Anonymous Sculpture* are not deep-etched since they are on a *white* background, and deep-etching literally means having *no* background (which is possible in a digital '.psd' document using 'layers'). But for our purposes, 'deep-etch' is used as a handy expression to convey the removal or absence of a background.



Image 14. Malraux with the photographic plates for *The Museum without Walls* (photo: Paris Match/Jarnoux; reproduced in Crimp 1993:59)

their photographs', the 'most heterogeneous subjects' can be 'brought together' and made 'homologous' (Sontag 1978:110-111). However, she worries about the repercussions of the resulting 'fictive unity'. Unlike Malraux who playfully exploited this capacity – his own *Museum Without Walls* epitomising exactly such a 'fictive unity' – Sontag warns us of the implications of such a leveling, 'photographic purchase' of the world (Sontag 1978:110-111). Sontag arrives at her wider concerns about the political, social, and indeed epistemological impact of photography, in fact by careful analysis and reasoning about photography's formal, technical characteristics. In particular she singles out the power of the photographic frame that can literally slice up the world:

'Anything can be separated from anything else: all that is necessary is to frame the subject differently. (Conversely anything can be *made adjacent to anything else*)' (Sontag 1978:22-23, my emphasis).

This capacity of the photographic frame to skillfully, swiftly and sometimes wantonly 'include' or 'reject' is superbly evoked by the curator of photography John Szarkowski, when he asserted that,

'To *quote out of context* is the essence of the photographer's craft. His central problem is a simple one: what shall he include, what shall he reject? The line of decision between in and out is the picture's edge' (Szarkowski; cited in Rosen 1997:382, my emphasis).

Sontag views this 'simple' problem faced by photographers rather more gravely. For Sontag this is not only an aesthetic, compositional decision about translating reality, but about *transforming* reality. By this 'line of decision', Sontag asserts that 'the world becomes a series of unrelated, freestanding particles.... reality [is made] atomic, manageable and opaque' (Sontag 1978:22-23). And not only does photography fail to accurately convey a vast, complex, heterogeneous, interconnected picture of the world as it actually is, but worse, we mistake this 'photographic purchase' of the world – atomised, homogenised and manageable, compounded by the camera's 'metrical accuracy' (Sekula 1989; cited in Edwards 2001:59) – *for reality*.⁴⁵

In any event, the ability to atomise the world with the photographic frame, closely attends to both Malraux's museum, and Weed's crosses: Malraux viewing this ability to 'quote out of context' as a curatorial opportunity; Weed particularly preoccupied with 'the line of decision making'.

It is important to emphasise that there are in fact two closely related things going on in the work of Malraux, Weed, and indeed in *The Last Periods*. Much of the discussion has drawn particular attention to the first aspect - to atomise and make reality into 'particles', by the ability of the frame to separate things from their contexts. But now I want to highlight the second aspect, which is especially pertinent to appreciating a *series* (collection) of photographs. This second aspect emphasises that following this atomisation of reality, the resulting 'particles' are now available for juxtaposition, the photographs can be 'made

⁴⁵ In *On Photography* (1978 [1973, 1974, 1977]), Sontag considers at length the implications of the ability of photographic seeing to indifferently 'democratise all experiences by translating them into images' (Sontag 1978:7), even when those experiences are not democratic. Sontag warns that because of its homogenising aphoristic qualities, we can only ever gain 'a semblance of wisdom' and a falsely democratic view of the world. I have quoted these powerful ideas of Sontag here at length since her expression is so affective. In her essay 'In Plato's Cave' she explains,

'The knowledge gained through still photographs....will be a knowledge at bargain prices - a semblance of knowledge, a semblance of wisdom....By furnishing this already crowded world with a duplicate one of images, photography makes us feel that the world is more available than it really is' (Sontag 1978:24).

And elsewhere in 'The Heroism of Vision':

'Through the camera people become customers or tourists of reality....Bringing the exotic near, rendering the familiar and homely exotic, photographs make the entire world available as an object of appraisal photographs do not explain; they acknowledge....Despite the illusion of giving understanding, what seeing through photographs really invites is an acquisitive relation to the world that nourishes aesthetic awareness and promotes emotional detachment' (Sontag 1978:110-111).

adjacent' and indeed, 'brought into line'. To refine this point, we can again benefit from the interesting parallel of the collecting and photography literature.

When an object is collected it can only take up residence in the context of the collection because it is first decontextualised. Bal vividly explains that when collected 'the object is turned away, abducted from itself, from its inherent value and denuded of its defining function so as to be available for use as a sign' (Bal 1994:111). It seems to me that this bears a striking resemblance to the atomisation of the world by photography. Indeed, just as Sontag explains that since when photographed 'anything can be separated' and then available to be 'made adjacent to anything else', Stewart asserts that when an object is collected it is 'severed from its origin' and so similarly available to combine (with others similarly severed) in the 'new context' of the collection (Stewart 1984:153). Indeed, where all things 'fall into line'.

We can explore this duality – where things can be made adjacent once they are separated – with reference to *The Last Periods*. Recall that the insight gained by this project (our appreciation of the 'personalities' of individual fullstops) is intrinsic to their juxtaposition. We now appreciate that it is only since these disparate fullstops have been 'severed' from diverse books, 'denuded' of their function and purpose as the closing fullstop, that they *can* be juxtaposed. The 'origins' of each fullstop – dispersed throughout twelve books, themselves dispersed throughout Buchanan-Smith's personal library – have been replaced by a 'new context': the series of (deep-etched, photographically enlarged and reproduced) fullstops accumulated by Buchanan-Smith.⁴⁶

The importance of repetition in order for all manner of things to 'fall into line'.

But now let's turn our attention to something specific about Buchanan-Smith's series of fullstops: this is not a jumble or even a neat pile, instead these atomised fullstops have been *meticulously* brought 'into line'. Representing an extreme version of aligned things, Buchanan-Smith has made these fullstops adjacent in *columns and rows, in a grid*. And when we turn our eye to our other projects of interest, we notice that Siegel too has arranged his deep-etched orange books in a grid. Even in the case of the works by Greene and Weed (while not as acutely aligned as in a grid), used lipsticks and desert crosses are 'brought into line' by the use of a repeated compositional template, across the spreads: each

⁴⁶ An image that is digitally scanned for our purposes is still a 'photographic reproduction', to the extent that it is similarly mechanically reproduced and precise as images produced by photography.

image presented at the same size, in the same position on the page, with the same style of caption, again in the same place.

Even in the two projects that lack a photographic component we can observe how things are brought 'all into line', though by a different graphic convention: consistent (albeit very basic) typographic hierarchies / templates. In *The Readers Before Us* for each entry in the inventory, the sequence of information is exactly the same (only the particulars change). Line 1 is the Dewey decimal number; lines 2 – 4 are standard bibliographic details; line 5 notes the page numbers the item of ephemera was found between; and starting from line 6 is the description of the particular item. Similarly McMullen represents each of the sixty books which featured blurbs that made some reference to the *Catcher In The Rye* by author (top, small caps); title (next larger caps); the excerpt of the blurb which includes the reference (set in lower case with the pertinent features emphasised in caps – CATCHER IN THE RYE, J. D. SALINGER and/or the protagonist, HOLDEN CAULFIELD); and finally in smaller caps set at the bottom of each bookmark shape, is the source of the review (e.g. *The New York Times Book Review*).

So what is this all about? The repetition of graphical forms, arranged in neat columns, grids, identical page templates? This isn't the Bechers' photography, but does it have a similar effect? What is the significance of this compositional uniformity? To explore this I will draw on ideas about the role of repetition in analytical information design.

In *The Visual Display of Quantitative Information* (1983) the revered Edward Tufte describes what he refers to as 'small multiple graphs', which repeat exactly the 'same graphical design structure' for numerous data sets (Tufte 1983:42). He explains that these are fantastic opportunities for enabling easy comparisons between the data sets:

'Small multiples are economical: once viewers understand the design of one [slice], they have immediate access to the data in all the other [slices]. Thus, as the eye moves from one slice to the next, the constancy of the design allows the viewer to focus on changes in the data rather than on changes in graphic design' (Tufte 1983:42).

To support this point Tufte pays particular tribute to the pioneer of these relational graphics. William Playfair apparently was the first to 'break free of analogies to the physical world' (Tufte 1983:44). He was the first to notice that comparing the areas of countries by comparing the *maps* of each country was not efficient since in the words of Playfair himself, 'where forms are not similar, the eye cannot compare them easily nor accurately' (Playfair 1801; cited in Tufte 1983:45). Instead, realising the advantage of repetition for facilitating

comparisons in what can only be regarded as a milestone in information design, Playfair was the first to convert figurative images (such as the map of a country) into the same geometric shapes (such as circles) (Tufte 1983:44-5).

Here Tufte (and Playfair) beautifully explain the special understanding we gain by converting things and presenting them in exactly the same way. We can now see that although the concept of 'all falls into line' is drawn from Malraux's very particular photographic practice, now in light of our understanding of the particular benefit of repeated graphical structures, we realise that 'all fall into line' can be extended to account for some of the other visual strategies, that we can observe in the formal qualities, common among these projects. Just as Malraux and Weed brought all manner of things 'into line' by *photography*, by deploying a consistent typographic structure to describe the particulars of diverse ephemera dispersed throughout the library, precisely the same effect is achieved: bus tickets, flyers and passport photos are made equivalent and brought 'into line'. Furthermore the literal alignment (could we say 'all-in-line-ment'?) of these items – arranged in sequences across page spreads, and in matrices – is consistent with the desire to take advantage of the insight of consistency.

c. Concluding our discussion of the *formal* features.

In this discussion (in Section 2) I set out to unpack the distinctive formal features prevalent in these projects, so I can better talk about the form of *The Last Periods*, and others. I have explained how the collecting literature can be helpful to emphasise that understanding these projects is connected to their seriality, which we have tagged 'the-same-but-different'. Subsequently, drawing on photography literature, I have introduced the idea that in addition to gathering the same kinds of things, visual tactics (such as deep etching and repeated templates) can be used to make these similar things even more similar (as in the case of *Why are all these books orange?*). In fact, we realise that by deploying these tactics quite diverse and disparate things can also be made similar and brought 'into line' (as in the case of *The Bicycle*, *The Desert* and *The Cross*.) 'All falls into line' describes how presenting things in the *same way* (by some combination of deep etching, grids, and captions) can enhance the insights we can gain from those things.

Now that we have these ways to talk about their *form*, I want to turn our attention to talking about the kinds of processes involved in creating these projects.

A different perspective: the process of seeing just the final fullstops of your favourite books.

Let's recommence our close consideration of *The Last Periods* from a different perspective that 'the-same-but-different' and 'all falls into line' have not addressed: what seems to me to be a peculiar *process* of a constrained kind of seeing. In one way, we can unpack *The Last Periods* as about the 'overlookedness' of fullstops: so we now appreciate that these ubiquitous, fundamental yet taken for granted little dots in fact have different little personalities. However this project isn't just about fullstops generally, but specifically about *the very last fullstop of some books*. *The Last Periods* brings our attention to that last closing fullstop as a universal characteristic common to all books. Buchanan-Smith explains:

'The last period interest me because they represent the weeks and months the author spent behind their manuscript....every author who has ever written a book longs for that last keystroke' (Buchanan-Smith 2007).

Buchanan-Smith evocatively contemplates that that last fullstop 'bears [a lot of] weight on its tiny little shoulders' (Buchanan-Smith 2007). Despite the myriad of differences in a set of books – different authors, varied critical notoriety, different topics, from the taboo to the classic, from the encyclopaedic to the satirical – the final fullstop is persistent, essential and predictable.⁴⁷

Thus, not only are heterogeneous individual *dots* made homogenous and brought into line by the formal strategies of deep-etching and arranging in a grid, but by concentrating on the universal feature of the final fullstops in particular, *these disparate books* also 'fall into line'. Despite qualitative unevenness between Nabokov's controversial novel *Lolita* narrated from the point of view of a pedophile, and a field guide to the birds of North America (which are two of the twelve featured in Buchanan-Smith's project), by extracting the common feature of their final fullstops, these two disparate books are 'leveled', 'made similar', 'rendered equivalent'. As Buchanan-Smith puts it: 'Whether you're James Joyce or Paul Rand, you still have to have that last period' (Buchanan-Smith 2007).

So what's the implication of this? It strikes me that there are in fact *three* kinds of things going on. In one way *The Last Periods* is about subverting the 'overlookedness' of fullstops (in general). In another it brings our attention to the universality of the *final* full-stop (in particular). But in a third way, turning the project around and thinking about it from quite a different angle, perhaps this isn't about the *final fullstops* of twelve books, but about the

⁴⁷ Although on reflection there are some books that may not feature a final fullstop, such as a street directory.

twelve books. By this consideration we are no longer talking about the formal presentation of twelve enlarged full-stops that are 'the-same-but-different', but *the process of seeing just those final dots*, in all the complexity and creative possibilities held by those twelve books.

This represents a shift to the second line of questioning which we explore in Section 3, where we contemplate the practical task of making these projects, as it is evidenced in the form, as well as in the creators' comments. We could say that this presentation of a grid of enlarged fullstops is just one way (among many) to express or approach this diverse collection of books. Buchanan-Smith chose the final fullstop, but we can imagine other ways to approach these books. Someone else might single out the covers, the Dewey decimal numbers, the scraps of paper used, the dedications proclaimed at the front, the marginalia noted at the sides, or even less eccentric possibilities such as the genre or price. By this line of thinking, we actually turn *The Last Periods* around from being a project about fullstops *per se*, and instead see the fullstops as incidental to a project primarily concerned with engaging with a set of twelve books.

Section 3. Unpacking *process*: how can we talk about this curiously restrictive way of seeing?

In this section we turn our attention to examine the process in these projects. In addition 'the-same-but-different' and 'all falls into line', here we derive two more 'tags' – two more phrases to add to our new vocabulary – for better talking about some homeless creative visual projects. Here we talk about ideas such as 'establishing a trail of similarity in an undifferentiated world' which is drawn from Cummings & Lewandowska (2000), as well as the concept of 'opening oneself up to parts of life that are otherwise out of reach' drawn from Jones (1984). As we shall see, the ideas of 'establishing a trail of similarity' and 'opening yourself up' reveal the paradoxically productive, liberating and fresh creative experience that seems to result from adhering to a restrictive way of seeing.

a. Beginning to talk about that weird process of seeing.

We open this discussion by considering the accompanying written statements made by the designers of the projects presently of interest. In going 'straight to the horse's mouth' so to speak, we detect some interesting commonalities. We can trace evidence in the authors' statements of a kind of 'first instance' of or 'initial noticing'.⁴⁸ While Weed reminisces about

⁴⁸ Bal (1994), from the Collecting literature, provides a wonderful expression to describe this. When the collector has obtained only the first one or two objects of what eventually becomes a collection, but before

that very first cross he noticed in the desert 'keeping vigil at roadside shrines' (Weed 2005:63), McMullen recalls that '[in] college, I began to notice one particular book – *The Catcher in the Rye* – appearing in blurbs everywhere' (McMullen 2004:24). It seems as if arising from this initial noticing, both developed a curiosity that they wanted to pursue. McMullen explains that he wanted to 'test his observation' about references to *The Catcher in the Rye* (McMullen 2004:24), while Buchanan-Smith explains that his interest in fullstops was a kind of 'itch' that he needed to scratch (Buchanan-Smith 2007). Similarly Weed explains that as he started to notice more of these impromptu cross in the desert 'questions arose', and so 'fascinated' had he become by the 'simple proportion of the cross' that he made this project (Weed 2005:63). Reiterating the sentiment, (indeed using exactly the same word,) Siegel explains that in scanning the shelves of bookstores for a certain kind of book: 'My interest in reading [these orange books] is marginal, but I'm fascinated by their uniform style' (Siegel 2004:42).

In reviewing the comments made by the creators, I observed with interest that *all six* correspond in regard to the focused, restricted process from which their projects arose. Each reports a kind of *searching in a particular place for a particular thing*: despite being situated in a diverse, complex context, these designers *see selectively* – a conscious decision has been made to only notice a certain kind of thing. Waller & Beard systematically searched only for scraps between the pages of the books held in the Royal College of Art Library; McMullen relates spending three days pulling down the books in the Literature section of a Chicago Barnes and Noble searching for and recording only the references to *The Catcher in the Rye*. Of the myriad books held in used bookstores, Siegel searches only the philosophy sections, and only for ones with orange covers; of all the sights in the vast desert Weed seeks just these perfectly portioned crosses; of all the visual components of these twelve books, Buchanan-Smith saw just their closing fullstop. (And indeed of all the personal objects in the possession of her female acquaintances, to produce *Lipstick* we may say that Greene chose to see only their used lipstick.)

In fact we can again turn to the Collecting literature for some fabulous expressions, which seem to lend themselves well to evoking the kinds of systematic, restricted seeing we are detecting in these projects. Extrapolating from the very practical action of collecting to selectively gather only certain kinds of things ('the-same-but-different'), we can appreciate

these objects are regarded as part of a series and instead continue to be thought of as distinct individual, functional objects, Bal calls this an 'initial blindness' (1994:101). For the time being, a biro remains an object for writing with: I don't yet see that it could also be part of the 'pleasing rhythm of sameness and difference' in a collection of pens.

the larger epistemological project to make sense and approach knowledge in a large undifferentiated world. Firstly, Stewart has argued that:

'One cannot know everything about the world but one can *at least approach closed knowledge* through the collection' [Stewart 1984:161, my emphasis].

Similarly, Neil Cummings and Marysia Lewandowska characterise collecting as

'a powerful tactic for making sense out of the material world, of *establishing trails of similarity* through fields of otherwise undifferentiated material' [Cummings & Lewandowska 2000:29].

It strikes me that this is a powerful evocation of the kind of processes reported to be taking place in undertaking these projects. What better way to describe seeing just orange books in all the stuff in a second hand bookstore and seeing just crosses in the wide expanse of desert (and so on), if not as 'establishing a trail of similarity through undifferentiated material', having acknowledged that the whole world itself is too big to know?⁴⁹

b. The peculiar restfulness of carrying out an experiment.

With this new tool now on board – the expression 'establishing a trail of similarity' – as a way to conjure the restricted way of seeing involved in these projects, let's look further at the *effect* of adhering to such an approach. What is achieved? What are the consequences? Can we unpack the significance of such an approach?

Let's begin our exploration of the outcome and effects of 'establishing a trail of similarity', by returning to our close examination of Buchanan-Smith's work, this time turning our attention

⁴⁹ Over the years I have noticed numerous creative projects exemplifying this restricted way of seeing.

In a project entitled *Taken On The Road: American Mile Markers*, Matt Frondorf drove across the United States in six days, with a device attached to the odometer that triggered the shutter of a camera mounted on the passenger side of the car. The camera took one photograph at each mile, thus by driving the 3304 miles from New York to San Francisco Frondorf produced 3,304 photos. This strikes me as an even more acute kind of restricted seeing: making a decision to travel all that way through all that countryside, but seeing literally only a frame at each mile (Frondorf 1999).

In his anthology Paul Smith included an irrelevant but irreverent little section called *Paul Smith For Paul Smith Love Paul Smith*, which plays with the ubiquity of his name. This is a photographic series of nine men from around Britain who are also called Paul Smith. The setting for the images are particular to the different Paul Smiths and their occupations are also noted, which emphasises the-sameness-but-difference (Smith 2001:289-295).

The artist Emil Goh produced a video artwork, *Mall*, that documents his day spent in a city whereby he followed a person dressed in bright red until another red people came into his path (crossed into view), and so he would change direction to follow them, and so on (Goh 2005).

What these projects highlight is that this curious restricted way of seeing is not only highly focusing and creatively productive (e.g. arriving at a huge series of photographs), but exploratory – engendering an expedition of sorts. For example, if Frondorf hadn't set this task to drive across America, albeit in an overtly limited way, perhaps he might never traveled to small Southern towns and taken photographs.

to the title: *The last periods of some books (magnified 4266%)*. We can recognise it as a specific description very reminiscent of the kind of title given to scientific papers (although clearly in this case it does not present a verifiable hypothesis.) Buchanan-Smith himself refers to it as an 'experiment'. Thus, in keeping with this theme, we can momentarily consider the work in terms of scientific parlance: we might say that a particular 'variable' is under consideration (the shapes of fullstops), and so in order to closely study this variable, other factors are kept 'constant' (we are just looking at the final fullstop in a limited set of books, and each is enlarged by 4266%). And so having established the design or boundaries or conditions for this experiment, all other possibilities become irrelevant: a final question mark, or the *second* last fullstop – even if you found one that was distinctively peculiar or beautiful – are just not of interest. Furthermore, not only do all other possibilities become irrelevant, but our interest in final fullstops is *indiscriminate*. According to the experiment evoked in the title of Buchanan-Smith's work, we are interested so long as something is the final fullstop – it seems irrespective of whether they are unusual, exemplary, or not in any way remarkable.

We can explore the decisive focus of this experimental approach accounted for by Buchanan-Smith, by drawing on the rather eccentric phenomenon of 'Experimental Travel'. In particular, the reflections made by the key proponents of Experimental Travel provide pertinent, transferable insights that can be brought to *The Last Periods* and others.

Experimental Travel is travel with overt, self-imposed, constraints (Antony & Henry 2005:9).⁵⁰ Before I outline the kinds of rules that have been recommended, let's develop a hypothetical situation, where Experimental Travel would be a productive strategy to deploy. Imagine you suddenly find yourself for only one day in a completely foreign city. It is amazing: it is somewhere large and diverse, imbued by a rich significant history, yet in other ways profoundly contemporary, such as Berlin. The problem is, with only one day, it is impossible to see everything. Even if you limited yourself to just the most popular tourist sites, you still could not physically fit them all in. And so facing the problem of how to choose, especially having not been there before and having had no time to research this destination, you are unable to make an informed decision, and so you end up paralysed.

⁵⁰ Conceptual artists of course have been 'experimentally travelling' for decades. Jan Dibbets commented that 'I discovered it's a great feeling to pick out a point on the map and to search for the place for three days, and then to find there are only two trees standing there and a dog pissing against the tree' (cited in Kastner 1998:208). While the popular British artist Richard Long undertakes projects such as *A Walk by all Roads and Lanes Touching or Crossing an Imaginary Circle, Somerset England, 1977* (see Long 1991).

To combat this paralysis and free yourself from the grips of overwhelming choice, with reference to *The Lonely Planet Guide to Experimental Travel* you make the decision to follow the 'left-right rule' through the city by taking lefts and rights alternatively and let come what may (Antony & Henry 2005:48-51). Or you could decide to journey to the grid reference K2 of a random page of a map of the city (Antony & Henry 2005:126-129). Or to use the number 12 to devise a travel itinerary, so take the 12.12 train, alight at stop 12, drive the route 12 motorway, take the number 12 bus, etc. (Antony & Henry 2005:238).

Here I have outlined just three from a whole myriad of possibilities outlined in the book. Reviewing the reflections of the two authors we come to appreciate the benefit of such a technique (Antony & Henry 2005:4-9). Counter-intuitively although one is adhering to rules, which are usually associated with being constricted, Experimental Travel is in fact said to be liberating and a rather 'restful' way to travel. When you travel by constraints, you are suddenly outside of the usual expectations of typical tourism where one seems to need to be constantly wow-ed and to see all the sights. There are no more decisions to be made once you've made the decision of which rule you're going to follow: instead you simply proceed. As Joël Henry reflects, although traveling by a rule 'imposes constraints, [in fact] you feel very free, [because] you just have to follow the rules....you don't have to think of any other way to explore a city' (interview in Antony & Henry 2005:7). In so doing, all destinations are 'rendered equal' (Antony & Henry 2005:9), whether you end up at a sausage cart or the Reichstag. And by being liberated from the usual expectations in fact the 'world opens up before you' (Antony & Henry 2005:9).

Returning to *The Last Periods*, we might reasonably infer that Buchanan-Smith experienced a similar kind of liberation. It strikes me that once the decision was made to study only the final periods of some books – to scratch that particular itch – all that would be required is for Buchanan Smith to pull off his favourite twelve books from his shelf and, despite the myriad of ideas they hold, the variety of images, the different dates of publishing, the different signs of use, (one may be well thumbed and bulging with stickies and full of annotation, while another is in pristine condition despite an inscription for his birthday four years ago,) notwithstanding all of these possibilities, Buchanan-Smith is only required to proceed straight to the last page and place this face down on the scanner, and enlarge each final fullstop by 4266%.

What I am proposing is that a decision such as to study 'the last periods of some books (magnified 4266%)' is akin to establishing a kind of rule, which drastically reduces creative

or intellectual alternatives.⁵¹ Once such a constrained way of seeing and creating is decided upon, *one just proceeds*: from that point on you are safe to be indiscriminate, no more choices need to be made, alternatives to be considered, possibilities to be evaluated.

c. 'Establishing a trail of similarity': restricted, but straightforward.

So what we are starting to see here is that in addition to the emotional (for want of a better word) kinds of benefits – to be restful and no longer paralysed – there is also a more practical benefit to such a focused process. What I want to do now is further explore the additional outcome of adhering to a rule – the fabulous straightforwardness and ensuing productivity, that is especially significant in a creative context. To explore this I want to draw in one reviewer's very thought provoking observation, of an unusual, imaginative, curative project by the New York based photographer Joseph Bartscherer, *Ava Gardner Dies* (2002) (→IMAGE 15).

In what strikes me as both exemplifying the focussed closed knowledge of 'establishing a trail of similarity in an otherwise undifferentiated world' *and* the restful experience of experimental travel whereby no further decisions had to be made, Bartscherer conceived of the idea – what I would call a preset rule for seeing and creating – to collect the obituaries of people whose death had been reported on the front page of the *New York Times* during the decade from January 1990 (when the actress Ava Gardner died aged 67, hence the title of the work) to July 2001.

What I want to emphasise is the overwhelming world that the pages of the *New York Times* from the past decade would present – imagine the diversity and richness, options and possibilities in trawling through these newspapers. But 'armed' with this rule to see only the obituaries on the front page, Bartscherer could safely navigate a restricted journey through this world, or to use the expression I have adopted from Cummings & Lewandowska (2000:29), he was able to 'make sense' by 'establishing a trail of similarity'.

Moreover, despite being constrained by a rule, the process is splendidly fruitful. Though appearing on the front page of the *New York Times* is rare – 'even...on the occasion of your death' (Deumens 2003) – and reserved for the most revered or infamous, Bartscherer accumulates 288 obituaries: 270 included photographs of the deceased, while 18 were text only.

⁵¹ I am not purporting that this is the reality of how Buchanan-Smith conceived of and carried out this project, but instead I am reporting on my thinking, interpreting and speculating around his work, as part of my project to develop a better way to talk about similar kinds of work.



Image 15. *Ava Gardner Dies* (Bartscherer 2002)

above – the book (source: http://www.artistsbooks.com/bookdetail.asp?art_id=711&ref=artistdetail.asp, viewed 1 December 2006)

below – the installation (source: <http://www.davismuseum.wellesley.edu/obituary/obituary.html>, viewed 1 December 2006)

Bartscherer exploited this body of 'data' in several creative outcomes: a book *Ava Gardner Dies*, and the exhibition *Obituary*, which has an accompanying website. The limited edition book, *Ava Gardner Dies*, compiles the actual photographs used in these front page obituaries – the 18 without photographs appear as blank pages – in the order they featured in the *New York Times* (i.e. by chronological order by date of death). The accompanying website provides background information and some basic graphical statistical breakdowns about the obituaries (Bartscherer 2001) such as the field the deceased was noted for (politics, music, film, science, sport etc), by gender, the day of the week obits tended to appear; as well as a full chronological list of the deceased, links to relevant websites for further reading on each of the 288 of them.

In her review of Bartscherer's interim installation *Obituary* (1995), Nancy Princethal superbly articulates the experience of adhering to a rule for producing a creative work (Princethal 1995).⁵² She gives the exhibition a favourable wrap, calling it 'engrossing', but in what could taken as a back-handed compliment, she quips, 'Bartscherer gets a pretty high return on fairly minimal creative effort'. Here she articulates that there seems to be something particularly productive about this way of working. Although time consuming and laborious, the mechanical process of trawling through the archives is straightforward. Furthermore the yields are high: by 'establishing this trail' you can accrue a whole series of things.

We could go even further and say that once a rule has been conceived, it is a procedure that could be carried out by anyone: Bartscherer, as for Buchanan-Smith and others, really need not have actually been involved in the practical task of carrying out their projects. But, as we shall see in the following discussion, it would be a pity to let someone else create according to your specifications, because there are in fact *personal* benefits associated with undertaking a project that involves adhering to a rule.

Returning to Buchanan-Smith's *The last periods of some books (magnified 4266%)*, in contrast to the social and historical trends and insights revealed in *Ava Gardner Dies*, it is of course undeniable, that seeing only the final fullstops in a collection of books – whether from the British Library or your sister's place – is a rather more arbitrary or illogical approach which gives rise to some fairly slim insights. However, this does not diminish the greater point, which is that by using such a constraint you are not paralysed, and instead you are productive. As we shall see, this is particularly relevant to and borne out in *BikeWork*.

⁵² Princethal's review in 1995 was possible because the exhibition actually took place half way through the decade long curation of obituaries.

d. 'Opening oneself up': using rules is a well-established, creative strategy for avoiding unwitting 'slavery'.

Having said that *The Last Periods* (and indeed *Ava Gardner Dies*) are akin to Experimental Travel, and have been produced by adhering to a kind of preset rule, it turns out that there is a tradition of the use of rules and constraints for creative purposes, for example which can be traced throughout conceptual art practices.⁵³ However possibly the most notorious creative group committed to a practice of adhering to constraints, are the French Experimental Poets, the *Oulipo*.

The *Oulipo* (taken from the French *Ouvroir de Littérature Potentielle* or 'Workshop of Potential Literature') were a collaboration of writers and mathematicians based in Paris in the 1960s. They promoted methods in 'literary experimentalism' (Motte 1986:cover), specifically 'systematic methods and agreed-upon constraints' to produce literature (Blauvelt 2003:21). The classic example of this is Perec's *La Disparition (A Void)*, which was 'a three hundred page novel that did not use a single word with the letter "e"' (Blauvelt 2003:21).

It is pertinent to understand Perec's reasoning behind such a process. Reminiscent of the Experimental Travellers, Perec explains that in fact he felt *more* liberated. By adhering to this 'e' rule, he felt much freer than if he had had to face a blank page and 'write freely' drawing from 'inspiration'. Perec contemplates 'The intense difficulty posed by this sort of production...palls in comparison to terror I would feel in writing ... "freely"' (Perec; quoted in Motte 1986:13). The Oulipo embrace 'the paradoxical effect of constraint, which, rather than stifling the imagination, serves to awaken it' (Bénabou 1986:42-43). Thus rather than 'frowning on literary rules and formulas', the Oulipo favourably view such conventions (Motte 1986:14).

'The classical playwright who writes his tragedy observing a certain number of familiar rules is freer than the poet who writes that which comes into his head and who is the slave of other rules of which he is ignorant' (Queneau 1938; cited in Bénabou 1986:41).

Indeed, for the Oulipo, inspiration is characterised as a 'blind obedience to every impulse, [which] is in reality a sort of slavery' (Queneau 1938; cited in Bénabou 1986:41). This vivid

⁵³ Consider the counsel provided by Sol Lewitt, a prominent conceptual artist in the sixties:

'To work with a plan that is pre-set is one way of avoiding subjectivity...the artist would select the basic form and rules that would govern the solution of the problem. After that the fewer decisions made in the course of completing the work, the better. This eliminates the arbitrary, the capricious, and the subjective as much as possible' (Lewitt 1967; cited in Rorimer 2001:155).

For further reading of the ambitions and outcomes of these art practices see Rorimer (2001) and Lippard (1997 [1973]) who provide excellent extensive accounts.

image of 'slavery' is worth exploring – what is it about inspiration and facing a blank canvas, that we can be trapped by and beholden to? What kind of 'rules' are the ideas that pop into our heads? What is Perec freed from? To explore these ideas we can turn to a peculiar, fascinating yet seemingly forgotten visual essay by J. C. Jones, the founder (and subsequent deserter) of the Design Methods movement.

There is little doubt that *St Ives by Chance* (Jones 1984:85-102) (→ IMAGE 16) is visually unremarkable and the ten photographs central to the work are underwhelming. But what is intriguing and enduring about this project are Jones' reflections that accompany the images. As Jones relates he finds himself on a family holiday at St Ives, a popular, picturesque holiday destination. Tired of being a holidaymaker and sick of the beach and bored of doing all the things one is expected to do while on holidays, Jones decided to entertain himself by setting himself a task of how to explore the place photographically. Jones has two related objectives in mind in setting this task. Firstly, he wants to avoid the tendency to unthinkingly shoot the typical views of a seaside village and end up with clichéd, postcard style, holiday snaps.⁵⁴ And secondly, under the particular influence of John Cage's ideas, he wishes to remove his own intentions for selecting the shots and composing the photographs, and in its place use randomness and chance as a method.⁵⁵

Thus Jones developed a strict, pre-defined system that indicated how, using an instamatic camera, photographs would be taken of St Ives.⁵⁶ Determined by 'chance operations', Jones marked ten points on a map of the village as the locations for taking each photo, and the 'system' even determined the direction he would be facing at each point. According to the rules, the photos had to be taken no matter how boring, awkward, embarrassing or typical.

⁵⁴ In *The Art of the Accident*, Hayles also emphasises this significant creative desire to escape from your own (usual, tired, habitual) intentions. She points out that this is a kind of logical conundrum, since how can you truly escape from your intentions, when it is your intention to escape your intentions.

'The problem with plans of any kind, of course, is that they are limited by our intentions. And our intentions are limited by what we (already) know. [So then how can we] intentionally escape intention, without having our escape plans contaminated by precisely that which we are trying to elude? Which is to say, how to open ourselves to what we cannot imagine?' (Hayles, cited in Gerber 2004:14)

⁵⁵ John Cage invented 'chance operations' and 'indeterminacy', in order to move away from conventional intentional creativity which is said to be inescapably ego driven, self imbued and 'dictatorial', and therefore apparently of limited true creativity, to rather superiorly access unforeseen outcomes (Gerber 2004:12-13). Cage himself was the composer of *4'33"* which is four minutes and thirty three seconds in which the performer makes no sounds with the instrument and rather the piece is comprised by whatever sounds that spontaneously occur and that the audience hears during that time, including the sound made by the audience themselves (Jones 1984:101-2).

⁵⁶ Jones provides considerable detail for how he developed his systematic 'chance process'. He explains that he drew a grid upon a tourist map of the area, of 100 x100 which produced 10000 points, from which he selected 10 by a 'random' process (using a list of the dates of service for the clergyman at the village church) to be the sites for each shot, and then he applied the compass points to dictate the direction the camera would be facing at each location. His essay includes the map of points 1-10 with their directions, whereby 1 faces North, 2 faces South, 3 faces West, and so on until 10 faces South (Jones 1984:85-102).

Indeed at one point, as he bemusedly recalls, he finds himself among promenading tourists with his *back* to the scenic view across the beach, in order to take a close up of a wall. That Jones ends up with a banal image of a brick wall is of course not a problem, because it is the experience rather than the outcome that is of interest.

'I've learnt, in all this, that this aspect of being driven by one's "promise" to accept the results whatever they may be, is perhaps the greatest fascination, though it can at times leave one very exposed. It is the reality, the actual experience of *being driven outside of oneself*, one's idea of what one likes, or dislikes, of "who one is". It is the process of being exposed to parts of life that are inaccessible to one unless one's preferences are given up. It is being put in touch with aspects of life that are beyond the range of one's habits and one's skills' (Jones 1984:89, my emphasis).

Jones beautifully and eloquently conveys the fact that by adhering to these rules, he has opened himself up to parts of the world (of his life, of daily experiences) that would otherwise be out of reach should Jones only rely on his judgement and intuition – his inspiration, anything that pops into his head – for his creative decision-making.⁵⁷ It is particularly interesting to observe strong parallels here with the world opening up for Experimental Travelers, since we can see that a fresh engagement with 'the world' makes sense not only in terms of the experiential world, but also the creative world.⁵⁸

This final idea from Jones – to be 'exposed to parts of life' that are 'inaccessible' if rules are not adhered to – helps to understand and put better words to the descriptions that we have reviewed of projects such as *The Last Periods*. In undertaking these kinds of projects, we

⁵⁷ A fantastic discussion of the *professional* importance of fresh, non-habitual experiences and decision-making is provided by Mason in his book, *Researching Your Own Practice: The Discipline of Noticing* (2002). According to Mason,

'An important source of pleasure comes from participating in a moment of choice by making an informed decision to act non-habitually, to respond professionally rather than just to react... there is a sense of freedom, of meaning, of worth-whileness and self-esteem' (Mason 2002:8).

Despite this,

'the practical facts...are that there is too much to attend to in any interaction, too much to be aware of, too much to notice...so we develop routines and decision habits to keep mental effort at a reasonable level....Far from learning by experience moment by moment, we react, just managing or coping...we continue to believe that we act freshly all the time, when in fact much of the time we react rather than respond' (Mason 2002:8).

⁵⁸ Furthermore, there is of course an epistemological benefit from freshly engaging with the world. In *101 Experiments in the Philosophy of Everyday Life* (Droit 2003[2001]) Roger-Pol Droit attempts to 'provoke tiny moments of awareness' by '[inventing] things to do', such as walking in dark, kill people in your head, look at people from a moving car, smile at stranger, run in grave yard, recite the telephone directory while on your knee. Droit asserts that these small, silly moments of the 'interrupted everyday' 'can each become the starting point for that astonishment which gives rise to philosophy' (Droit 2003[2001]:ix). His experiments are designed to result in 'a systematic discrepancy, a step to one side, a change of view point', so that we may 'shake a certainty we had taken for granted' and feel the 'unsettling of reality' (Droit 2003[2001]:x). While playful, his intention is the serious stuff of dislodging and questioning what we take as 'the way things are'.

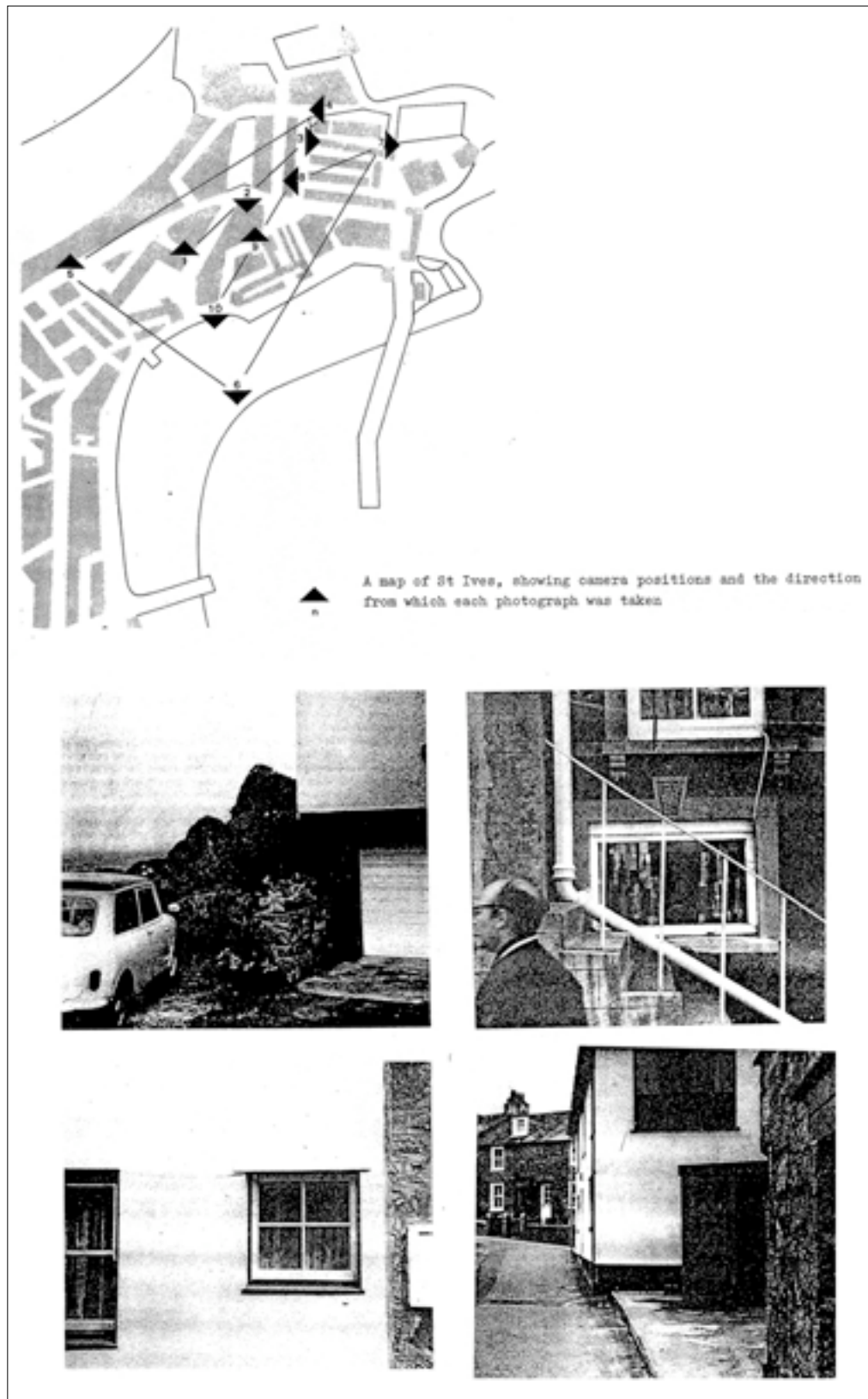


Image 16. St Ives by Chance (Jones 1984:85-102)

*above – map of St Ives indicating the location and direction for taking the photographs
below – four of the ten resulting photographs*

can say that not only were these designers 'establishing a trail' of similarity, and perhaps achieving a high yield for 'fairly minimal effort' (to the extent that they were reasonably straightforward once the constraint was established), Jones now provides us with this idea of 'being driven outside of ourselves' so that we are exposed to different parts of the world. Thus, not only does a restricted kind of seeing cut a trail of similarity for us through an undifferentiated world, but this restricted kind of seeing can take us into parts of the world that we might otherwise not reach.

Moreover a preset rule also provides the ability to *articulate* the restrictedness of your seeing. This is important not to misunderstand. Adhering to a preset rule does not solve our normally restricted habitual experience (that we are 'blind slaves' to, as the *Oulipo* put it,) by *guaranteeing* an unrestricted all-encompassing experience. Instead, creating by adhering to a preset rule ensures a *consciously* limited experience – it is still a limited experience, but one we *can account for*.

In summary, through this exploration of *process* we can refigure or construe *The Last Periods* as a project that is not about fullstops, but is about establishing a trail of similarity in the undifferentiated world of a collection of books, despite the myriad insights and creative possibilities that such a collection of books might inspire. Instead of grappling with overwhelming choices, the decision to see just the final fullstops provides an experiential and creative strategy for being open and fresh, as well as establishing a clear and uncomplicated trail through the enormity of one's books.



This brings Part 1 of Collecting to a close. In this discussion we have derived ways to talk about a group of 'sticky', 'homeless' projects including *Lipstick* and *The Last Periods of Some Books (magnified by 4266%)*. We now have language to attend to such creative, investigative, visual work: both with regard to *form* ('the-same-but-different' and 'all falls into line') as well as *process* ('establishing a trail of similarity' and 'opening oneself up'). To further work through these concepts, I will now turn to explore *adopting* this language as a *strategy* for creating an original project.

Part 2.

Principles of Collecting that can now be adopted.

Section 1. Adopting Collecting to accumulate cyclists.

As outlined in the Preamble that preceded Chapter 3, for the purpose of applying the Model I have chosen to investigate cyclists. In particular, I am interested in gaining a clearer picture of cyclists, since they seem to be invisible and obscured by stereotypes. In the following discussion I describe how I adopted the Collecting concepts now derived, such as 'all falls into line' and 'establishing a trail of similarity', to carry out Stage 1 of *BikeWork*. I established a 'rule' and context for accumulating cyclists, resulting in a poster featuring a Collection of 65 cyclists. Finally, I reflect on my experience of using Collecting and identify some of the shortcomings associated with this strategy.

How I 'established a trail' of cyclists.

In light of 'the-same-but-different' (the unique insight that can be gained from a set of similar things) and 'establishing a trail of similarity' (how paradoxically the world opens up when you adhere to some self-imposed preset constraint), I set a rule to just see cyclists in a park in the city one afternoon, and to see them all the same way. (See *Item 4* in the Appendix for a more comprehensive account of how this project was arrived at, organised and carried out on the day.)

In addition to taking their photograph, I asked all the cyclists a 'ludic', whimsical aspirational question. I wanted to flesh out each cyclist's image with some additional understanding but wanted to embrace my role as a *designer* undertaking research. I realised that social science questioning and methods were best left to social scientists. And since I am not a social scientist, I decided not to ask how old the cyclists were, nor their reasons for cycling. Instead I posed the rather absurd but evocative question, 'what two things would make next year the perfect year?' Asking such a whimsical question (not to mention taking a rather affected photograph) is largely attributable to Gaver's work with 'cultural probes' which stresses the value of the 'ludic' and idiosyncratic in design related and led research.

Asking the question 'what two things would make next year perfect', allowing space (on the survey) for only a very short response, and with only a couple minutes to respond before leaving for a bicycle ride, is ludicrous. Even if perfection existed, could it be realised by attaining just two things? (And what on earth has this got to do with cycling anyway?) And what about the value of the responses? (As they say, ask a stupid question, get a stupid answer.) Was the response 'world peace' (which did turn up numerous times) a mocking response, as in the clichéd vacuous beauty queen speech; or a sincere wish?

While by no means dependable comprehensive information, the responses to such a question are valuable, as Bill Gaver puts it, as 'fragmentary clues about [the participant's] lives and thoughts' (Gaver et al. 2004:53). Contrary to the fundamental recommendation of conventional social science, the 'probes' researcher's focus is to *avoid* asking 'unambiguous questions [since these just] tend to give you what you already know' (Gaver et al. 2004:56).⁵⁹ Instead 'cultural probes' researchers aim to 'provoke' and gain 'glimpses', as a way to access *usefully unexpected* insights. A probes approach values a 'more impressionistic account' (Gaver et al. 1999:25) – even 'whimsical' (Gaver 2001) – since, as the oft cited *r'asion d'êtré* states,

'[people] do not just pursue tasks and solve problems, they also explore, wonder, love, worship, and waste time. These activities...are meaningful and valuable, but difficult to handle from traditional perspectives' (Gaver 2001).

Cultural probes research involves the distribution and return of artefacts that set evocative tasks for the end users of a (usually technological) design. For example, to inform the design of an older persons centre, a map of the suburb was distributed to the participants (who will be the end-users of the centre.) The map requested these people mark certain places, such as where they feel 'safe' or fearful. Then, once completed, these annotated maps (known then as 'returned probes') were returned to the designers, for 'influencing' their subsequent design (Gaver et al. 1999). Gaver and others contend that setting such tasks is a way to become playfully, subjectively familiar with the rich and varied particularities of users, which is useful for 'inspiring design ideas' and uniquely advantageous for arriving at sensitive, humanising design solutions (Gaver et al. 1999).⁶⁰

⁵⁹ I was warned by one how-to-write-a-proper-questionnaire textbook that 'it would be *interesting* to know' is not an acceptable justification for including a question on a questionnaire (Bradburn et al. 2004:22). This is clearly diametrically opposed to the spirit of *BikeWork*, (not to mention cultural probes), which is highly heuristic, and where there is no specific objective in mind: instead it is driven by a question of '*let's see what happens* when we photograph a whole bunch of cyclists'.

⁶⁰ Therefore it is strictly more accurate to say that my approach is in the *spirit* of cultural probes research.

Thus in contrast to asking 'straight' questions – such as conventional demographic questions, as well as logically expected questions such as, in my case, 'why do you cycle' – by asking 'what would make next year the perfect year', I do not just find out what I already know, (and not to mention, that has been reliably established by more rigorous methods).⁶¹ In this way, a Gaver-inspired-ludic approach provides access to certain fragmentary, idiosyncratic insights into cyclists that could not have been otherwise gained.⁶²

The resulting Collection: 65 cyclists who are 'the-same-but-different'.

My resulting 'collection of cyclists' constitutes Stage 1 of *BikeWork*. Perhaps, since my Collection consists of situated photographs and idiosyncratic answers, it may be strictly more correct to call this a 'collection of fragments of cyclists'. The poster 'Collecting Cyclists' (U FIGURE 9) shows the result of this process: a grid of 65 cyclists, and 65 answers to the ludic question. The images happen to be in chronological order (the time the photograph was taken), while the responses happen to be in alphabetical order (by the first letter of the first response).

In carrying out this project I was chiefly concerned to emulate my observations and theorising of *Lipstick*, *The Last Periods*, and others. Accordingly I developed a makeshift white backdrop to create the effect of 'deep etching', to remove the contextual detail and bring the cyclists 'all into line' to some extent. Furthermore I 'art-directed' the photograph so to speak, so that all the cyclists would be standing just with their bicycles. I too wanted to see what 'knowing' I could gain from 'the-same-but-different' (a series of cyclists) who were 'all in line' (photographed in front of a bed sheet with their bicycles). Indeed, once I had set these rules – these conditions for Collecting cyclists – others could carry it out. As Appendix

While significantly informed by Gaver's 'ludic' approach, it is important to note that my research differs from Gaver's accounts of cultural probes in two ways. First of all, I ask a provocative question and request a particular pose, instead of setting 'ludic' probing tasks *per se*. Secondly my research participants are not the end users, so to speak, but instead themselves the subject of my inquiry.

⁶¹ For example, when Leichhardt Council surveyed 700 people, they found (perhaps not unexpectedly) that 71% of people want more bike lanes and 40% want safer drivers (GTA Traffic and Transport Consultants 2006: Appendix K – Community Cycling Questionnaire & Analysis).

⁶² Gaver does not restrict the importance of the ludic only to the kind of data that you want to *extract* from your research participants; instead the ludic must also be maintained in the way you (the researcher) *handle* that data. Five years after describing 'cultural probes', Gaver felt it necessary to put forward 'probology', which is the *study* of probes (Gaver et al. 2004:56). Here Gaver stresses that, having gathered 'ludic' fragmentary data, the point is not to summarise or average it: probes do not need to be subjected to some kind of 'rigorous' analysis in order to validate or rationalise what they uncover, (as some subsequent researchers have apparently mistakenly done). Instead Gaver insists that the researcher preserve the ludic spirit, and engage in a subjective, non-systematic, non-comprehensive *interpretation* of the 'probe' outcomes. Indeed, perhaps categorising these ludic fragments (as I do in the subsequent chapter on Ordering) could be the kind of systematic analysis that Gaver warns against.



?! Howard and Bush fall	(But Beazley is gone too!)
a good relationship	peace of mind
a healthy son	finish renovations
a new bike friday	and a trip to the USA to collect it
a new job	an overseas trip
a new job in the community sector	overcoming my sexual hang ups
a new partner who cycles	lots of money!!
a novel complete	adventures in Russia
A scholarship!	Lots of bike rides
a super boyfriend	adventure
a total worldwide ban on all motorised transport	not being killed by a car before the worldwide ban takes effect
all streets having cycleways	money to travel
become a dad	win oxfam trailwalker
being able to climb alot	some positive developments in the saga of making sydney cycle friendly
being healthy	& happy
big fat pay + owning a roof!!	yes + lots of cycling!
bulldogs premiers	wallabies undefeated
bush's impeachment	end of iraq war
car free CBD	tandem
challenge	travel
cycle touring NT	become fluent in French
demise of cars	global sustainability
dream job [coaching]	dream lung power
dream job [idle rich]	& sustainable transport everywhere
extensive o/s travel	no family bereavements
family good health	promotion
fed govt. money for national cycling strategy	RTA 5% of their budget for bikes
get 1st class honours	my mum falls in love
get licence back	get close to dream job [professional motorcycle racer]
good relationship	howard out of office :)
health and fitness	time for play
Howard dead	no more oil
i'd get more actively involved in activism	i'd spent more time with friends in silence / meditation
john howard is assassinated	a socialist govt gets in
land dream job [some sorta museum curator (for now)]	meet dream girl :)
less stress at work	better communication with my wife & kids
long international trip (on cards)	start university
lose 25 kilos	spend 2 weeks in the snow
lots of surfing or snowboarding trips - with pristine conditions	change of attitudes of our governments
maintaining a sense of self development	getting in touch with old friends
mandatory detention abolished	and a trip to peru
more cycle lanes	& a new house
more money	more holidays
more rain	
moved to beach	got approved for my exchange to Japan
my business gaining enough momentum to provide a good income	
my family moves here	to fall in love
my partner returns	my passive income increases
new frame	new commissions
new job (see above)	less stress
new MTB	my girlfriend to come and join me
nick cave in concert	more love
overthrow the capitalist system	implement an equitable socialist system in its place
peace	winning lottery
protected bike lanes everywhere in Australia	lose howard
success in business	and relationship
successful projects	growing friendships
that's a bit much to ask	
the death of all the Howard government	time at the beach
travel round africa	buy home
USA out of Iraq	& me passing exams
world peace	Green Government
world peace	less corporate greed
world peace	sydney car free
worldwide nuclear disarmament	cyclepaths throughout Sydney

BikeWork Stage 1: Collecting what two things would make next year the perfect year?

Figure 9. BikeWork Stage 1 – Collecting

Item 4 details, I had assembled, briefed and deployed a little team to recruit the cyclists and take their photographs.

Reflecting on the process and the outcome: energising yet frustrating.

Adopting the ideas derived in the first part of this chapter as a creative, investigative, visual strategy was a productive, energising and focusing approach. Just like the creator of *Ava Gardner Dies*, I enjoyed some pretty high returns for not much creative effort, once the project design was conceived of and the 'constraints' were in place: Collecting cyclists, at just this event, on just that afternoon and taking just one kind of photograph.

But now the question is what do I know from a pile of cyclists? I certainly gain a sense of 'cyclist-ness' – a large number of cyclists and the common defining characteristic, which is simply holding a bike. Indeed, the overwhelming impression is that of diversity within the 'cyclist' category: diversity in looks (as seen in the photographs); and diversity in ideas (as revealed by the fragmentary answers to the whimsical question). But in another way, as we will shortly see in the limitations discussion, I realise that in observing this diversity I have also begun to notice patterns – especially in such large numbers – *which can not emerge properly* in this 'leveled structure' where all cyclists are 'equivalent'.

For example (as shown in →FIGURE 10), among the images, I notice that there are at least four categories of bike (mountain, road, fold-up and childrens'); a trend in different kinds of cycling luggage (from rear panniers to back-packs, from children seats to an appropriated shopping basket); or even in the posture people assumed in relation to their bike (straddling, in front, behind, grasping the saddle, grasping the handle bars). And within these trends I started to wonder about sub-trends: were mainly women holding the bike with two hands on the handle bars, and mainly men with one hand on each the saddle and the handle bars? Similarly in the comments, I began to notice trends such as plans for babies, a desire to travel, and career aspirations, as well as reoccurring mentions regarding political leaders. It seemed to me that I needed to find a way to more meaningfully carve up this undifferentiated pile of cyclists. I wondered if it would be useful to establish a more refined kind of taxonomy, such as I had seen in Weese's *Periodic Breakfast Table*?

While I enjoyed the productivity, I am frustrated by the limits of this approach. Through the process of Collecting basically I now have a set of cyclists that are 'the-same-but-different' and held 'all in line' (in a grid, photographed in front of a white background). The emergent question now is, how do I deal with a 'pile' of cyclists? In other words, how am I going to get

types of bikes



'birdy'



road



mountain

ages groups of people



child



younger adult



older adult

body language



enthusiastic



relaxed



apprehensive

Figure 10. Patterns emerging in the Collection of cyclists.

all this organised? In particular, are there *visual* strategies available for *making sense* of large series of similar things?

Section 2. The limitations of Collecting.

In this part of the discussion we'll talk about the limitations associated with Collecting that we have started to discern, particularly in light of adopting and carrying out the principles derived in part 1 as strategies in *BikeWork*. Two related limitations will be discussed. Firstly, the more practical problem that potentially a collection can go on forever and the collector ends up with 'just too much stuff', that is basically the-same (but-different). The second problem associated with Collecting is a more epistemological problem, although directly related to the practical limitation. Eventually accruing a 'pile' of 'the-same-but-different' is intellectually frustrating. The 'making-equivalent' operation of Collecting whereby all things 'fall into line' – one of the powerful and distinctive features that gave rise to the collection in the first place – can also be (eventually) disadvantageous.

In this discussion we will consider a project, Hassink's *Personal Coffee Cups* (Hassink 2003:102-115), which beautifully demonstrates the benefits– the indiscriminate accumulation and fabulously focussed yet free productivity – but yet also begins to show the strains of Collecting: ending up with a shapeless stockpile and being unable to make sense of the patterns within that stockpile. In other words eventually a collection becomes an undifferentiated world in its own right, which require trails of similarity to be established within its world, itself a trail of similarity cut through the larger world. Interestingly enough we can expand this point by considering a fascinating essay by Gerald Grow who has studied the 'The Writing Problems of Visual Thinkers' (1994). Although Grow's topic specifically describes problems associated with the *textual* world created by visual thinkers, Grow's discussion is very evocative of the kinds of problems that seemed to eventuate when I collected cyclists in *BikeWork*, as well as in Hassink's documentation of workplace coffee cups.

I'll introduce the discussion by building on Wurman's now familiar quip about buying things in threes. Wurman explained that by a series of things that are slightly different but that belong to the same category, we can become very familiar with the defining characteristics of the category (cabbageness), which we could not if we only had one (even if that one was exemplary) that belonged to the category (a green cabbage). By being able to compare three cabbages, Wurman could observe the consistent attributes that defined cabbage – the

smell, texture, and density. But what would happen if cabbages occurred in a greater variety? In addition to red, green and Chinese cabbages, there are also white and Savoy cabbages, and as well Bok Choy and Brussel sprouts, (not to mention cauliflowers and broccoli which all belong to the same *Brassica* genus of plants) (Conran 1997:134-6). So the question is, what would Wurman have understood if he had considered say 65 cabbage varieties (which happens to be number of cyclists collected in *BikeWork*) or even 420 types of cabbage (the number of mugs in Hassink's collection), instead of three? If cabbage varieties occurred in numbers like these, it strikes me that considering them in the flat, equivalent 'all in line' structure of the Collection would be extraordinarily frustrating.

Two kinds of things eventually start to happen that strain the benefits of Collecting. First of all, at some point (for Wurman apparently beyond three) accruing subsequent individuals (more kinds of cabbages) for understanding what defines the group (cabbage-ness) is just not useful. To put it bluntly: *we get it*, we get 'cabbageness' at around the third cabbage, adding more cabbages does not enrich this. Even without the Savoy, although apparently 'particularly tender and mild flavoured' (Conran 1997:134), Wurman has already understood an idea of any cabbage's smell, texture, and density from the original set of three.

Secondly, the differences and finer distinctions – the colours, the taste, the shape – the features that do define the individual cabbages, which could be managed and comprehended and held in the mind when observing a smaller population, become unruly and obscured in a much larger group. Instead we start to wonder about trends of cabbages, and yearn for sub-groupings: green and not green, and so on.

Similarly while we could still gain insight from the relatively small numbers of orange books (four), used lipstick (ten), enlarged fullstops (twelve) as a series of 'the-same-but-different' and 'all-in-line', seeing the similarities and differences is unworkable when larger populations – 60 references to *The Catcher In the Rye*, 288 front page obituaries, 300 bits of paper, (and indeed 65 cyclists and 420 coffee cups) – are contained by the 'level' structure of a Collection. In these larger collections, we certainly get a strong sense of what defines the group: in *The Readers Before Us* we understand the evocative ephemerality of impromptu bookmarks; in *Coming of Age Reading Checklist*, we appreciate the prevalent trend of giving a new novel kudos by piggy-backing a Salinger novel. But trends within these groups are frustratingly concealed: we can not see *categories* of paper (tickets, notes, photographs) nor the *kinds* of reviewers who trot out the apparently mandatory reference to *A Catcher in the Rye*, and for what *kinds* of fiction.

Thus in this closing discussion we concede that at some point the 'flat' structure seems to be limited in its ability to 'facilitate' or 'articulate' the trends of similarities and differences, made discernible by the same 'flat' structure. Although I do not try to calculate or nominate a specific, threshold number as the point beyond which Collecting is no longer helpful, in the following discussion we explore the idea that flattening and equivalence are useful to a point – indeed indispensable and central to the case for Collecting – but only to a point.

To begin to consider what would be required from a stage subsequent to Collecting and to augment the shortfalls of this initial strategy, we will refer to Jacqueline Hassink's book, *Mindscales*, as well as Grow's contemplations on writing.⁶³

In the project *Mindscales* Hassink aims to compare the 'mindscales' of two cultures – the US and Japan. More specifically, Hassink seeks evidence for these cultures by examining the characteristics of their workplaces, documenting the material culture and interior design of several corporations for each country. For example, in one component of the project, Hassink juxtaposes the desktop image from an executive's computer (which was in one case a clichéd tropical holiday deserted island complete with lone palm tree and turquoise waters), with a photograph of the office of the same executive (which included a rigidly neat pin board, with notices arranged precisely perpendicularly, under fluorescent lighting.) This simple juxtaposition inspires the same kind of imagining and speculation as Greene's lipstick shapes captioned with women's names. Is the office organisation the *reality* of this executive's life, and the desktop image more reflective of their aspirations, or is this rather about the incongruencies between a publicly projected and privately revealed identity? In any event, *Mindscales* certainly is provocative and a rich site for contemplation. As one commentator notes,

'Through Hassink's extended taxonomical program...we are allowed to compare, contrast, and question more deeply....Does this company stress tradition or innovation? Is there a clear internal hierarchy on display or is this a horizontally organized company? Is the CEO a king or ostensibly a team player? In viewing the photographs....one is struck both by the uniformity of corporate life and, within that uniformity, the infinite variability' (McNear 2003; in Hassink 2003:190-5).

However the component of *Mindscales* most instrumental for the present discussion of the limitations of Collecting is *Personal Coffee Cups – Netscape and Cigna* (2003:102-115)

⁶³ While Hassink is not a designer but a photographer, since her work *Personal Coffee Cups – Netscape and Cigna* (2003:102-115) uses the same visual strategies as Buchanan-Smith's *The Last Periods* only in much larger numbers, Hassink's work represents the extreme case of Collecting and so is informative for understanding Buchanan-Smith's *The Last Periods*.

(↓ IMAGE 17). For Hassink coffee cups are a kind of portrait that express the individuality of the employees:

'In a working environment filled with objects belonging to the corporation, the personal coffee cup allows employees to show their individuality. In offices as well as factories, employees bring their own coffee cup for personal use. Corporate culture offers the coffee break, that period of time in the working day when employees are afforded the leisure to create some private space, to talk about the weekend, their hobbies, families, etc. I wanted to map, or portray a corporation by photographing "the personal coffee cup" of each employee' (Hassink 2003:102).



Image 17. *Personal Coffee Cups* (Hassink 2003:102-115)

35 of the total 420 coffee cups.

This work, which simply documents the personal coffee cups of the employees from two US corporations, demonstrates how the insight gained by Collecting can begin to strain. In page after page, there is a grid of photographs of coffee cups, with a facing page reflecting the same rows and columns indicating minor details about each mug in black and white text. Across the ten spreads, the photographs seem to be in no particular order.

There are 288 of mugs from Netscape, and another 132 from the Cigna Corporation, totaling 420 coffee cups. All that we know about each mug is simply, the name of the owner, how old the mug is, how many cups they have a day, and (sometimes) of what kind of drink. As I mentioned it is not the intention of this discussion to recommend some optimum number, but I am interested in this project as suffering from having 'too much'.

We can consider how Hassink's project demonstrates both the benefits as well as the drawbacks of Collecting. By the decision to adhere to a self imposed preset visual constraint – to photograph coffee cups and arrange their images in a grid – 420 coffee cups are 'all in line'. Clearly this has been a productive approach - yielding a great many images and details. And we can reasonably presume once the project was conceived, that it was straightforward to complete – Hassink herself may not have even produced it, and perhaps someone else (e.g. an assistant) followed the rules she conceived of.

But we can also view this as a project that is *suffering* as the product of a collection. In particular, I want to highlight that the intellectual disadvantage of having 'too much' that is 'all in line' is that things remain undifferentiated, unmanageable and so unknowable. If you are only working with a flat structure, you can not engage at a higher conceptual level of 'sorting things out'. The adherence to a grid structure page by page, and the simple repetition of photographs of mugs, and the repetition of details, conceals potentially interesting trends and variations in the mugs (→ IMAGE 18). For example, what is the ratio of tea, coffee, water, hot chocolate, and hot apple cider? How many mugs are corporate branded? jokes? 'cute'? rude? chic? plain?

Additional interesting questions also arise in the mind of the viewer, which simply can't be attended to by the Collection. Is there a correspondence between the kind of drink that is consumed, the style of mug, the age of the mug and the gender of the drinker? We might also wonder why ask how old the mug was, when the corporate status would surely have been a richer question? Can we know more about those people who drink *no* cups of tea or coffee all day, (unimaginable surely). And what about those who have *eight* cups of coffee? And why own more than one mug at work? By even a cursory survey, it seems that there is

so much more to know about these mugs that isn't made available in an extensive grid of photographs. So how can we better understand these problems?



Image 18. *Personal Coffee Cups* (detail adapted from Hassink 2003)

Grow's account of 'The Writing Problems of Visual Thinkers' is instructive here. In this article Grow contrasts the characteristics of good writing with the characteristics of writing done by visual thinkers. For example: 'Instead of the dramatic method of "who does what to whom now, and now, and next," the visual thinker tries to infuse prose with multiple simultaneity that flattens out into "is...is...is..." (Grow 1994:146). Indeed, this kind of account of how

visual thinkers write is spookily reminiscent of the strategy of Collecting, which we have derived and explored in this chapter.

Grow explains that the writing of visual thinkers is characteristically overly open and receptive: 'no detail is irrelevant' (Grow 1994:150). Additionally, the visual think is non-evaluative, indiscriminate and unbiased: for the visual writer everything is 'sublimely equal' (Grow 1994:150). These are all characteristics that we have just established as the hallmarks of Collecting practice. The result is that the writing of visual thinkers resembles a kind of list, or as Grow describes, 'subject-heavy, verb-weak sentences in which long noun clauses (the rough equivalent of visualised objects) are loosely strung together' (Grow 1994:146).

There are several problems that are associated with the use of lists as a strategy for organising thoughts, which are worth reviewing in the present context of the limitations of Collecting. In her thought-provoking essay, 'From the (a) trivial to the (b) deadly serious, lists dominate visual culture', Alice Twemlow (2003) observes that a list has the effect of rendering all the items it includes as having 'equal weight', giving rise to 'laughable abutments' such as in 'to-do' lists: 'call printer, pick up dry-cleaning, quit smoking; get bicycle fixed, buy deodorant, write memoirs' (Twemlow 2003:41). This is a rather more serious matter for the analytical designer, Edward Tufte. In his spirited, disparaging attack of *The Cognitive Style of Powerpoint*, Tufte singles out the 'bullet outline' as simplistic and 'faux-analytical', and having only the semblance of organised thought. He cites at length an article published in the *Harvard Business Review*, which explains that lists are incapable of specifying complex relationships among things and can only actually say three very simple kinds of things – membership to a group, sequence of things, and priority – and only one at a time (Shaw et al. 1998; cited in Tufte 2003:5).

Returning to Grow's account, we might now recognise that his specifications for good *writing*, are in fact very instructive for enriching Hassink's coffee cups project, and indeed my own collection of cyclists. Grow explains that the typical characteristics of good writing are that, in contrast to everything being equal, there are *overarching themes* and *subordinated thoughts* (Grow 1994:150). Good prose arises not by listing and enumerating, but by *ranking* and *ordering*.



In this discussion we have considered the other side of the Collecting coin, (which, we might say, prompts the shift to a new coin, Ordering). Creating an amassed, large, level and

undistinguished pile is practically unmanageable and intellectually crude. It seems that despite its benefits and productivity, eventually Collecting must be abandoned. That Collecting can go on forever is impractical, absurd, and unsustainable. Instead, the constellations of similarities and differences that can be discerned seem to implore for some structure to be generated, for some order among things.

CHAPTER 4.

ORDERING: A SHORT-LIVED SALVE

STAGE TWO

In the previous chapter, Collecting, we considered a series of projects (like *Lipstick*) that were only partially accounted for by Visual Communication and Visual Research. In this chapter, Ordering, we examine another series of projects (like *Periodic Breakfast Table*), which are similarly not attended to by Visual Communication or Visual Research. But in addition, this second group of projects *also* resists the explanations derived in Collecting.

Accordingly, in Part 1 we derive a language that *does* attend to projects like *Periodic Breakfast Table*. This language features expressions such as 'nothing so tentative', refers to the 'which-way-to-organise-it' problem and outlines the concept of gaining a 'multivalent', microscopic-macroscopic appreciation of things.

In Part 2, these ideas are adopted as a strategy for creating Stage 2 of *BikeWork*, where I Order my Collection of cyclists. Based on this experience, I outline the advantages and limitations of the process of Ordering. Finally I speculate on what would be desirable in a subsequent stage.

Part 1.

Deriving a language for talking about projects like *Periodic Breakfast Table*.

Section 1. Why Ordering comes after Collecting.

While providing *partial* explanations, the Collecting language does not fully address all of the ‘homeless’, ‘sticky’ projects that I have gathered. Terminology such as ‘the-same-but-different’ just doesn’t attend closely enough to projects like *Periodic Breakfast Table*. Instead, as shall see, literature such as Hilary Evan’s (2001) paper ‘Where Do We File “Flying Saucers”? The Archivist and the Uncertainty Principle’ does. In this chapter, by bringing such literature, broadly concerned with classification and categorisation, to three key projects including *Periodic Breakfast Table* (which are *like*, yet not quite, Collections), we derive an Ordering language. Thus my intention is not to ‘assess’ the projects in light of the classification literature, but to explore what understanding can be gained when we draw on such literature to unpack ‘sticky’ projects.

This discussion is structured by a series of iterative ‘passes’. In the ‘first pass’ we recognise that Ordering is both practical and ubiquitous in everyday life, as well as analytical and fundamental to knowledge. Here we understand that these projects benefit from establishing principles to Order their Collections, not only in the *utilitarian* sense in terms of ‘sorting things out’, but also, not inconsiderably, in the *epistemological* sense, since creating order among things in fact affects how we *understand* them.

Then we’ll ‘problematise’ this first pass. Here we’ll consider more critical literature that suggests that Ordering may not be so straightforward, but is instead ‘tentative’, inherently flawed and even ideological. This ‘second pass’ emphasises that no Order is ‘axiomatic’ (a devastatingly appropriate choice of word that is provided by Carmody [2007]). Rather than being based on some set of pre-established principles, creating an order among things is discretionary. The enriched perspective gained by this second pass actually lays the groundwork for what I subsequently assert as the real value of Ordering.

I propose that rather than conceiving of an Order as a fixed outcome, it is more useful to conceive of Order–*ing* as a dynamic process. Thus, in the ‘third pass’ we consider the project *outcomes* under consideration as ‘workable’, (representing a compromise between the conceptual ideal of perfection and the need to fulfil a practical task to get organised), while we recognise Ordering as a *process* – of cycling in and out, from categories to particulars, negotiating the possibilities between ‘too coarse grained’ and ‘too finely meshed’ – as an opportunity for gaining an intimate understanding of a Collection, both as a whole and in terms of its components.

a. Introducing the three projects (and how they seem to be something *more* than Collecting).

While we are already familiar with *Periodic Breakfast Table* based on previous discussions, *Endcommercial: Reading the City* (Böhm, Pizzaroni & Scheppe 2002) and *I [heart] [heart]* (Daly 2007[2005]) are new to us. So I will provide a general introduction to each, before moving on to describe how they are *like Collections*, (indeed like Collections of Collections or ‘meta-collections’,) but eventually drawing attention to their standout features, which seem to persist past Collecting terminology such as ‘the-same-but-different’.

Endcommercial: Reading the City (2002)

Endcommercial: Reading the City (2002) (henceforth referred to as *Endcommercial*) is a tome of a book which is the culmination of several years work by Florian Böhm, Luca Pizzaroni, and Wolfgang Scheppe.⁶⁴ Over several years, Böhm, Pizzaroni and Scheppe had, through their daily practice of taking photographs whilst visiting and living in cities around the world – Berlin, Rome, Munich, Paris and New York – amassed over 60 000 images between them.⁶⁵

The kinds of images (→IMAGE 19) they had accrued were not of the iconic or noteworthy landmark structures of these cities, but more in line with the oeuvre of Richard Wentworth or Eugène Atget.⁶⁶ They document signs of survival – in spite of urban decay – in life at the street level, evidenced in the ad hoc adaptations that can be found in cities around the

⁶⁴ Böhm, Pizzaroni and Scheppe are designers in the broader sense. *Endcommercial* is a ‘case study’ by the now disbanded Scheppe Böhm Associates (1994-2003). This was ‘a multidisciplinary creative office developing corporate communication identities for countries and brands’ (Phaidon Books 2005).

⁶⁵ One thousand photographs were selected for the final book (Margolin 2003).

⁶⁶ See Bush (2001) for a fabulous treatise on the shared propensity of these two photographers to observe the inconspicuous continual change and adaptation, and ability to image a city ‘constantly being made and unmade, pulled apart and put together once more’ (Bush 2001:27).



Image 19. *Endcommercial: Reading the City* (Böhm, Pizzaroni & Scheppe, 2002)

A selection of page spreads from throughout the book.

world: for example the widespread, multifarious uses of plastic milk crates, gaff (duct) tape, and blue tarpaulin covers. In his review of the work, Victor Margolin comments that they 'expose the hidden or otherwise invisible actions, processes, and communication codes that constitute the fabric of daily life for large numbers of people' (Margolin 2003).

Wolfgang Scheppe explains, 'What we did was similar to what a scanner does: Mechanically registering the streets block by block. It was resulting in a mass production of a very large number of pictures' (Scheppe 2002; interview in Böhm et al. 2003). The creators recognise that generating such a collection is only made feasible by digital photography, which has dramatically reduced the cost of producing such a volume of images (Böhm et al. 2003). In a way simply not practical in an earlier pre-digital age, Böhm, Pizzaroni and Scheppe used their digital cameras as a 'digital notebook' (Herda 2002; review in Böhm et al. 2003).

How Endcommercial is like Collecting

In the first place, we can talk about *Endcommercial* in terms of Collecting. Just as in Wurman's cabbages, the impact of, and interest, in this work is a result of the *aggregation* of the images, not in any individual image itself. Böhm recognises – in a remarkable characterisation of the insight provided by 'the-same-but-different' – that when an image is presented in a series:

'[you] not only see the characteristics of the particular image but start looking rather at its "differences" in relation to others. That way information can be extracted that would be impossible to see just by looking at a single image' (Böhm 2002; interview in Böhm et al. 2003).

Undoubtedly *Endcommercial* was achieved by a sustained and liberated process, which resulted in the accumulation of thousands of photographs. And certainly, it is the seriality of the (rather than individual) photographs which is informative: just as we really understand orange books by Siegel's accumulation of more than one, we gain a strong insight into various 'overlooked' ways of coping and survival in an urban environment by viewing the series of images presented in *Endcommercial*, which arguably we couldn't get if we only looked at one.

How Endcommercial isn't like Collecting

Ultimately *Endcommercial* exhibits features that exceed Collecting. *Endcommercial* does not present these photographs as an amassed equivalent collection that is 'all in line', as does Greene in *Lipstick* and Hassink in *Personal Coffee Cups*. Instead *Endcommercial* presents 32 categories (chapters) of photographs. For example, 'Blue City' (→IMAGE 20) is a



Image 20. A selection of pages spreads from 'Blue City' – a chapter in *Endcommercial* (Böhm et al. 2002:99-116)



Image 21. A selection of pages spreads from 'Standpipes' – a chapter in *Endcommercial* (Böhm et al. 2002:387-400)

category of photographs that document the various uses of blue tarpaulin; ‘Stand pipes’ (← IMAGE 21) documents the variety of shapes and adaptation of fire hydrants as street furniture. These categories are organised into a taxonomy of three main categories and nine subcategories, which are reflected in the table of contents, itself a diagram that resembles an organizational chart (↓ IMAGE 22).

In one way we could talk about these categories in *Endcommercial* as Collections within Collections. But what is significant and defining and indeed unexpected about this work, is that these categories were identified *subsequent* to taking the photographs: in *Endcommercial* accumulating ‘the-same-but-different’ prompted the question of how to organise things. In other words, the set of photographs called ‘Blue City’ was not created because Böhm, Pizzaroni and Scheppe had colluded and set themselves a visual constraint (to photograph only blue tarps when wandering around the city). Instead we learn that these themes emerged out of a amorphous pile of photographs initially accumulated: and it was only as they were viewing their amassed images that Böhm, Pizzaroni and Scheppe began to notice reoccurring themes, patterns and types.

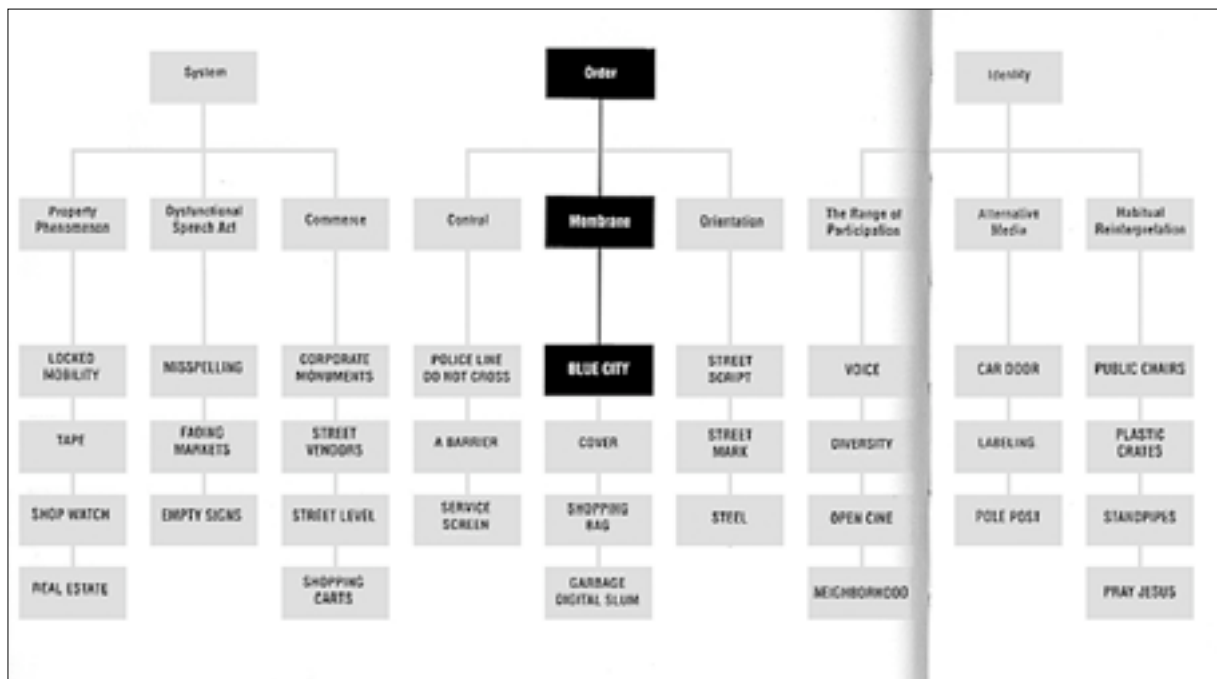


Image 22. Table of Contents, *Endcommercial* (Böhm et al. 2002)

They insist that their work is 'empirical': that they shot the photographs first with no categories in mind and that the taxonomy was extracted from the material, not the other way around (Böhm 2002; statement in Böhm et al. 2003). In fact it took more than *fourteen months* (on top of the time taken to amass the photographs) to identify and articulate the patterns and structures emergent (from their initial Collection), and layout (sort out the Order for) the book (Scheppe 2002; statement in Böhm et al. 2003). They explain that ultimately the 'aesthetic act' of *Endcommercial* was in the 'archival work not in the moment of taking the picture' prompting Wolfgang Scheppe to quip 'Our oeuvre is not the photography but the archive' (Scheppe 2002; statement in Böhm et al. 2003).

Wayne Daly's I [heart] [heart] (2007[2005])

I [heart] [heart] (2007[2005]) is a 'personal project' created by the London based graphic designer Wayne Daly, which explores the use of the love heart symbol.⁶⁷ This project features as a 'case study' in Noble & Bestley's book *Visual Research* (2005:82-87).⁶⁸ Noble & Bestley explain that as a whole project, Daly's *I [heart] [heart]* actually involved a range of aspects including: a historical consideration of the evolution of the love heart symbol; a study of the lonely hearts advertisements in newspapers; and the extensive accumulation of graphic ephemera featuring love hearts (Noble & Bestley 2005:82, 84, 86). For our purposes, we will be exclusively focusing on the two main posters Daly created, which display what he refers to as a 'heart typology' (Daly 2007). These two posters are essentially identical, except that the first sets all the symbols in black on an (appropriately) pink background, while the second sets symbols in different colours on a white background. (We'll come back to the significance of the colour shortly.)

Daly explains in the fine copy on the posters that each poster features four hundred 'found logos, icons and illustrations that use the heart as a component element.' Beneath the columns and rows of love hearts, Daly names the origin for each symbol, as well as the country of origin (if known). For example, heart 28 is the 'Apple Macintosh OSX Favourites icon (US)', while heart 112 is the 'dating.co.uk logo (UK)', 301 is the '*Pan Pipe Love Songs* album sleeve detail (UK)' while 361 is the Taiwan Society of Cardiology Logo.

⁶⁷ This title is apparently inspired by the ubiquitous *I [heart symbol] NY* slogan (Noble & Bestley 2005:82).

⁶⁸ Since the detail in these two posters is largely lost in reproduction in *Visual Research*, I contacted Daly directly, who kindly supplied the original electronic versions at a higher resolution and so these have been used as the basis for my analysis (Daly 2007).

How I [heart] [heart] is like Collecting

In the first place Daly's first poster (→ IMAGE 23) is a striking demonstration of adhering to a creative, visual constraint. By scanning the graphic world just for love hearts, and bringing this huge number of 'the-same-but-different' symbols together, we not only gain a tremendous appreciation for the widespread use of this symbol, but also we appreciate how strongly recognisable are its essential qualities, such that it can be subject to all sorts of graphic manipulation (e.g. cropping, shape substitution etc). Indeed in this poster all these love hearts, despite their graphic nuances and wildly disparate origins, are 'all brought into line'. As Noble & Bestley observe, some uses of the heart as a symbol are more or less logically 'iconically linked to their subject – for instance in the logos of medical organisations and cardiac charities' but 'other instances simply incorporate the sign as a visual symbol' rather more arbitrarily (Noble & Bestley 2005:86). Consider heart 388, the 'Walls' logo which is an ice cream manufacturer. Or 324, the Roxy Girl logo, a clothing brand. Yet, in this first poster, cardiology, internet dating and icecream are treated the same: all in a grid, all scaled to the same size and all made black.

How I [heart] [heart] is not like Collecting.

In the second poster (→ IMAGE 24), this collection is no longer an undifferentiated amorphous mass. Instead Daly has coloured-coded the 'core collection' of logos/icons/symbols by the *kind* of industry for which the logos are used. Accordingly, this second poster includes a legend that explains the categories Daly developed. Noble & Bestley provide a good account of this explaining that the second poster

'shows the range of products and services associated with the companies and groups whose logotypes are derived from the heart symbol, from charitable bodies (orange) and health care (green) to political groups (red) and pornography (light blue)' (Noble & Bestley 2005:84).

In total Daly distinguished twenty-five categories:

'Book or Greeting card; Charity or community; Clip-art; Computer, website, email or SMS; Dating; Educational; Environmental; Fashion; Food or drink; Graffiti; Graphic design or illustration; Health or medical; Historical; Music; Political; Pornography; Religious; Retail or standards body; Sport; Symbol font; Television or film; Tourism; Toy or child-related; Transport or vehicular; Unknown.' (Daly 2007)

Thus it seems Daly has gone beyond establishing a trail of similarity in the world by seeing and gathering only love hearts, and then bringing them 'the-same-but-different' all 'into line'.

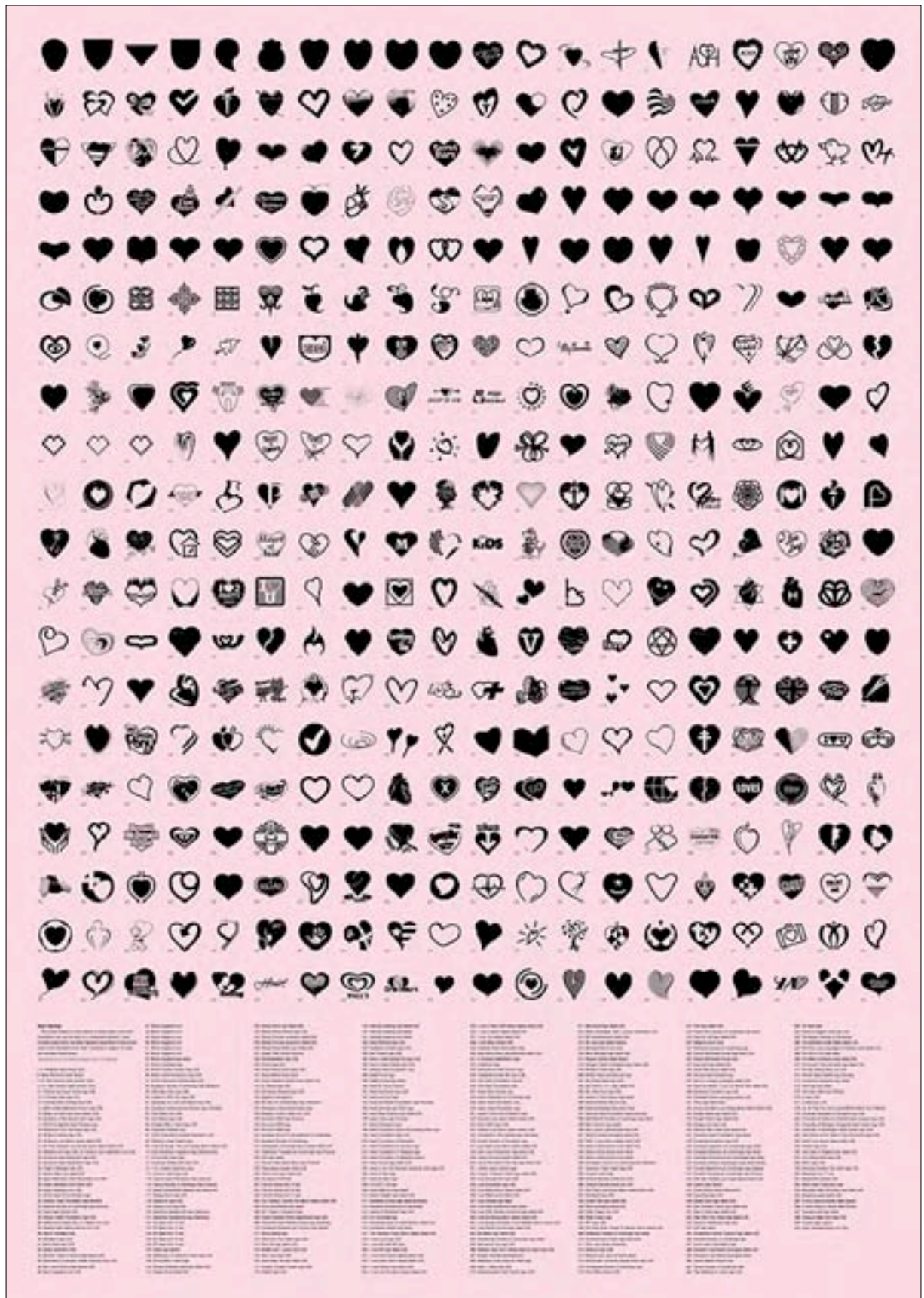


Image 23. The pink poster. *I [heart] [heart]* (Daly 2007[2005])

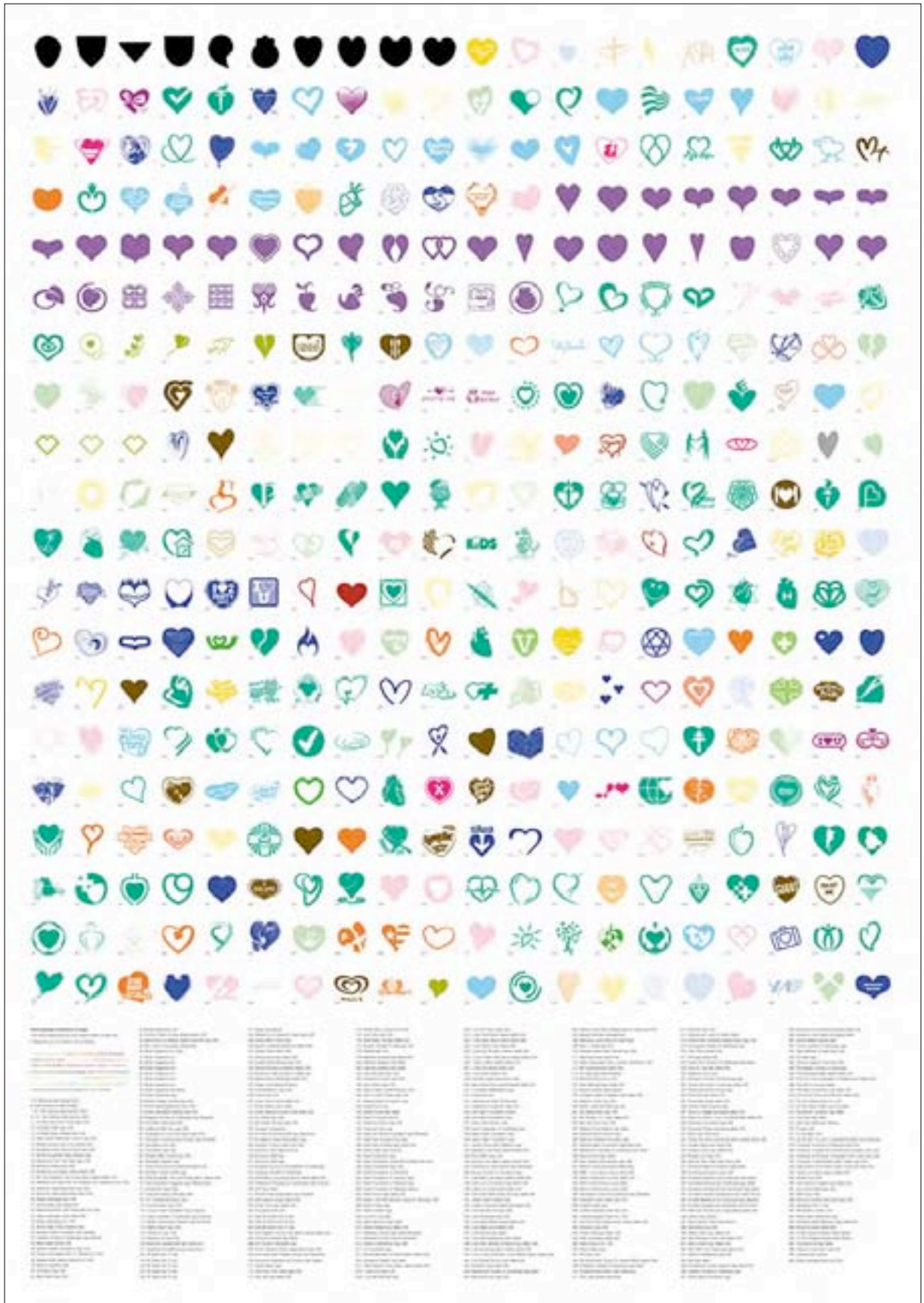


Image 24. The colour coded poster. *I [heart] [heart]* (Daly 2007[2005])

Instead by this subsequent colour coding we come to discern and appreciate the remarkably flexible and cross-cultural significance of this symbol. (Not to mention pondering the more bizarre uses: I mean, really, what does a love heart have to do with *transport*?)



Thus, just as *Endcommercial* was not shot according to a series of micro visual constraints like 'Blue City', but rather these themes emerged by a subsequent process of sorting and sifting through a mass of images, it seems that Daly has established categories among his mass of love hearts, *subsequent* to accumulating them. Indeed, similarly we might reasonably presume, Weese was prompted by an original collection of cereal to sort these cereals into rows of different shapes. The question of what exactly is involved in establishing such orders among things, and unpacking this organising and categorising which we have discerned by this cursory consideration of projects that 'seem' distinct from Collecting, is the subject for this chapter.

The problem addressed in this chapter is to talk about (unpack) projects that though seeming like Collecting are in fact quite different. Instead, these projects seem to create *some order* among a pile of things, to *make sense of* a series of 'the-same-but-different', indeed, to differentiate things previously rendered equivalent. This now brings us to our 'first pass' attempt at unpacking these projects, where we begin with literature that delineates the 'mechanics' of sorting things out.

Section 2. An apparently straightforward way to resolve the problems of Collecting?

In an essay entitled 'Notes Concerning the Objects that are on my Work-table', Georges Perec (1997 [1985]) confesses that he often finds himself rearranging his desk, 'clinging on to...activities of withdrawal: tidying, sorting, setting in order', on 'those indecisive days, when I don't quite know whether I'm going to get started'. By contrast, he notes that it is when his work is really moving along, that his desk becomes cluttered (Perec 1997[1985]:140-1). Meanwhile, in *Typologies and taxonomies: An introduction to classification techniques* Kenneth Bailey (1994) is at pains to explain that constructing a multidimensional typology of more than two dimensions – *even* when these are only dichotomised (polarised) – can become unmanageable since the researcher must deal with a large number of resulting cells or 'types' (Bailey 1994:5).

Though here Perec provides a discursive contemplation of an everyday behaviour while Bailey provides a technical, statistical, methodological account, the two are talking about exactly the same process (and more to the point, the kinds of *problems* associated with this process) that is how to establish an order among things. As we shall see, establishing an order among things also appears to be central to the three ‘homeless’ projects under investigation in this chapter.

a. Setting the boundaries on a vast topic.

It is important to be clear from the outset that it is not the goal of this discussion to provide a comprehensive or practicable overview of Ordering and its associates, ranking, grouping and organising, not to mention classification, taxonomies and typologies.⁶⁹ Instead, we will be carefully stepping a path through these ideas with particular questions in mind related to unpacking *Periodic Breakfast Table* and others.⁷⁰

Our interest is to enhance the understanding about these projects, since at this point we have essentially only discerned that these projects *seem different* from those considered in Collecting – here things aren’t ‘all in line’. To this end we will be pursuing two kinds of goals as we negotiate this ‘Ordering’ literature. Firstly, to better appreciate *how* these projects have organised their collections - their populations of love hearts, cereal, and urban photographs - if not ‘in line’. And secondly to grasp what effect this organising has on the *understanding* imparted by these projects: if not the essence of things (‘cabbage-ness’) or ‘the-same-but-different’ then what?

We begin by seeking a fundamental understanding of Ordering (why and where; its mission, its occurrence), before seeking a more practical account (i.e. the rules or ‘mechanics’ for creating an order among things.) We find that putting a neat line around the topic of Ordering is no easy task. Orders may be stable or provisional (Perec 1997 [1985]);

⁶⁹ For an extensive, practical discussion of the *technical* and *statistical* aspects of classification in the context of social science methods, for the distinction between *typologies* and *taxonomies*, see Bailey (1994). For an excellent *sociological* and *historical* investigation of information science in a broadly medical context, for example dealing with the classification of disease, refer to Bowker & Star (1999). Finally, Ashby & Johnson (2003:116-120) provide a concise, *applied* discussion of classification, in the context of materials science.

⁷⁰ I say ‘carefully’ advisedly, since I have also noticed a somewhat alarming trend during this review of literature related to Ordering: several authors tackling the subject of classification desperately note that it may be impossible to ever adequately convey the interconnectedness of ideas *in prose*. Bolter longed to write his book in hypertext (Bolter 1991:ix); while Belknap feared he would only even be known as the ‘list man’ (Belknap 2004:xii); meanwhile Perec in fact ‘[abandons] the pretence of organising’ his ideas into an essay with a beginning middle and end, and instead he ‘deliberately preserves the hesitant and perplexed character of ... shapeless scraps’ (Perec 1997[1985]:184-201), remarking that ‘[taxonomy] can make your head spin’ (Perec 1997[1985]:191).

simple/universal or deep/perceptual (Ashby & Johnson 2003:118); formal or 'folk' (Bowker & Star 1999); empirically driven or theoretically derived (Becker 1998); uni-dimensional or multidimensional (Bailey 1994). Indeed, it is oft commented that although Ordering is key to the most mundane tasks of our daily lives (sorting our laundry), it is also the basis of all scientific and epistemological endeavour (from the classification of plants, to the diagnosis of illnesses, to the origins of the encyclopaedia.) It would be difficult to find another activity that is apparently so ubiquitous and yet simultaneously so key to specialisations. For our purposes, it is most helpful to initially explore the three principles of Ordering (consistency, 'total coverage' and mutual exclusion [Bowker & Star 1999]), before we review an information design cure-all – *LATCH* (an acronym provided by our Collector of cabbages, Wurman [2001], who also turns out to be an Orderer of dogs). In view of this understanding we will then move on to more expertly scrutinise our three projects.

The basis of modernity: grouping things that are 'like' does not just tidy things up, but is apparently the basis of all reasoning.

Although I set out on the more or less specific task to unpack these projects which categorise love heart symbols, blue tarpaulin and breakfast cereal, in fact in so doing I have apparently opened up this discussion to the most profound and widespread conceptual exercises. Indeed Bowker & Star comment that classification is itself too large a genre to be useful, and that classification itself 'should be reclassified' (Bowker & Star 1999:319).

Bailey asserts that classification is the 'foundation not only for conceptualization, language, and speech, but also for mathematics, statistics, and data analysis', and indeed '[without] classification there could be no advanced conceptualisation, reasoning, language, data analysis, or for that matter social science research' (Bailey 1994:1). Ashby & Johnston concur describing classification as no less than the basis of scientific endeavour, pointing out that '[the] founders of biology, zoology and geology were those who created the classification systems' (Ashby & Johnson 2003:117). For example, 'Mendeléeff's classification of the elements into the periodic table, Darwin's classification of the natural life of the Galapagos islands, Linnaeus' classification of plants' (Ashby & Johnson 2003:117). Meanwhile Bowker & Star assert '[to] classify is human' (Bowker & Star 1999:1), before going on to argue that '[the] work of making, maintaining, and analyzing classification systems.... is one of the central kinds of work of *modernity*, including science and medicine.... [and] social life' (Bowker & Star 1999:13, my emphasis).

Despite these formidable characterisations whereby classification is a deliberate and weighty task, it is also true to say that classification can be carried out tacitly (Bowker & Star

1999:1-2), subconsciously (Wurman 2001:42), and often in the most mundane scenarios: to keep our DVD collections in order - especially to separate out borrowed ones; to put tinned goods on that particular shelf in the pantry, and separate from the spices. Yet in spite of how ubiquitous and essential classification is, Bailey describes it as 'almost the methodological equivalent of electricity': one of those things we all use everyday 'without knowing very much about how it works' (Bailey 1994:1).

For our purposes there is one key lesson to take away: it is not a *collection* of facts that is the basis of modernity, *but the sorting through of these facts*. This is particularly well explained by a physiologist, John Carmody (2007), in the introduction to his tribute of the above mentioned Swedish botanist, Carl Linnaeus. Carmody explains:

'classification is the basis of all of our useful knowledge. Of course we can know many things, as we can possess many things, but they are of greatly diminished utility if they are not properly classified' [Carmody 2007, my emphasis].

Moreover, Carmody emphasises the significant correspondence between the practical and epistemological benefit of Ordering.

'Our systems of classification are certainly utilitarian but they are far more than that: they commonly determine how we see and understand particular parts of our world' [Carmody 2007, my emphasis].

Gilyard, Holdstein and Schuster similarly recommend that classification is not simply a practical procedure useful for sorting things out, but able to engender 'new insights and a fresh way of looking at the familiar' (Gilyard, Holdstein & Schuster 2007:275). They specifically explain that the intellectual benefits can be multi-dimensional.

'When done well, classification gives us a powerful way to understand the world. It compels us to look at objects both microscopically [details, specifics, individual traits] and macroscopically [common qualities, general similarities, overarching frameworks]' [Gilyard, Holdstein & Schuster 2007:272].

Accordingly, as we unpack these three projects, we will explore the orders among things in terms of this dual nature – looking at how we gain both a 'micro'/detailed and 'macro'/overarching understanding of (the world of, of collections of) cereal, love heart symbols, and urban photographs.

As we shall learn, the practical and epistemological benefits of Ordering are not without their problems, but for now let's tackle this 'poorly understood' 'methodological electricity' from an essentially functional perspective.

b. The mechanics: the nuts and bolts of sorting things out.

When we consider the most elemental definition of classification, establishing an order among things appears to be remarkably straightforward. Bailey explains that classification is ‘merely...the ordering of entities into groups or classes on the basis of their similarity’ (Bailey 1994:1). We can build from this basic premise by reviewing the three general laws that underpin classification which are outlined by Bowker & Star (1999).

Three laws: total coverage, mutual exclusion, consistency.

First of all a classification should provide ‘total coverage’ and be wholly inclusive of the world or population it is describing. In other words there shouldn’t be anything left out, or omitted: everything should be absorbed. Nor should there be any ‘residual’ categories, such as ‘other’, ‘not elsewhere classified’ or ‘none of the above’ (Bowker & Star 1999:312,2,11). We could say that if there are left-overs, your classification is not exhaustive and you haven’t effectively made sense of your collection. Consider sorting through a basket of clean laundry freshly plucked from the line: the goal is for there to be a place where everything belongs. You don’t want to end up with some item that’s not really a sock, doesn’t really belong to your flatmate, isn’t really a towel, and doesn’t really hang on a hanger. What an annoying clean thing.

Secondly a classification system should be mutually exclusive. Categories should be clearly demarcated so that each instance has a distinct and particular place to fit. Categories should not overlap; there should be no ‘maybe’ instances, which seem to go in more than one place. Bailey steps through this principle deftly, explaining that the goal is to maximize ‘within-group homogeneity’ (i.e. instances are strongly the same) and ‘between-group heterogeneity’ (groups or the containers are clearly different):

‘we generally seek to minimize within-group variance, while maximising between-group variance. This means that we arrange a set of entities into groups, so that each group is as different as possible from all other groups, but each group is internally as homogenous as possible’ (Bailey 1994:1).

This all explains the constant frustration associated with keeping all of your stationery in one box or with carrying a rucksack with too many pockets. In the first case, the ‘within-group variety’ is unworkably heterogeneous (ball point pens, the good pair of scissors, the crappy pair of scissors, an empty sticky tape carousel, your favourite 2B pencil, and the useless clutch pencil with no leads, are all in there together); while in the second case, the ‘between-group variety’ is unhelpfully homogeneous (each pocket is as suitable as the other: for

storing house keys, your wallet, pen and notebook, spare change and mp3 player; and thus much rummaging ensues each time you board a bus or reach your front door.)

Last, but certainly not least, Bowker & Star explain a key requirement for classification is *consistency* (1999:11). Whichever way to sort things out that you decide, these principles must be applied consistently. This is particularly keenly felt by Perec, who reflects on the distinction between 'stable' and 'provisional' classifications in 'The Art and Manner of Arranging One's Books' (Perec 1997[1985]:148-149). According to Perec a stable classification is one which 'you continue to respect' (Perec 1997[1985]:149) (and so fulfils the aspiration for consistency); while 'provisional' classifications are those only supposed to 'last a few days' (Perec 1997[1985]:149).⁷¹ For example, while you might *generally* keep your books in alphabetical order on your shelves, for the time you are reading them books remains outside of that system – you do not apply your classification consistently – and instead, these are stacked on your bedside table and no attention is paid to their alphabetical ranks.

At this point an important clarification is worth making. It is important to not confuse consistency with *disputability*. You may choose to order a set of books by colour (straightforward but illogical,) alphabet (universal but arbitrary) or by merit, grouped *masterpiece, interesting, some good bits, ordinary and rubbish* (clearly disputable, dependent on subjective views, even idiosyncratic, but – though more fraught – is potentially more meaningful). Clearly these are more or less *disputable*, but so long as these systems are applied *consistently* – this law of classification outlined by Bowker & Star appears to be satisfied.⁷²

⁷¹ Perec provides a vivid enumeration of the kinds of reasons why a book is kept outside of the 'stable' system of Ordering, and is instead 'provisionally' classified:

'This may be a book recently acquired and not yet read, or else a book recently read that you don't quite know where to place and which you have promised yourself you will put away on the occasion of a forthcoming 'great arranging', or else a book whose reading has been interrupted and that you don't want to classify before taking it up again and finishing it, or else a book you have used constantly over a given period, or else a book you have to take down to look up a piece of information or a reference and which you haven't yet put back in its place, or else a book that you can't put back in its rightful place because it doesn't belong to you and you've several times promised to give it back, etc.' (Perec 1997[1985]:149).

⁷² Ashbury & Johnson explain how objective, indisputable, universal classification gives rise to 'simple' indexing, while subjective, disputable, perceptual classification is associated with 'deep' indexing. Classification is closely associated with indexing: while classification brings order by grouping, indexing assists searching and retrieving information from a classification system. 'Simple indexing' refers to search requests of indisputable attributes such as authors and dates, whereby 'anyone entering the same request will get exactly the same response': it is precise. By contrast 'deep indexing' refers to searches of features and qualities, such as genre or character, which is based on perceptions and associations, where clearly views can differ (Ashby & Johnson 2003:118).

To summarise Bowker & Star's specifications, categories and principles for organisation must be: consistently applied (having chosen a system, you stick to it); mutually exclusive ('between-group heterogeneity' is maximised – the pockets in your rucksack are useful); and inclusive (providing 'total coverage' – you avoid pushing too-hard-to-categorise-items under the carpet or into an 'other' category.) So presuming that these rules are borne in mind – the question now is, *which way*? What kinds of principles are available? In fact deciding which way is key and the most contentious aspect of creating an order among things. As Bailey gently but firmly breaks it to us, there is 'no specific formula' for deciding which way (1994:2). Furthermore, this decision is not inconsequential since, as Carmody (2007) previously suggested, *the way we decide to classify affects how we understand what we have classified*. We'll come back to this epistemological impact in a later discussion, but for now let's stick with the basics, and review the alternative ways we can create order among things.

Location. Alphabet. Time. Category. Hierarchy.

Wurman explains that while things and information may well be infinite, the ways for organising things is finite (2001:40). Wurman summarises the main choices that one must decide between by the acronym 'LATCH', which stands for *Location Alphabet Time Category Hierarchy* (2001:40-41). We will consider each of these five principles in turn, bearing in mind that Wurman is chiefly concerned with the meaningful, accessible communication of information, (rather than achieving statistically significant trends as is the case with Bailey [1994], or concerned by the ideological or moral problems of classification, as is the case with Bowker & Star [2001]).

Starting with 'L' for *location*, we could deem things as 'similar' *geographically* – books from the same region – and so obviously this is an excellent strategy for a population associated with diverse locales (and wouldn't be much use for dividing up a set of things all from the same place.) Wurman explains the *alphabet* is a suitable choice when dealing with a large body of information. Dividing or ranking things according to *time* – chronologically, by era - is a good way for understanding change. Finally in establishing the last two options, Wurman provides a useful clarification of *grouping* compared with *ranking*. *Categorising* (grouping) is a good choice for creating order among items of similar importance (different brands, different types), while establishing a *hierarchy* (ranking) is useful for appreciating value or weighting in the information (e.g. from most expensive to cheapest) (Wurman 2001:40-41).

Wurman demonstrates the point by considering the case of breeds of dogs (2001:43-45). Wurman begins with the 148 dog breeds officially recognised by the American Kennel Club,

which is incidentally a remarkable embodiment of a Collection (→IMAGE 25). Here we see that to begin all 148 dog breeds are ‘in line’ and amorphous, and so we might say that our insights are limited to a sense of ‘dogness’: four legs and a tail.

Subsequently, he deploys his strategies to create order: Wurman sorts his dogs *alphabetically* by name, by country of origin for each breed (categorising by *location*), by the *year* they were officially recognised as a breed (*time* – chronology), ranked by the weight of each breed in pounds (a numerical *hierarchy*) (→IMAGE 26). As Wurman contemplates additional strategies, one starts to realise that there are diverse possibilities that stem from the basic options summarised by ‘LATCH’. Wurman explains he could categorise *kinds* of dog breeds: sporting, hounds, working, terriers, toys and non-sporting; ‘*Then* I could arrange them from smallest to largest, from shortest to tallest...from shortest-haired to the longest-haired, by their level of viciousness, popularity in the United States, population, price, and the number of championships they have won’ (Wurman 2001:43, my emphasis).

Clearly by using these different ways to arrange his dogs, Wurman is surely gaining a sense of control and tidying things up: ‘LATCH’ is a highly successful strategy for approaching an amorphous collection. However Wurman’s discussion is chatty rather than comprehensive, and I wish to draw attention to two particular issues that he glosses over.

The first is a specific and considerable (albeit inconspicuous) claim that reiterates the *epistemological* benefits of creating order (previously suggested by Carmody): classification doesn’t just practically tidy things up, but determines how we *see and understand*. Wurman asserts, reflecting on the case of dog breeds, that ‘[real] learning about the dogs comes from *comparing* organizations’ (Wurman 2001:45, my emphasis). We realise the key word here is ‘*comparing*’, once we consider the ‘real learning’ Wurman purports to gain:

‘You might see that the most popular dogs are the shorter-haired dogs, or that the most expensive dogs are the small dogs’ (Wurman 2001:44).

Wurman seems to strangely underplay and underdevelop this significant aspect, which could be missed altogether. It is just detectable in Wurman’s explanation, ‘[every] time the dogs are arranged in a different way, you can start seeing new information about the *relationships*’ (Wurman 2001:44, my emphasis), and also faintly suggested by his choice of conjunction as I emphasised above: ‘*then*’ and not ‘or’ (Wurman 2001:43). The fact is, Wurman’s ‘real learning’ is not gained by merely having lots of different ways to get

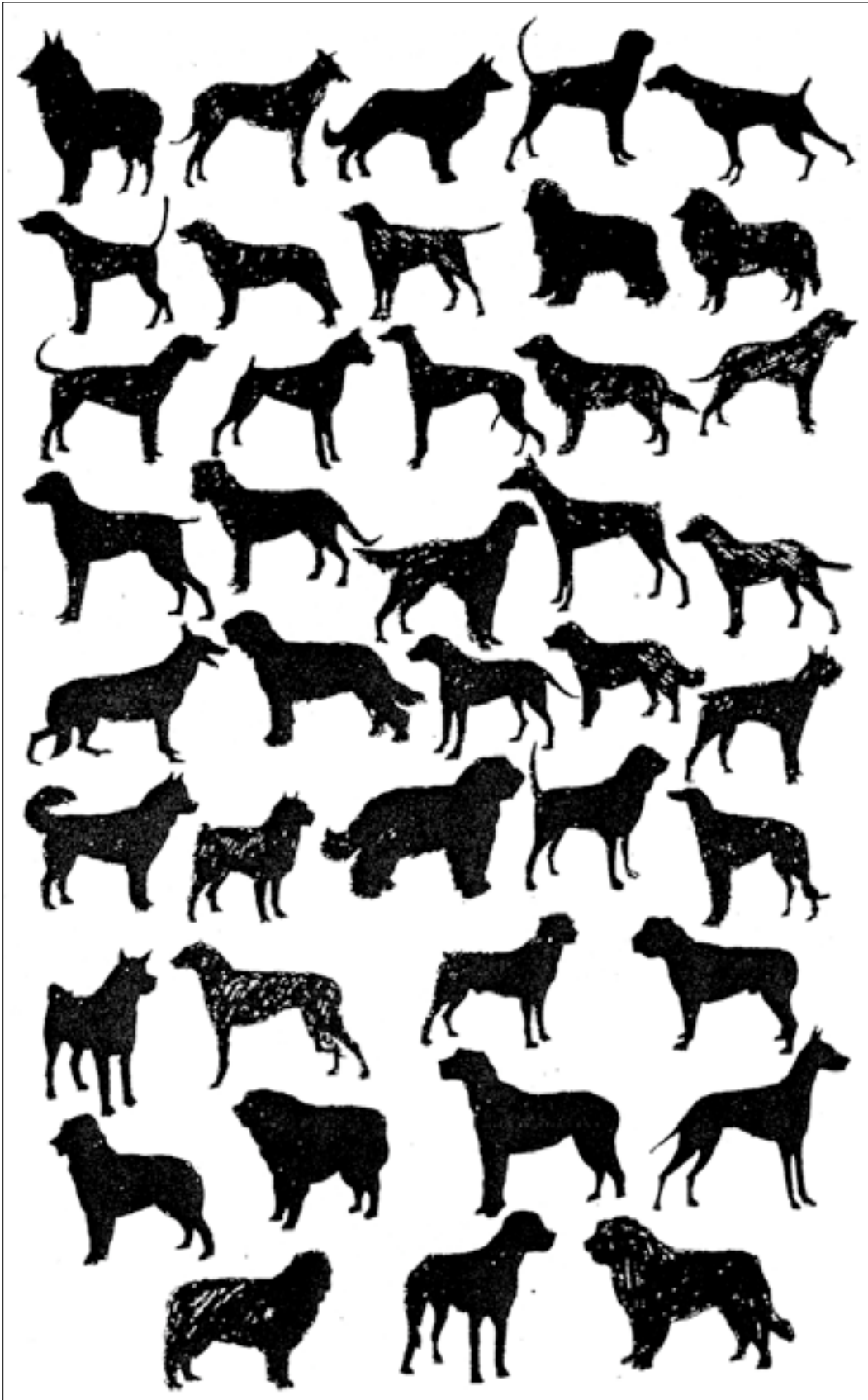


Image 25. A 'collection' of dog breeds (Wurman 2001:43)

organised from which to choose, but gained by *comparing* these different organisations.

When Wurman comments that '[you] might see that the most popular dogs are the shorter-haired dogs' he has not learned this by ranking dogs by popularity, but by *comparing* these ranks to hair length. I want to emphasise this point because it is key to our investigation of

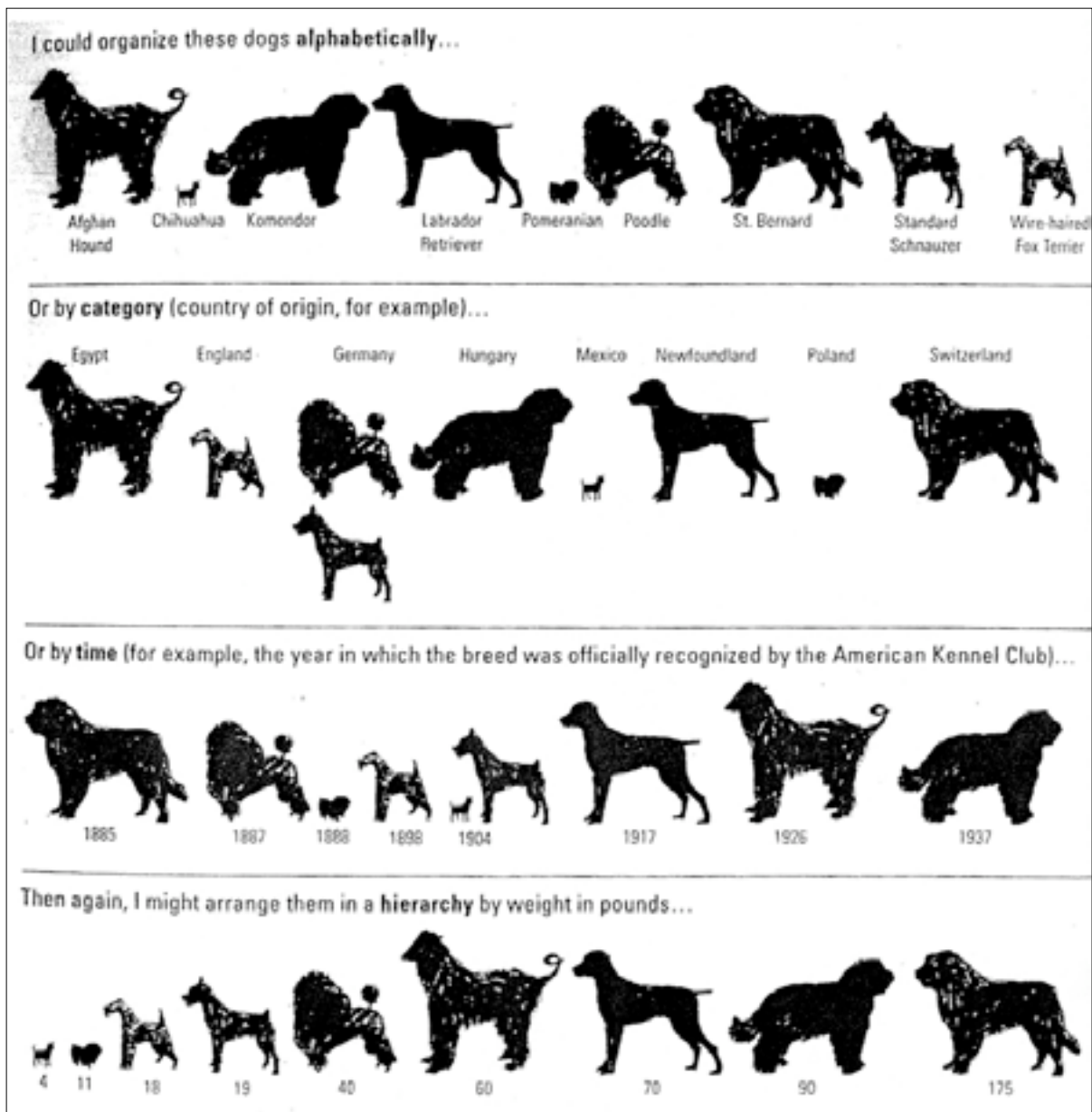


Image 26. Creating order among dog breeds (Wurman 2001:45)

projects like *Periodic Breakfast Table*, and later when carrying out *BikeWork*. Accordingly I will now explore comparing classifications, with reference to Bailey's technical distinction between taxonomies and typologies.

When attributes or variables are *theoretically* combined, a typology is created (Bailey 1994:4-7, 34).⁷³ By contrast a *taxonomy* can be created when attributes or variables are combined *empirically*. It is basically the reverse process: while typologies are top down (deductive, conceptual), taxonomies are bottom up (inductive, empirical). 'Cluster analysis' is one of the most prevalent statistical strategies for deriving a taxonomy. Here the empirical cases of a population are plotted on an x-y axis, which 'crosses' (combines) two dimensions or attributes. For example, variable one could be height, while variable two is weight. Where clusters form shows similarities and suggests groups or classes (Bailey 1994:6-7,34).⁷⁴ (While we are on the topic, it is important to appreciate that clusters only ever *describe* relationships, and are *not* explanatory, and these relationships are only *correlations* and are *no* indication of causality.)

The second aspect of Wurman's discussion that remains notably undeveloped regards the arbitrariness of the alphabet. Wurman is not explicit about the arbitrariness of an alphabetical order among things, nor the fraughtness often associated with a conceptual categorical order among things. Certainly, the alphabet is a tremendous tool for getting organised (and indeed making information retrievable), being universal and indisputable. But here there is a trade off, for the alphabet is also arbitrary: no 'real learning' can be gained by establishing an alphabetical order among things. The reality that the alphabet is essentially diametrically opposed to a more meaningful conceptual order among things, is well demonstrated by Jay Bolter's (1991) historical account of the trends in encyclopaedic order.

Bolter explains that while it is today convention for encyclopaedias to be arranged in alphabetical order, this was not always the case: originally the encyclopaedia was arranged conceptually, according to logical relations between things (Bolter 1991:89-91). However

⁷³ A prevalent form of typology is the 'property space' that results when two dichotomous dimensions are 'crossed' to yield four cells that can be labelled 'type concepts' or 'ideal types'. Bailey provides the 'hypothetical fourfold typology' which combines the attributes motivated/unmotivated and intelligent/unintelligent, which gives rise to concept types such as 'over-achiever' (motivated/unintelligent) and 'success' (motivated/intelligent). For qualitative researchers, deriving these conceptual types deductively can be useful for guiding how an actual population is subsequently empirically analysed (Bailey 1994:4-7,34).

Also see Becker's (1998:146-214) chapter on 'Logic' for an excellent critical review of using typologies in qualitative social research.

⁷⁴ This is a necessarily rudimentary version of what is a vast and specialised area: the statistical, quantitative data analysis to derive robust classification. For a full technical account, Bailey (1994) is an excellent exhaustive starting point. Also see Ashby & Johnston's discussion of cluster analysis (2003:118).

categories, that were sufficient for use in the ancient, medieval and Renaissance eras, were no longer able to accommodate the growing complexity and specialisation of knowledge. Thus by the 18th century, encyclopaedias were being organised alphabetically. Of most interest to the present conversation is the tone of *resignation* that can be detected in Bolter's account. Using the alphabet is apparently an unappealing but necessary, practical compromise, made for the sake of 'access to information' (Bolter 1991:90). It is an admission that categorising can't keep up with and suitably accommodate the growing complexity of knowledge. The problem with the alphabet is that its 'sequence means nothing' (Bolter 1991:90). By contrast, a categorical hierarchical arrangement of knowledge that defined the relations among elements, in Bolter's words, would be more 'intellectually satisfying' and of 'philosophical value' (Bolter 1991:91).

This intense, intellectual preference for a more meaningful categorical arrangement of things, in place of the neutral alphabetical ranking, is particularly evoked by Werner Hüllen's (1990) distinction between the dictionary and the thesaurus, where 'two powerful lexicographical intentions' can be distinguished: 'the first is to collect words and identify their meanings, the second is to reconstruct human knowledge with the help of words. The first meets its expression in alphabetical word lists, the second in conceptually ordered ones' (Hüllen 1990; cited in Kay 1994:68-69).

We could say that the alphabet represents a place betwixt Collecting and Ordering. Although the alphabet certainly does create Order, it is also true, as Bernard Shaw is credited to have remarked, that 'The alphabet is the great leveller' (cited in Knight 1979:155). Elsewhere, having asked himself 'Why start with A, then B, then C, etc?' since 'objectively speaking, A is not better than B', Perec concludes that the alphabet is 'arbitrary, inexpressive and therefore neutral' (Perec 1997[1985]:190).⁷⁵ Therefore it appears that using the alphabet to create an order among things, is akin to adhering to a preset visual constraint: variations and particularities are irrelevant, instead all manner of things fall

⁷⁵ Although apparently one study *did* find that the alphabet was associated with bias (Rössner 1993). In 'The Relationship between surname initials and academic success, or why was Aabel appointed professor?' Rössner speculates,

'Is it possible that these scientists are promoted because they are repeatedly found as [alphabetically] first authors on papers emerging from their departments? Will their role as leaders in science be overemphasized because the principles, syndromes equations, tests, methods, or whatever they have developed will carry their name, whereas the poor collaborating Smiths and Watsons [not to mention Rössners] will be forgotten' (Rössner 1993:42)?

Corroborating this hypothesis, he noted a trend whereby as career status improved, so did the proportion of surnames from the proximal end of the alphabet: surnames beginning with letters A to N made up only 68% of students, but 71.6% of associate professors, and a whopping 76.3% of professors.

indisputably into line. However, while easier to carry out, these arbitrary orders intellectually have less to offer, than a more disputable order among things.

What we are starting to detect here is a trade off, between meaningfulness (salience but disputability) and straightforwardness (universal but arbitrary): a kind of toss up between fraughtness and arbitrariness. Some principles are straightforward at the expense of being meaningful (e.g. the alphabet), while others are ambiguous and uncertain to work with but at least the placement of the constituents is significant rather than arbitrary (e.g. conceptual relations). Furthermore, it is becoming clear that just as the alphabet is the 'great leveller', the opposite is also true: a non-arbitrary principle of Ordering is biased and even ideological.

c. So, what 'real learning' about love heart symbols / urban photographs / breakfast cereal comes from *their* organisations?

Before we go on to examine the projects under investigation in this chapter, it is worth taking a moment to briefly cast our mind back to three of the *Collecting* projects to make an important distinction. In view of this introductory exploration into Ordering, we can now see that in fact some Collections are inherently 'in order'. In other words they have 'arrived' in some sensible order that is incidental to and by virtue of the 'visual constraint' or preset rule. Consider *The Readers Before Us*. By setting up the creative constraint of going through the books on the shelves at a university library and inventorying any found ephemera, the resulting list of ephemera is in Dewey decimal order. Similarly, by going through the shelves of fiction at Barnes and Noble (shelved alphabetically by author,) scanning the blurbs for allusions to *The Catcher in the Rye*, the resulting selection of references finally presented in *A coming of age reading checklist* is also in alphabetical order (by author of book that the references are found on.) The photographs of people in *Ava Gardner Dies* are in fact in chronological order – according to the date of death of the individual for whom the obituary was written. So, what is important to note is that these projects which feature collections in 'incidental' order, are quite apart from the projects (hence classed as Ordering), where work has been done on the collections *subsequent* to their accumulation.

This now brings us to the three projects we are investigating in this chapter. So far we have made some initial observations about how they make sense of things, but what deeper appreciation can we now gain in light of our thus far essentially unproblematic technical discussion of classification and creating order? Can Bowker & Star's three laws of classification provide better insight to our 'sticky' projects? Or is Wurman's *LATCH* concept more enlightening? In view of the ideas highlighted by Carmody (and Wurman), can we

discern what *understanding* is gained by the organisations in these projects? In other words, how does the organisation of cereal / love heart symbols / urban photographs, affect how we understand cereal / love heart symbols / urban photographs? How has sense been made of these Collections?

The benefit of placing 'like' with 'like' in Endcommercial.

Endcommercial, we can now articulate, divides up and categorises its photographs in a way that is 'disputable' though 'consistent'. Just as themes are identified in textual qualitative analysis (see Ryan & Bernard 2003), Böhm et al. have 'coded' their photographs by a formal 'content analysis' of the photographs.⁷⁶ And while it is difficult to detect how each group is internally organised, there is a quasi logic to the organisation of the groups: the groups start at the beginning of the alphabet (temporary fencing classed as 'A Barrier'), and end with death (with grave yards in 'Pray Jesus'). The 'organisational chart' that serves as the contents page of this book, we now technically appreciate, is an *empirically derived taxonomy*. That is, these groups (and their superordinate classes) have been driven *out* of the data, rather than being pre-existing categories for which particular instances were sought. For example, the category of 'Blue City' was arrived by noticing a trend in photographs; these photographs were *not* shot to demonstrate the *a priori* category of 'Blue City'. (If we were pedants, we might contend that since Böhm et al. culled the original archive of 60000 photographs to present only 1000 in this book, it is difficult make any conclusions about this classification with regard to 'total coverage'. Could all 60000 be convincingly sorted into these 32 categories? Or were the photographs that did not conform to the categories established, the ones that were omitted?)

What is more, just as Carmody explained, these categories have not just 'tidied things up' or sorted things out – created some order among 1000 photographs – but by this organisation

⁷⁶ Gillian Rose (2001) and Emmison & Smith (2000) provide good introductions to image-based content analysis in social science.

Emmison & Smith (2000) particularly extol the virtues of this 'neglected quantitative tradition' (2000:58-64) claiming that it is an excellent opportunity to investigate structural categories and process' because it uses large sample sizes leading to 'the discovery of generalisable information' (2000:58). Furthermore they allege that when consistently applied, this strategy in fact gives rise to 'counterintuitive discoveries' (2000:61).

This discussion concurs with 'Content Analysis: Counting what you think you see' in *Visual Methodologies* (Rose 2001:54-68). Rose's citation of Lutz & Collins (1993) is particularly helpful: they assert that the strength of content analysis is that it can facilitate 'the discovery of patterns ... too subtle to be visible on casual inspection' and so '[protect] against an unconscious search ... for only those [images] which confirm one's initial sense of what the photos say or do' (Lutz & Collins 1993; cited Rose 2001:56). Rose however provides some important qualifiers, such as you cannot count what is not in the image; counting cannot describe the quality of the example (e.g. there is only 1 or 0, no .5 or .2); counting cannot take into account different audience interpretations; and indeed, content analysis poses as an 'objective' analytical and interpretative method. The reality is, as Emmison & Smith concede, the validity of this method rests on the rigour of the coding and sampling, which as we shall see involves discretion and so can never be 'neutral'.

my understanding of these photographs, indeed my 'reading of the city' (which is the subtitle of *Endcommercial*), is enhanced. By viewing these images within this classification, I notice them more closely, my seeing is more structured and efficient, I can see the kinds of things going on – I notice in these different photographs how people sit in the city, how things are covered in tarp, how bicycles seem to disintegrate on street poles. If I had only viewed the single photograph of the African American man in the park (top left in *Image 20*), and not in the context of the category of blue tarpaulin, itself in the category of 'Membrane', I may not have had my attention drawn to the fragment of blue tarp serving as an urban 'membrane' on a building in the distance. Categorising these photographs in this way promotes an acute understanding of city environments in terms of their *formal details*: spray paint markings, street furniture, shop fronts, signage. As Margolin comments, the hierarchy of categories 'neatly' visualises a conceptual framework that attends to the different types of signals transmitted by a city, and achieves a new reading of the urban experience (Margolin 2003).

But then is this part of the problem? At what expense do we gain this appreciation of the *formal elements*? Could categories have been formed which promoted a reading of the city in terms of nature or social interaction or history? Have they concealed apparent trends in ethnicity? And what if they had added another dimension to this taxonomy? If the images were not only categorised by theme, but also by author, would we see that the themes were *evenly* contributed to by all three authors? Or in fact was the blue series shot exclusively by *one* of them? What does this 'neat' hierarchy conceal and these compelling groupings prevent us from contemplating? Might I suggest that the overall *symmetry* of the taxonomy is a little convenient? What did Böhm, Pizzaroni & Scheppe do with images that seemed to fit *two categories*? As another commentator notes,

'Though the structure of classification appears rigorous...the content of the categories is often poetic or open ended.... The subjective nature of some of these categories also suggests the [possibility] of infinite recategorizations and reinterpretations of the original data' (Herda 2002; review in Böhm et 2003).

While *Endcommercial* seems to address some of the problems of Collecting exhibited by Hassink (a shapeless mass), and provides a more structured, coherent way to make sense of a volume of data (decoding the city's formal codes) such organizing does seem to entail its own problems. Unpacking these problems – and eventually refiguring the inherent instability of classifications as constructive rather than detrimental – is the topic of the following conversations.

The benefit of placing 'like' with 'like' in Periodic Breakfast Table.

Like *Endcommercial*, Weese's categories seem to have been driven out of the original population of a collection of cereals, we can say that this is also an *empirical taxonomy*. But moreover we realise that in fact Weese's table is *multidimensional*. Weese has introduced additional data to create a higher order of classification. Not only has she sorted cereal into groups of similar shapes (held in rows such as 'Flake', 'Fake' etc), but we can also discern a time-based principle of Ordering: the role of chronology.

The legend indicates that the left upper corner is the date the cereal was invented. Although what Weese doesn't elucidate - but we can deduce by analysis - is that these dates order the individual cereals *within* each group (across the rows) as well as the groups *themselves* (how the rows are ranked). That is from left to right, the cereals are increasingly recent creations, and similarly from top to bottom. Thus Shredded Wheat comes before Rice Chex in the top row, because Shredded Wheat was invented in 1894, while Rice Chex wasn't conceived of until forty years later in 1941. Also, the group of 'Grain' shaped cereal is ranked above the group of 'Fake' shaped cereal, since the first 'Grain' (Puffed Rice) came on the market in 1902, while the very first, ludicrously coloured 'Fake' shaped cereal (Trix) wasn't dreamt up until 1954. (However in 1902 both the first 'Flake' shaped cereal and first 'Grain' shaped cereal were introduced, presenting the problem of which row comes first. Looking closely perhaps we can discern another dimension of ordering [in addition to shape and chronology] in Weese's table: alphabetical. This seems a reasonable explanation for why the 'Flake' row is above the 'Grain' row.)

In fact, with particular reference to Bailey (1994) and Ashby & Johnson (2003), we realise we could refine Weese's classification by developing its data into a version of 'cluster analysis': by plotting the cereals along a time scale we can make the patterns even more apparent, as shown in → FIGURE 11. The trend to introduce the so-called 'Fake' shaped cereal during the 50s-70s era is impossible then to miss. However it is important to keep firmly in mind that correlation and causation are different matters. Despite the trend in this graph, it does not follow that if a cereal was invented in the 50s it was 'Fake' shaped: the date of invention does not predict or cause shape. There is perhaps some relationship - but not one understood, and certainly maybe random – between the two variables. This is a very important distinction to bear in mind when we come to stage two of *BikeWork*, towards the end of this chapter.

At this point, classing cereal by shape seems to be an effective, practical means for sorting out a pile of cereal. The groups appear to be strongly mutually exclusive: there is a plausible

distinction between 'Grains' and 'Round', and 'Flake' and 'Orthogonal'. Furthermore, given this classification, our *comprehension* of cereal is refined. We vividly grasp not only the variety of shapes (which we could have discerned from a Collection alone), but by this taxonomy we can detect the variations in the themes, that we could not have without this Order among things. If you were a manufacturer thinking of entering the market, this classification clearly sets out the status quo, essential for shaping your 'unique selling proposition'. Particularly by appropriating the scientific graphic rhetoric of Mendeleyev's Periodic Table of Elements, *Periodic Breakfast Table* appears to be robust. But are the attributes of 'year invented' and 'shape' the only way that these cereals could have been organised? Surely it is a lost opportunity not to exploit the other data dimensions included, such as sodium content and manufacturer? This might reveal strong trends that could assist the consumer with a dicey ticker to gravitate towards certain brands for wiser breakfast selections.

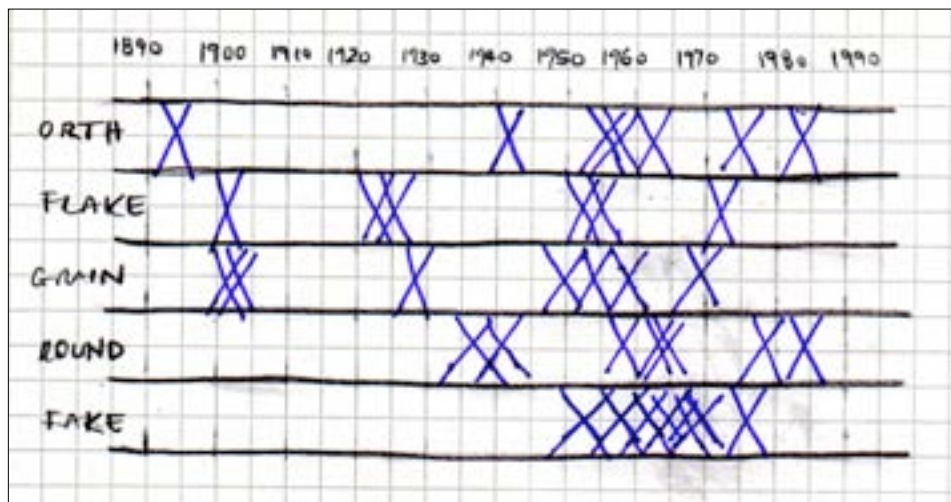


Figure 11. Sketch of an amateur 'cluster analysis' of the cereal featured in *Periodic Breakfast Table*.

The benefit of placing 'like' with 'like' in I [heart] [heart].

Finally to *I [heart] [heart]*. In the first place we might make a rather technical observation and amend Daly's description of this work as a typology (which as Bailey explained, in everyday use is interchangeable with taxonomy). The classifications that Daly arrives at, from 'Dating' to 'Tourism', have been arrived at by an empirical process of sorting through accumulated data. By contrast, a typology is arrived at by the *conceptual* process of combining attributes to create 'ideal types'. For example, Bailey provides the hypothetical case whereby combining motivated/unmotivated and intelligent/unintelligent creates four conceptual classes, including for example, the *underachiever* (unmotivated and intelligent (Bailey 1994:4-5). Thus it is more correct to describe this as a taxonomy. And we might add, a rather basic, uni-dimensional one. The classes (of use) he has derived and shown in the key are listed alphabetically – from 'Book or Greeting card' to 'Unknown'. (Indeed we can observe that this taxonomy suffers from what Bowker & Star [1999] refer to as a 'residual' category: 'Unknown' is akin to 'other' or 'not yet classified'.) Similarly the list of names for the individual hearts that takes up the bottom part of the poster, is also listed alphabetically, from All About Dating to the Wounded Heart Ministries. This alphabetical list is enumerated from 1-400, and dictates the same order for the actual symbols in the upper part of the poster, also from 1-400.

Notwithstanding the arbitrary (although indisputable) use of the alphabet, by classifying love heart symbols by use and deploying colour coding as a graphic strategy, Daly has augmented many of the frustrations we might have had, if he had not developed this project beyond a Collection of love hearts symbols. While we can gain a strong sense of the 'sameness' among a series of love hearts and the defining features of the love heart symbol from the Collection of hearts in the first poster (*Image 23*), in this second poster (*Image 24*) we gain a very real sense of the widespread prevalence of the love heart symbol in particular industries (which at a glance seems to be predominantly in 'Health and Medical', after removing 'Clip-Art').

However, while these love hearts are neatly differentiated – indeed so systematic as to be almost unquestionable and absolute – on close inspection, especially with Bailey's and Bowker & Star's warnings in mind, two sets of questions seem to arise. First of all we might wonder about the wisdom of these categories – how meaningful is it to class 'Symbol font' separate from 'Graphic Design or illustration' or indeed 'Clip-Art'. And where would one class the symbol (which featured a love heart) from an online dating service? In 'Dating' or in 'Computer website email or SMS'? For example Daly classed the logo for Singles.com

(heart number 335) as 'Dating', but it strikes me that the 'Computer website email or SMS' category is just as suitable.



In establishing an Order among things, each of these 'sticky' projects in essence comply with the technical expectations outlined by Bowker & Star (1999) and Bailey (1994). Above all, we now keenly appreciate that we have gained 'real understanding' from these organisations that, we might reasonably presume, we could not had they been left as a Collection, 'the-same-but-different' and 'all in line'. (Recall that Bowker & Star credited creating an *Order* among things as the basis of modernity, *not* merely gathering a huge number of things [1999:13].) We now recognise that by simply grouping 'like' with 'like' – and separately from 'different' – these projects have achieved the high order conceptual benefits of classification: we don't just apprehend an amorphous pile of love heart symbols, but a structured overview of the commercial and corporate sectors where love heart symbols seem most prevalent.

Clearly the ways things are organised in these projects – by use, by shape, by formal details – are not the only ways to make sense of heart symbols, cereal and photographs of urban environments. A subsequent appraisal of these three projects is informed by a review of literature that *critiques* (rather than delineates guidelines for) how an order can be made among things. Realising the 'tentativeness' of Ordering – despite our current understanding that classification is a straightforward practical and logical task of putting 'like with like' – is the topic of the next section.

Section 3. In fact, there is nothing more tentative.

a. The question of how to judge what is significantly similar: a *practical* problem.

While we have established that there are rules for classifying things (Bowker & Star's three requirements), and outlined several helpful principles (Wurman's 'LATCH'), in order to carry out the fundamental task of grouping things that are similar, one question persists: similar in *which way*? As Sekula recognises,

'[anyone] who has sorted ... through a box of family snapshots understands the dilemmas ... inherent in these [kinds of] procedures. One is *torn* between narration and categorisation, between chronology and inventory' [Sekula 1986:156, my emphasis].

As we shall see, Becker refers to this as the 'which-way-to-organise-it' problem (Becker 1986:59). Ashby & Johnston assert that central to classifying things is the *decision* of what is deemed the *relevant* attribute (Ashby & Johnston 2003:118). While the rules of classification (exhaustiveness, mutual exclusion and consistency) can be followed more or less straightforwardly once the fundamental characteristics have been decided, there is 'no specific formula' for identifying which are the salient attributes for judging 'dissimilar' and 'similar' (Bailey 1994:2). As Carmody explains, the reality is 'the best means of achieving classification is not axiomatic' (Carmody 2007).

Thus classifications are at their very core based on *discretion*. Despite the authoritative appearance and rhetoric of most orders among things (organisational tables, symmetrical trees, the prevalent deployment of enumeration and alphabetisation, and so on), no system for classifying things is The Only Way. In fact all systems of classification are based on a choice: the selection of which way to organise things from among alternative ways.

This has been most famously observed by Foucault in his preface to *The Order of Things: An archaeology of the human sciences* (2003[1966]) where he contemplates an imaginary Chinese encyclopaedia fabricated by Jorge Luis Borges (Foucault 2003[1966]:xvi-xxvi). In this encyclopaedia, animals are divided into categories including '(a) belonging to the Emperor... (m) having just broken the water pitcher, (n) that from a long way off look like flies' (Foucault 2003[1966]:xvi). While the classifications outlined in Borges fictional encyclopaedia are far-fetched and fanciful, Foucault playfully speculates that a more conventional order among things might be just as unbelievable:

'[When] we say that a cat and a dog resemble each other less than two greyhounds...even if both [the cat and the dog] have just broken the water pitcher, what is the ground on which we are able to establish the validity of this classification' (Foucault 2003[1966]:xvi)?

It is Foucault's project to denaturalise and deconstruct established classifications. In asking 'according to what grid of identities, similitudes, analogies, have we become accustomed to sort out so many different and similar things?' (Foucault 2003[1966]:xvii), he is bringing modern thought into question. Foucault insists that creating an order among things is not 'determined by an *a priori* and necessary concatenation' and instead concludes that 'there is nothing more tentative, nothing more empirical...than the process of establishing an order among things' (Foucault 2003[1966]:xxi).

Foucault's consideration of whether a dog should be grouped with a cat (based on their similar status of having just broken the water pitcher, despite being different animals), or

with another dog (based on their similarity as the same kind of animal, even though this other dog may not have just broken the water pitcher), in fact evokes the key sticking point when creating a classification among things. Whichever attribute is deemed the most relevant, the resulting classification inherently will be ‘flawed’, as Elizabeth Orna succinctly explains:

‘by the very fact of bringing items together in one way ... [any order among things] separates items that have other things in common’ (Orna 1995, cited in Bell 1999:55).

This is a frustrating *practical* problem for a librarian or any person organising a filing cabinet by category (rather than chronology or alphabet), and even in the simple, hypothetical case of sorting out a pile of buttons. Grouping buttons that are the same colour, unavoidably separates buttons which are made of the same material (a green metal button is grouped separately from other metal buttons because they are blue and pink and orange in colour). Furthermore in this (grouping by colour) scenario, we see that buttons are grouped together which are dissimilar (a red *metal*, red *wooden*, red *plastic* and red *cloth* buttons are side by side in the same group). Whichever way we decide to organise buttons, this practical problem is intractable.

Not only is this practically or physically inconvenient, but in fact the choice of how to create an order among things promotes different worldviews. As we shall see in the following discussion, this dilemma has *ideological* repercussions.

b. Each way of organising things ‘valorizes some point of view and silences another’ (Bowker & Star 1999): an *ideological* problem.

Bowker & Star explain that when things are placed in the ‘boxes’ of a classification system, ‘work’ is done on them (1999:10). We could say that classifications do two kinds of work. Firstly, the structure of the classification (i.e. as a whole system) emphasises a particular worldview; (in the world I described above whereby buttons are classified by colour and not the material they’re made of, we might say that this is a world which prioritises appearances and surface, rather than substance etc). Secondly, and consequently, this in turn stresses a particular restricted perspective on the components or entities considered by that classification (in this world, buttons are *defined* by their colour, while their material, shape, or size, etc. are deemed irrelevant and of no consequence in determining their status).

Clearly in the case of buttons, this may all seem slightly absurd, but of course this ‘work’ done by a classification can have a significant impact in other scenarios, such as stating the

cause of death on a death certificate (pneumonia or AIDS, suicide or asphyxiation), or when 'sorting' work visas or immigration (more or less 'desirable' skills, more or less 'permissible' ethnicity). It is with this in mind that Bowker and Star explain their moral agenda, recognising that the intractable problems of Ordering are not just only a practical matter, but a moral and political issue:

'for each standard and each category valorizes some point of view and silences another.... This is not inherently a bad thing – indeed it is inescapable. But it is an ethical choice, and as such it is dangerous – not bad, but dangerous....For any individual, group or situation, classifications and standards given advantage or they give suffering. Jobs are made and lost; some regions benefit at the expense of others ... some kinds of knowledge skills [are valorized] and ... other kinds [are rendered invisible]' (Bowker & Star 1999:5-6).

We will illustrate this powerful capacity of classifications to valorize and silence, by considering three cases: the revision of the Encyclopedia, filing pictures of flying saucers, and creating an index for a book.

Firstly, a substantial, historical scenario whereby the effects of the 'work done' by a system of classification were far-reaching, is the case of the revolutionary – indeed at the time heretical – reorganisation of the 'tree of knowledge', which took place during the Enlightenment. It has been said that the 'Encyclopedists' Diderot and d'Alembert, 'took enormous risks when they undid the old order of knowledge and drew new lines between the known and the unknown' (Darnton 1984:193). Indeed they simply 'ruled out of bounds any knowledge that could not be derived from sensation and reflection' (Darnton 1984:205). Thus this Encyclopedia was no neutral compendium of information, but revolutionary: 'it [reshaped] knowledge in such a way as to remove it from the clergy and do away with accounts of history dominated by the hand of God, and rather to put knowledge in the hands of men such as intellectuals committed to the Enlightenment' (Darnton 1984:209).⁷⁷

⁷⁷ See Darnton (1984) and Clarke (1969) for an intriguing discussion of this noted Encyclopédié, and the momentous implications of Diderot and D'Alembert's 'tree'.

Darnton explains that by subordinating theology to reason, the Encyclopedists relegated the discussion of god to a 'gloss' (Darnton 1984:202-3). As Clarke points out, so revolutionary were the ideas reflected by this rearrangement of knowledge, that the Encyclopaedia was twice suppressed by the authorities (Clarke 1969:179). Thus while the seventeenth century was an era of 'senseless persecutions and ... unparalleled cruelty' such as '[burning] witches and other members of minority groups, or [extracting] confessions by torture ... or [going] to prison for speaking the truth', we owe the Enlightenment's 'victory of reason and tolerance' for the end of such practices, which was not only reflected in, but was also *instigated* by, the publication of this Encyclopaedia's new tree of knowledge (Clarke 1969:171-9).

A more quotidian scenario of the valorising and silencing effects of choosing different organisations among things, is revealed by the charming reflections of an archivist contemplating the problem of where to file a picture of a flying saucer, in a large picture library in London which holds varied, rare, historical pictures. She vividly reveals how the decision as to which location to file a picture is not a straightforward task, but obliges her 'biased' commitment:

'In principle, the interesting questions – whether or not flying saucers exist, and if they do, what they are – do not concern archivists, who are supposed neither to have opinions nor to take sides. But in practice it's another matter; they must abandon neutrality and make up their mind' (Evans 2001:241).

In other words the decision of *where* an archivist files flying saucers is not neutral but instead conveys some belief about flying saucers. Consider the alternative categories, should she file flying saucers in the category of paranormal? Folklore? Transport? Military? Filing, it turns out, is an *interpretative* exercise, whereby meaning is ascribed to something.

However it is possibly most instructive to finally consider an example which we generally accept as a patently neutral and indisputable order of things, but, as will be revealed, is as imbued with discretion – and even idiosyncrasy – as filing a flying saucer (or indeed sorting photos into a group of those depicting blue tarpaulins): the book index. In *Indexing, The Art of: A Guide to the indexing of books and periodicals*, Lindsay Verrier (1969; cited in Knight 1979:38-9) provides an enthusiastic, detailed, evocative account of how to create a book index (albeit from a pre-computer age).

As Verrier re-reads the book that requires indexing, he underlines the key words that need to go in the index. He then neatly types out these key words with their page numbers, so that the resulting typed list occurs in page order (i.e. just as the ideas run through the book).

'I then take a rather large plastic bowl, one of those kitchen bowls with a snap-on cover, and shut the doors and windows and snip up the whole index into single-line pieces, which all fall into the bowl. The snap-on lid allows me to leave the work at any stage. ... Next, I sort the small strips into first letter order on a table, getting 26 piles of varying size, and when done stuff them into old envelopes which are rubber-banded together. Now, at leisure, and in the depths of the silent...night, the real work can begin' (Verrier 1969; cited in Knight 1979:39).

Envelope by envelope, on 'a large smooth table' he 'slithers' the strips into alphabetical columns, adding '[this] is very easy and rather fun'. Then using PVC adhesive, tweezers and large sheets of newspaper he pastes the index down into a form that is finally 'a pleasure' to

type out once again. Then, *voilà*, the key ideas from the book are no longer in page numerical order, but in alphabetical order. All the different thoughts and concepts brought up and diverted and reasoned throughout the book, are now marching down neat columns expressed as key words in predictable, universal alphabetical order (Verrier 1969; cited in Knight 1979:39).

Knight's anecdote evokes the great satisfaction of getting organised and in particular working with an indisputable universal principle of Ordering (the alphabet). And indeed without the benefit of Bolter (1991), we might have taken Verrier's word for it – that creating an index is a largely mechanical, straightforward process, involving the simple transformation of a numerical order into an alphabetical order. Bolter however characterises a book index as a *network* of associations– indeed whereby things are grouped by similarity, which is our most fundamental definition of classification (Bolter 1991:24). It follows then that a book index must be a discretionary order among things. But how can this be? In fact the matter is touched upon, although obscured by his overemphasis of the mechanics and hardware of the process, when Verrier explains the very first step of underlining the key words.

Bolter reminds us that writing (well conveyed by the sequential, subjugated contents page of a book) is linear and hierarchical. By contrast the index brings together ideas that are related but scattered throughout the linear sequence of the argument (Bolter 1991:24). Let's consider a hypothetical example. In the course of its argument a book refers to wild dogs on pages 34, puppies on 72 and working farm dogs on page 80. Therefore in the index, despite the ideas being separated by the linearity of a written argument throughout the pages of the book, in the index these ideas can be brought together under 'dog', and thus 'dog' becomes a generalisation that groups and defines these individual instances. Hence while we might say that the *rhetoric* of a book index conveys the fixed, indifferent universality of enumeration and alphabetisation, in fact classification and its attendant discretion, disputability and intractability, are at its centre.

Consequently, we might contend that there is a remarkable correspondence between Böhm et al.'s account of how they put together *Endcommercial*, and Verrier's anecdote as a book indexer working late into the night, despite the fact that one is an obscure, creative visual undertaking and the other is an essential, widespread textual process. In undertaking both of these projects, both sort out an order among things: *Endcommercial* sorts thousands of photographs into thirty-two categories; the indexer sorts a pile of key ideas into alphabetical order. Superficially however these projects seem to be engaged in very different strategies

for creating order. The classes in *Endcommercial* seem to have been arrived at empirically: thematic categories of photographs of the city have been established driven out of the observation of trends and similarities in a previously undifferentiated mass of photographs. By contrast the book index's alphabet is conventional and arbitrary.⁷⁸ But now we can appreciate the processes of Ordering by these accounts somewhat more deeply. On reflection, each of these accounts glosses over the discretion and idiosyncrasy of creating their orders.

What has become clear is that any order among things represents a decision made from alternatives. While creating an order among things is certainly useful, it is important to disrupt the apparently self-evident stability of Orders, and be aware of their provisional and tentative status. (Indeed in the ensuing discussions, we will recognise that Orders are functional – not because they are perfect, self-evident or pre-established – only because practicality requires us to stop asking questions about them.) For now, let's turn to consider the discretion and disputability – rather than stable *a priori* logic – that we can now appreciate has given rise to the organisation and classification of love hearts, blue tarp and cereal. In other words, now that we realise that these orders in fact stem from some more or less shrewd decision of what is the 'relevant attribute', we can unpack each Order and contemplate possible alternatives.

c. The 'tentative' order among love hearts, cereals and blue tarpaulins.

Valorising the ad hoc surface of the city; silencing ethnicity and nature.

When we look again at *Endcommercial*, we recognise that a decision was made to group photographs according to particular features that appeared in the photographs. A couple of the most vivid categories are 'Blue City' (which is the class of photographs of the widespread use of blue tarpaulin in the city environment), and 'Public Chairs' (which all depict home and office chairs which have been introduced into the street in a city that appears to be devoid of public furniture). They have even developed a taxonomic graphic that contextualises these categories by establishing classes and subclasses. So 'Blue City' is grouped with 'Cover' and 'Shopping Bag' within 'Membrane', which is a subclass of 'Order'; while 'Public Chairs' is grouped with 'Standpipes' and 'Plastic Crates' within 'Habitual Reinterpretation', a subclass of 'Identity'. Through these empirically driven

⁷⁸ This seems to be also supported by the difference in the effort exerted we can detect in each account. The creators of *Endcommercial* explain that it took over 14 months to arrive at their system for Ordering photographs into themes (Scheppe 2002; in Böhm et al. 2003), which contrasts with the descriptions of pleasure, leisure and ease made by the indexer of working with an alphabetical order (Verrier 1969; cited in Knight 1979:39).

classifications, I am certainly able to ‘read’ aspects of the city more clearly: strategies of temporary cover, the flexibility of this material, the adaptability of humans, the failure to facilitate the human need to sit. But what this account overlooks, and what this book’s high-level explicit organisational structure suppresses is the discretion and tentativeness of this order.

The category of ‘Blue City’ or ‘Public Chairs’ does not exist ‘out there’, but has been created by deciding that the relevant attribute which deems two photographs as similar is ‘*features use of blue tarpaulin*’, ‘*features misplaced domestic furniture*’. And the point is that these attributes have been selected from any number of other attributes that could have been selected as the ‘relevant attribute’. Furthermore, these categories are inescapably flawed in the way Orna described, to the extent that when Böhm et al. group photographs that share the feature of blue tarpaulin or impromptu public seats, they also are scattering photographs that are similar in other regards: splitting up a series of images by the same author, separating images that feature people of Asian ethnicity, or images that have greenery. They could have grouped the images by author (so the book would be in three parts); could be grouped by location (which region of New York, or other city). They could have sorted the images by season, in terms of work or play, young and old, and so on. Any of these ways may have revealed interesting trends in images, and again we may presume that each would have separated all the images of blue tarp, and all those chairs attached to telephone boxes (unless these were prevalent in one region of New York, or were all shot by the same photographer, or all in the same time of year, but this would only add to the interest).

When we begin to think about different ways to sort through these images, it becomes clear – in the same way as Sekula described being ‘torn between narration and categorisation, between chronology and inventory’ (Sekula 1986:156) – that the alternatives may well be endless. We realise that the order presented in *Endcommercial* is not the only way, but a way: and as a way (as for any way) it cannot represent a perfect logical order among things, which comprehensively, faithfully interprets each individual image. Instead, not only are similar photographs split-up, but certain features of each image’s content are obscured: we see ‘blue tarp’, not ‘sky’, not ‘greenery’ (or lack thereof), not ‘African American’.

Valorising the shape of cereal; rendering invisible their ingredients and manufacture.

Despite its especially striking graphic orderliness, Weese’s categorisation of cereal is also discretionary and tentative. Grouping by similar shape scatters cereal which are high in protein, are similar in price, those made by the same manufacturer and those which have a similar market share, (although Weese does include this information by the use of a key and

colour coding). Furthermore, by choosing this way above others, Weese defines these individual cereals by their shape, and suppresses our appreciation of their other attributes. So let's rework this decision to group cereal by shape, and consider an alternative way for sorting out cereal – grouping by the key ingredients (rice or corn) or manufacturing style (e.g. pop or puff) as featured in their names – and indeed observe the intractable problems associated with this imagined system of classification. I might begin by grouping those with 'wheat' in their name: Shredded Wheat, Frosted Shredded Wheat, Frosted Shredded Mini-Wheat, Puffed Wheat, Wheatie. By establishing this subgroup of wheat-named cereal, I am drawing attention to their 'wheat-i-ness', (not to mention the lack of 'wheat-i-ness' of the other cereals.) But of course, by this way of grouping cereal - by attributes in the naming – I encounter the same problems we observe when cereal is sorted according to shape. For example the group for 'Crispie' brings Cocoa Crispie and Rice Crispie together, but separates 'Rice' (Puffed Rice, Rice Chex and Rice Crispie), as well as cereals with 'Cocoa' (Cocoa Crispie and Cocoa Puff). (Not to mention what on earth I should do with names like Kix or Kaboom.)

Valorising trends in corporate identity; silencing trends in motifs

Similarly, by Daly's decision to group love heart symbols into those from the same kinds of industry or use, although we gain insight into the different types and prevalence in commercial or corporate use, this is at the expense of being able to appreciate other trends. When these love heart logos are grouped by industry, logos that are from the same country are separated, as are logos that feature similar styles (solid hearts, things inside of hearts, hand rendered sketched type hearts, heart shapes created out of objects etc) and logos which have similar motifs, (all those with arrows, or hands or ticks or wings or couples).

As we can see here (→IMAGE 27), heart symbols featuring a *couple* are spread into various groups including 'dating' and 'websites'; while those with *arrows* in common are separated into groups such as 'charity' and 'music'; finally logos which all feature hearts and *hands* are scattered throughout categories as disparate as 'health and medical' and 'environment'. (And, all three of these motifs, despite being different motifs, are *grouped together* and appear side by side in the categories of 'health' and 'music'.)



Image 27. Hearts grouped by motifs: couples, arrows, hands.
Adapted from *I [heart][heart]* (Daly 2007[2005])

d. Shifting our attention from frustrations with the inescapably imperfect *outcome*, to the productivity of an iteratively imperfect *process*.

In this discussion we have explored how Ordering is 'tentative' and indeed the subject of moral and ethical questions. While we originally understood sorting a Collection into some Order as a useful, straightforward, logical and practical task, when we turn to a more critical Ordering literature, it is immediately apparent that we must revise such a superficial understanding of the stability and self-evidence of an order among things. Instead Ordering

is a conceptually and physically fraught undertaking: imposed, discretionary, even idiosyncratic, and that both valorises and suppresses.

However, I propose that this tentativeness and instability can be refigured as in fact advantageous. Bailey has observed that classification can be thought of as a *process* and not just an *end result* (Bailey 1994:2). In a similar way, in the next section, instead of focusing on the *outcome* of an order as a frustrating, flawed and merely ‘workable’ compromise, I argue that we can think about Ordering as a *dynamic process*, wherein alternative orders among things are negotiated in consideration of the different attributes of each thing. As I contend, the extended, close and contextual investigations of the items in a Collection necessitated by the process of Ordering, uniquely gives rise to potent insight, in particular into the ‘multivalence’ of things.

Section 4. The insight of Ordering: pursuing the mid-grain.

‘[Neither] so coarse-grained that it is uselessly amorphous...nor...of so fine a mesh that every item is uniquely classified’ (Carmody 2007).

This section revisits issues that we have already encountered in previous sections, but this time we recast these issues so that we come to perceive the intractable practical and epistemological problems of Ordering as instead *advantageous*. Therefore it is helpful to begin this discussion by reviewing what we have established so far. Originally, (in section 2) we established that Ordering was a more or less straightforward (three distinct laws, five basic principles, albeit some arbitrary) practical and logical task – of essentially putting like with like – that reaped practical and logical benefits. The literature suggested, and we accordingly observed in our projects, that Ordering was a great way to get a collection organised, and to gain a structured overview that differentiated a previously amorphous mass.

Subsequently, we deepened our first appraisal and came to recognise orders as in fact not so much straightforwardly beneficial, but tentative and discretionary, and involving practical dilemmas. The principle inescapable problem of Ordering is that *things that are like in some way come to be physically separated*. Correspondingly, this impacts on how we *understand* things: we see things in terms of some of their attributes but not others. In other words, it seems that Ordering results in a restricted perspective on things – according to the decision of what attribute is the ‘relevant’ attribute – and not a full view of each thing as a complex, multidimensional, individual artefact featuring numerous attributes. To illustrate this point,

we can examine one of the cereals, say, Corn Pops, to see how it ‘suffers’ from being classified in the *Periodic Breakfast Table*.

In the context of this system of classification, I understand Corn Pops as ‘Grain’ shaped (and so, apparently, ‘like’ Puffed Wheat which is also ‘Grain’ shaped, and ‘unlike’ Apple Jacks which are by contrast ‘Round’). Now in fact there are lots of attributes to Corn Pops (indeed many of which we can discern by the legend) – they are not just a ‘Grain’ shaped cereal, but a cereal invented in 1957, manufactured by Kelloggs, that has 16% market share, that is high in sugar and sodium, low in fibre and protein, and one of the cheaper cereals at \$US 2.66 per pound. In fact Corn Pops actually has a good deal in common with Apple Jacks after all. Apple Jacks – despite being (dissimilarly) ‘Round’ – are similarly around the two to three dollar mark, similarly made by Kelloggs, of a similar market share at 18%, and high in salt and sugar. Moreover all things considered Corn Pops are actually quite distinct from Puffed Wheat – despite both being ‘Grains’: Puffed Wheat is twice the price, is made by the competitor Quakers, has a salt and sugar content of zero, twice the protein but a negligible market share (which apparently rounds to 0%).

Notwithstanding such problems, I now set out my proposition that the real insight associated with Ordering a Collection isn’t actually in the (never perfect) *outcome* that is an Order among things, but in the *process* of considering alternative attributes and systems for Order-*ing* things.

a. The descriptive efficiency of Ordering.

We have contemplated various difficulties that Ordering poses in practice. For example, in the case of ordering a group of buttons, if I rank buttons by size, it is very likely that I will be also be putting buttons that are very different colours side by side. Rather than having to choose one compromised order over the other (either by colour or by size), in theory I can resolve this problem by *combining* attributes. For example, I could plot buttons in a two-dimensional coordinate space, whereby the x-axis pertains to size, and the y-axis to colour. This creates a more detailed taxonomy, which enables me to keep buttons that are the same size together *and* keep buttons that are the same colour together. Clusters that emerge in the quadrants represent a kind of trend in the population: perhaps there is a significant number of large red buttons. But here I may be troubled to notice that I have grouped large, red, *square* buttons and large, red, *animal-shaped* buttons together.

To resolve this I can add another axis, say a z-axis for shape. This means that I can more accurately group large, red, square buttons separately from large, red, animal shaped buttons. But then (you know what's coming) what do I do about separating large, red, square, *wooden* buttons, from large, red, square, *metallic* buttons. If I keep adding axes or dimensions to reflect the multiple attributes of each item (which is the same as adding sub-groups in a taxonomy), I am going to end up with a pragmatically impossible multi-dimensional coordinate space (or a similarly impossibly intricately branching taxonomical tree), such that there will be as many categories as there are particulars. I will end up with a category for red, large, heavy, textured, chipped, wooden, elephant-animal-shaped buttons: to the extent that the category simply describes a particular button: a red, large, heavy, textured, chipped, wooden, elephant-animal-shaped button. This scenario has been particularly well described by Rudolf Arnheim, who describes the 'diminishing returns' of such a 'catastrophic onslaught of information' (Arnheim 1969:157-158).

Arnheim agrees that while in theory, the membership of a particular instance to numerous groupings simultaneously is possible, in practice this 'would not contribute to sensible orientation' (Arnheim 1969:157-158). The problem is 'the larger the number of common traits, the smaller the number of individuals comprised' of those traits, such that eventually 'we [will be] left with as many classes as there are individuals' (Arnheim 1969:157-158). He postulates the example of a cat: a cat would simultaneously belong to all groups from 'organic things' to 'felines', to 'furry things', to 'the customers of the meat and canning industries,' indeed, 'all the way up to that exclusive club for which only this one cat would qualify' (Arnheim 1969:157-158).

Thus in trying to maintain an accurate picture of each of the buttons throughout the Ordering process – while this seems like an admirable goal, to be as sensitive as possible to the complexity of each item – is in fact to *reverse the benefit of Ordering in the first place*. Bailey explains that one of the key advantages of classification is its descriptive efficiency (Bailey 1994:11-12). The idea is, although it is impossible to deal with all the particulars of a large and diverse population individually, when grouped in classes or categories a complex reality is reduced according to its salient attributes. Accordingly, Charles Ragin describes typologies as a 'form of social scientific shorthand' (Ragin 1987; cited in Becker 1998:165), while Becker explains that the name given to a type or group ('animal shaped' or indeed 'grain'), is a 'generalisation to manage empirical variety' (1998:128-130). We can even see this borne out in the case of grouping buttons. By grouping buttons I benefit from a kind of conceptual shorthand: I am no longer required to comprehend one hundred buttons, but I

see four groups of buttons, *long, square, round and animal shaped*. What's more, should I henceforth encounter further buttons, I can more rapidly comprehend them in terms of their membership to one of these classes, rather than taking on board their peculiarities.

Thus we see that the *point* of Ordering and classifying is to *truncate* to some meaningful extent, since maintaining a full picture of each thing is not helpful. As Carmody explains, a system of classification 'must be neither so coarse-grained that it is uselessly amorphous, for instance to classify the biological world simply into plants and animals' (Carmody 2007).⁷⁹ But on the other hand, a system of classification should not be 'of so fine a mesh that every item is uniquely categorised', (adding the qualification 'except in a library where the purpose is different' [Carmody 2007]), as we saw in the case of the red elephant button category, and indeed in Arnheim's frightfully exclusive club for cats (indeed, for *a cat*).

b. The process of seeking a mid-ranged grain.

Ultimately, as Gilyard, Holdstein & Schuster explain, '[meaningful] classification requires sophisticated analysis [in order to create] thoughtful *categories* that reflect the *complexity* of the subject' (Gilyard et al. 2007:274, my emphasis). Consequently, we could characterise the process of choosing 'which-way-to-organise' things, as a kind of (sophisticated analytical) pursuit for a 'mid-grain', which balances faithfulness (to the complexity of things) with efficiency (categories that truncate meaningfully). Thinking about the case of *Periodic Breakfast Table*, 'breakfast cereal' would be too big a class to be analytical (too coarse grained), yet 'Frosted Mini-Wheat' would be too narrow a class to be useful (too fine grained). Instead, what is needed is what I am referring to as a *mid-ranged grain* (between too coarse and too fine).

Frosted Mini-Wheat could have been classed 'Wheat', 'Frosted' or 'High protein', but since Weese deemed the attribute of *shape* as the most relevant, Frosted Mini-Wheat is classed 'Orthogonal'. We (now) appreciate that this is discretionary, and that each way of classifying is as flawed as any other. But in this discussion, instead of reviewing the problematic insights associated with any formal Ordering *outcome* or end result, we will now explore a different focus: the insight gained by the *process* of creating Order. By considering alternative dimensions of cereal – possibilities such as shape, primary ingredient etc. – in pursuing some mid-ranged grain or another, it strikes me that you would undeniably *really* get to know your cereal. From Frosted Mini-Wheats all the way up, through wheat or not

⁷⁹ Exploiting the comic potential of this the humourist Stephen Leacock asserts, 'Plants are divided into trees, flowers and vegetables' (cited in Perec 1997[1985]:186).

wheatness, frosted and not frostedness, orthogonal and other shapes, to 'breakfast cereal'. Even in the knowledge that the ideal order you are striving for where there is a 'perfect' place for everything is impossible, I suggest that you still gain a more thorough and fundamental understanding of the items (cereal) in your collection, than you would have if you hadn't grappled with the 'dilemmas' and felt 'torn' by the process of Ordering things.

Thus in the very weakness of Ordering – its elusive, alluring ideal that can be endlessly pursued – is the benefit and insight gained by Ordering. That no principle for Ordering a population can say all that you want to say – that each is at the expense of another, that each order emphasises one set of attributes but is insensitive to numerous others – encourages the iterative, close and contextual consideration of alternatives, which gives rise to an intimacy with both the macro, contextual trends as well as the micro, detailed particulars.

Orders are 'workable', not resolved.

It is a truth that Orders can never be fully, satisfactorily resolved. Bowker & Star comment that they have never actually seen a 'real-world working classification system' that fulfilled all three essential requirements, and what's more they 'doubt that any ever could' (1999:11). We can turn to Darnton (the scholar who examined the rearrangement of the French *Encyclopedié*) for an explanation for how 'real-world' classifications are *workable*, if not ideal. Darnton explains:

'Things hold together only because they can be slotted into a classificatory system that remains *unquestioned*' [Darnton 1984:192].

Demonstratively, upon considering the dissimilarity of two dogs, the Great Dane and the Pekinese, Darnton drolly observes that: 'If we stopped to reflect on [definitions of dogness or on the other] categories for sorting out life, we could never get on with the business of living' (Darnton 1984:192). In other words, the selection of attributes that determine how things are categorised will never be undebatable; the groups that result will always be at the expense of some other configuration. But at some point 'questioning' and 'reflection' have to be ceased, since carrying on only obstructs the practical benefit of classification, which is to sort things out.

Interestingly, there is evidence that a 'workable' though imperfect order among things is central also to the process of writing up research (Becker 1986), as well as creating design (Frascara 1997). In *Writing for Social Scientists: How to start and finish your thesis, book or article* (1986), Becker points out that if you want to actually *finish* a research paper,

accepting a less than 'perfect' order is *essential*. Becker sympathises with the 'which-way-to-organise-it' problem: dismayed when writing one paper that 'whichever way [he] chose, [he] found [himself] wanting to talk about...something [he] hadn't mentioned yet' (1986:58). However ultimately Becker confirms that it is impossible to achieve a perfect multidimensional constellation of your argument, by somehow '[talking] about everything at once' (1986:59). To directly confront the paralysing illusion that there is 'One Right Way', he advises to begin simply by sorting key ideas 'that seem to go together' into groups (1986:61). Becker explains that you will soon see that 'each of the several ways [to organise your materials to support your argument] has something to recommend it, [but] none are perfect' (Becker 1986:59, 61). According to Becker, although 'believers in [abstract] perfection' might not like it, they do eventually accept 'pragmatic compromises...[but] only when reality – the need to finish a paper or thesis, for instance, compels it' (Becker 1986:59).

Meanwhile, in a remarkably similar way, Frascara's account of how to make sense of the myriad factors relevant to developing a mass communication campaign stresses that '[the] objective is not to find the *true* connection between [the factors]' but 'to find an [*operationally satisfactory*] organisation of the various units that would render them *usable* for the construction of visual messages' (Frascara 1997:42-43, my emphases).

In view of Becker's and Frascara's recommendations, we can observe that a preference for abstract perfection ahead of pragmatic compromise, seems to correspond with an erroneous interest in the *Order* itself, in place of the actual interest in the *things* themselves. Trying to attain the 'true' order among things is not the point: this is to become more concerned by your 'containers' than what they hold, in the same way that it would be mistaken to become more preoccupied with the organization of your sock drawer, than getting on with the business of wearing socks and heading out for the day. Spending time – even a good amount of time – doing the hard, slow, work thinking about arranging your sock drawer is irreplaceably useful for really understanding the variety and even relationships within your population of socks: the weave, weight, colours, patterns, fabric, texture, occasion for selection. But when Ordering it is key to avoid pedantry: the greater significance of socks is that they are for wearing on your feet, not appearing in some perfect, static organisation.

As an iterative dynamic process, Ordering is a productive struggle between the distinctiveness of each individual, and each individual's abilities to belong to different kinds of group. It is a process of cycling up and down, from a macro encompassing system, to the

micro specific attributes, between too-coarse-a-grain and too-fine-a-mesh, mingling 'inductive [bottom-up] and deductive [top-down] kinds of thinking' (Gilyard et al. 2007:274), in pursuit of some appropriately truncated, 'satisfactorily operational', 'workable' mid-grain. In other words, our interest is in the *pursuit* of a workable mid-grain – rather than the workable mid-grain *per se*.

c. Conclusion: the real insight of Ordering – becoming acquainted with multivalence

Ordering is distinct from and a subsequent stage to Collecting. If Collecting was about making sense of the undifferentiated world, we might say that Ordering is about making sense of the undifferentiated world *of the Collection*. While Collecting was an energetic, widening and gathering stage, a time of indiscriminate openness, as we shall see, it seems that Ordering is a rather more fraught process of trying to get things organised, requiring scrutiny and acumen. We realise that in order to sort 'like' from 'unlike', 'same' from 'different', (and having no 'not sure' left over), careful decisions need to be made which determine the best conditions for 'like' and 'same'.

The upshot is that through this process of Ordering, the 'shapeless mass' (Poyner 2000:12) left by the process of Collecting starts to take a more meaningful structured organisation. While Collecting rendered all things to an equivalent value, Ordering evaluates and assigns different values among things. However, Ordering is not without its problems. The downside is that Ordering can tempt the hollow desire to find a 'perfect', logical, suitable place for everything. In light of the literature drawn in to attend to *Periodic Breakfast Table* and others – from information management to materials science, from Foucault's account of Borges' Chinese Encyclopaedia to the picture librarian's struggle with illustrations of flying saucers – we realise that such a pursuit is illusory both practically and intellectually: it is impossible to establish a single, indisputable order among things.

In deciding on some way, according to some attribute, for getting things organised, while this brings items together that are similar in one way, it is inevitable that I will be simultaneously physically separating things that are similar in another way, (when I group cereal by roundness, I am separating cereals that are the same colour). Furthermore, ideologically, we are now defining these items by *this* attribute, and not any number of other attributes that add up to define each thing, (I am promoting a way of comprehending cereal that demotes the recognition of their colours, but prioritises their shapes). Thus we come to recognise that orders among things – including the orders of cereal, love hearts and blue

tarpaulin, not to mention cyclists – are not neutral nor *a priori*, and instead discretionary and debatable.

But in fact this supports my ultimate assertion: that the real strength and insight of creating an order among things is as a *process* of considering (indeed struggling with) alternatives. By creating Order we gain a robust acquaintance with the *multivalence* of the things in our collection. Through the ‘dilemma’ of Ordering, by grappling with the ‘which-way-to-organise-it’ problem, by considering the alternative ways that a Collection can be split up and categorised, emphasising different distinctions and creating different generalisations, we appreciate that the items in a Collection have many dimensions, and accordingly various values can be ascribed to them. We gain a ‘multivalent’ understanding: *macroscopically* (appreciating the alternatives structurally, how things fit together), as well as *microscopically* (the many dimensions of any individual thing that add up to define that individual thing). The fact that we shall never arrive at a perfect Order does not matter because, as we have demonstrated by our analysis of *Period Breakfast Table*, *Endcommercial* and *I [heart] [heart]*, the real purpose of Ordering is as a means, *a means for gaining insight into the Collection*.

This brings us now to adopt these ideas in a practical application. How can the concepts derived for this language of Ordering be more keenly understood by applying them as a creative, investigative, visual strategy? I will now describe how I Ordered my Collection of cyclists.

Part 2.

Adopting Ordering as a strategy.

Section 1. *BikeWork*: Ordering Cyclists

a. Reconciling the problems from Collecting cyclists

I will first recap where I'm up to in *BikeWork* project. What is the legacy of Collecting that I now want to deal with? At this stage, I have accumulated an undifferentiated, amorphous 'pile' of cyclist fragments: 65 images, and 65 responses to the question 'what two things would make next year the perfect year?' And I also have in the back of my mind a question surrounding the image of cyclists. The most immediate question is, how can I make some sense of – to create some order, to sort through – this pile of cyclists? What kind of meaningful structured overview can I establish – what kind of truncation, or conceptual shorthand – can I benefit from, to see this group of cyclists more keenly than as a set of 65 cyclists which are the-same-but-different.

In view of the preceding discussion in part 1 of this chapter, I now recognise that it is not actually (but only hypothetically) possible achieve a 'perfect', stable order among things. But I also realise that the process of sorting things out is worth engaging in since there are real (albeit compromised) practical and epistemological benefits. Not only will I get organised in a practical sense, but I can gain a meaningful structured overview: whereby I gain perspective macroscopically and microscopically; seeing each, in this case, individual cyclist in terms of their specific attributes, and also perceiving the relationships and trends among the population of cyclists.

In light of Ordering, I recognise that what I am seeking to do is to negotiate different ways of organising things to achieve some 'grain' between each individual cyclist (too fine), and the 'pile' of cyclists as a whole (too coarse). And I understand that this will be discretionary and not pre-established: it is up to me to decide which attribute I deem the 'relevant' attribute for determining how individuals are the same, and thus forming groups of 'like'. If cyclist A is a woman on a road bike, will A be 'like' B because B is also 'female', or will A be 'like' C since C also rides a 'road bike'? A, B and C won't change; how I prioritise attributes will. By the decision of which attribute (gender or genre of bicycle?) I produce completely different

groups of cyclists, (men / women cyclists; road / mountain / fold-up / recumbent / hybrid bicycles).

It is clear that Ordering is an experimental, dynamic process, of considering alternative influencing attributes and resulting arrangements, and playing with the relationships between various organisations of things. There are three broad goals of classification (outlined by Bowker & Star 1999): not to leave out any images or responses that are 'too hard' or 'too boring' or don't quite fit'; to treat the individuals in the whole population consistently; and to form mutually exclusive groups, so that no individual seems to belong in more than one group, or no groups in particular (each cyclist should have a definite 'box' applicable to them). Whichever way I decide to group things and make sense of this pile of cyclists, it is inevitable that I will tend towards promoting some worldview, and valorising some set of attributes and some group of individuals while suppressing others, (for example seeing gender and not bike types).

However, even in the knowledge that any order among things will be inescapably, technically 'tentative', above all I recognise that it is not the point to achieve a perfect order among things, but a satisfactorily operational one. In other words, I do not expect to achieve an order among things that tells me 'everything', but seek an order among things that tells me 'something'. In particular I anticipate that by the iterative process of Ordering that I will be in an excellent position to gain a multidimensional, intimate acquaintance with my cyclists. The point is not to become preoccupied with the compromised, end-result order among things. Instead my focus is on the *insight* gained by the *process* of establishing order among things: the struggle of striving to meet Bowker & Star's three goals of classification; trying to negotiate which grain size is the most appropriate and useful; considering alternative systems and selecting which valorization (and which suppression) is the most functional and satisfactory (and the most *convincing* and *engaging*.)

b. Ordering cyclists: how could these 65 cyclists be grouped?

Here I shall report on the different ways I considered before eventually, pragmatically settling on a 'tentative', discretionary, 'workable' organisation of cyclists, (which is, if you like, my *BikeWork* equivalent of Weese's *Periodic Breakfast Table*).

The upside: appreciating the multivalence of cyclists.

Firstly, thinking about the set of 65 *photographs*, I realised that these could be classified in numerous ways depending on what I deemed the 'relevant attribute'. By some amateur but

careful image 'content analysis',⁸⁰ I could sort out the cyclists by gender (male versus female); or the kind of bicycles (road, mountain, fold-up, recumbent, hybrid, retro, bmx and childrens'). But also I could group and separate cyclists by age group (children, young adults, older adults); or bike gear (panniers, flags, baby seats, specialist clip-in shoes.) Or thinking about Perec, I could group - rather more obtusely - by the colour of the bicycle, or the t-shirt worn by the cyclist. Then as I looked at the photographs even more closely, I began to perceive trends in body language (reticent, engaged, neutral, relaxed); and facial expressions (happy, grimacing, stoic, comic).

With regard to the responses to the '*ludic*' question, as an alternative to the gloriously straightforward, arbitrary alphabet, (the incidental principle of Ordering which features in Collecting *BikeWork*), I considered ranking them by word count: some left the survey blank; most responses included one or two words; others verged on exposition. Subsequently I considered that these responses could be grouped more meaningfully (but tentatively) to reflect conceptual patterns. Accordingly, by some amateur but careful qualitative 'theme identification',⁸¹ and recalling Becker's advice to begin simply by sorting things that 'seem to go together' (1986:61), I created groups of aspirations related to: career / money / education / home; wellbeing / travel / leisure; family / intimacy / friends; bikes / cycle paths / banning cars; government or political leader / war or peace; and 'other'. These thematic groupings are shown in  FIGURE 12.

Next, recalling Wurman's comment that real learning comes from *comparing* organisations of things (Wurman 2001:45), as well as Bailey's discussion of inductive 'cluster analysis' as a strategy for creating taxonomies (Bailey 1994:6,34-40), I started to think about multidimensional orders for making sense of my group cyclists. For example, if I compared gender to bike genre: would I find any men riding fold-ups? How many women ride road bikes? Or if I compared a thematic classification of the statements to gender; what is the ratio of men to women who wish for a baby next year? Or if I compared aspirational categories to bicycle genres, would I find that people on mountain bikes are more interested in travel? Or are people on road bikes more concerned by money/career? I started to recognise that there are vast possibilities for uncovering correlations by comparing attributes. Are mountain bikes generally red? Would I find a correlation between men and 'no panniers' (preferring to carry backpacks)? Is unsmiling/reticent body language,

⁸⁰ See Rose (2001:54-68) and Emmison & Smith (2000:58-63).

⁸¹ See Ryan & Bernard (2003).



Figure 12. Thematic groupings of each response to the 'ludic' question, (i.e. treated and categorised separately, rather than as the pairs as provided by the participants).

associated with expressed concerns related to political leaders and environmental issues?
Are aspirations for love/sex expressed exclusively by younger adults?

In any event, as I started to play with these different ways of Ordering, I certainly began to appreciate the multivalence of each cyclist: an individual could be 'tagged' *male, older adult, no luggage, clip-in shoes, red mountain bike, white t-shirt, reticent posture, stoic facial expression; aspirations begin with G, are 35 characters long, and pertain to travel/adventure, as well as health/well-being*. I benefit from conceptual shorthand – no longer having to perceive this individual as one specific individual cyclist among sixty-five distinctively individual cyclists. But yet I can distinguish this cyclist more finely than 'cyclist', which I would have perceived him as if he had remained in the context of the amorphous collection of cyclists.

The frustrations: empathising with the picture archivist trying to file a flying saucer.

Notwithstanding the sense of getting my pile of cyclists better organised, and beginning to appreciate multidimensional insights, both at a micro level (multivalent individuals) and macro level (trends of types), I certainly also experience frustration at the impossibility of achieving a 'perfect' order among things.

Dilemmas abounded in thematically classifying the responses. With regard to establishing the categories themselves, while it was more or less straightforward to group comments related to 'politics' and 'war' together (and similarly 'leisure' with 'travel'), I was rather more 'torn' (to use Sekula's word [1986:156]) when it came to others. For example, it occurred to me that 'education' could equally 'go together' with either 'career / money' or '(mental) well-being'.

Other dilemmas related to categorising the individual responses. How else can I categorise the aspiration for 'more rain', without establishing the ubiquitous, residual 'other' category (that Bowker & Star [1991] describe)? Should 'got approved for exchange to Japan' be classed as 'travel' or 'education'? Does 'money to travel' fit in 'money' or 'travel'? And since each person generally gave two responses to the ludic question (as requested – 'what *two* things...?') – even when each individual response is more or less straightforward to classify – it is impossible to select which category is best to place the *individual*. How can I suitably categorise the individual who wishes 'travel round africa' + 'buy home'? But if I create more refined categories (that combine attributes – so I have more specific categories such as 'would-be jet-setting home-owner' and so on and so forth) I will of course end up with an unmanageable and unmeaningful number of categories (as Arnheim described [1969:157-

8]). At moments like these we can deeply appreciate the benefit of working with something more arbitrary such as the alphabet or length, where there is a definite and indisputable rank and position.

Similarly, when deciding which way to classify the images, I am acutely aware that I affect a particular worldview or paradigm. Sorting images of cyclists into groups of men and women seems to invoke the issue of the under-representation of women cyclists. Promotion agendas also seem to be entailed when sorting cyclists by *age*: the problem that children today are commonly discouraged from cycling to school for safety reasons; the opportunity that cycling is often recommended to older adults as a low impact option for keeping active later in life. Meanwhile when I sort by *type* of bicycle a marketing perspective is evoked, arousing ideas about styles of riding, (off road, on road, xtreme, aerodynamic, touring), as well as affluence (retro bikes may well have cost nothing found abandoned or 'handed down', mountain bikes are generally in the \$500 – 1500 price range, while road bikes can carry price tags up to \$2000 – \$7000.)

c. The Order I settled on: perceiving the 'cycling' in these cyclists.

In the end, I decided to Order the fragments I had Collected, in order to perceive the 'cycling' in these cyclists: to what extent did their image convey 'cyclist'; to what extent did their comments reveal 'cyclist'? Accordingly I ascribed values (which I will describe in more detail) to the photographs and comments according to attributes of 'cyclist-ness': categorising the images in terms of more or less 'lycra-ness'; and the answers to the 'ludic' question in terms of mention or no mention of cycling. My Ordered Collection of cyclists is shown in  FIGURE 13.

Ordering cycling photographs by 'lycra-ness'.

I derived seven categories along a continuum of 'lycra-ness' for sorting out the sixty-five photos of cyclists, shown in the right half of the poster. At the 'more lycra' extreme, I grouped photographs of cyclists who were wearing lycra bike shorts. Towards the other end of 'less lycra' are photographs of people who are essentially in street wear: they could have stepped out from behind a desk or be going to a movie. One wouldn't know based on their appearance that they are 'cyclists' (except that in these photographs they happen to be standing with a bicycle). The specific 'less lycra' extreme category distinguishes cyclists wearing collared shirts and trousers. The subsequent categories of photographs in-between these extremes, (working from right to left along the continuum) are cyclists wearing: trousers and jeans; 'dressy' shorts; active / casual wear, perhaps as you'd wear to the gym



lycra bike shorts
(the ultimate image of
cyclists)

lycra
top

fluoro/
'hi-vis' gear

active wear/
gym clothes

shorts +
t-shirt

trousers +
t-shirt

trousers +
collared
shirt

← more lycra

less lycra →

+

more cycle lanes
+ a new house

protected bike lanes
everywhere in Australia
lose howard

all streets having cycleways
money to travel

being able to climb alot
some positive developments in
the saga of making sydney
cycle friendly

worldwide nuclear
disarmament
cyclepaths throughout Sydney

fed govt. money for national
cycling strategy
RTA 5% of their budget for
bikes

A scholarship!
Lots of bike rides

big fat pay + owning a roof!!
yes + lots of cycling!

new MTB
my girlfriend to come
and join me

new frame
new commissions

a new partner who cycles
lots of money!!

a new bike friday
and a trip to the USA to
collect it

cycle touring NT
became fluent in French

demise of cars
global sustainability

car free CBD
tandem

world peace
sydney car free

a total worldwide ban on all
motorised transport
not being killed by a car
before the worldwide ban
takes effect

get 1st class honours
my mum falls in love

less stress at work
better communication with my
wife & kids

Howard dead
no more oil

world peace
less corporate greed

world peace
Green Government

i'd get more actively involved
in activism
i'd spent more time with
friends in silence / meditation

?! Howard and Bush fall
(But Beazley is gone too!)

bush's impeachment
end of iraq war

john howard is assassinated
a socialist govt gets in

overthrow the capitalist system
implement an equitable
socialist system in its place

health and fitness
time for play

a good relationship
peace of mind

peace
winning lottery

my family moves here
to fall in love

nick cave in concert
more love

dream job [coaching]
dream lung power

a super boyfriend
adventure

land dream job [some sorta
museum curator (for now)]
meet dream girl :)

become a dad
win oxfam trailwalker

being healthy
& happy

a new job in the
community sector
overcoming my
sexual hang ups

maintaining a sense of self
development
getting in touch with old
friends

extensive o/s travel
no family bereavements

good relationship
howard out of office :)

USA out of Iraq
& me passing exams

mandatory detention
abolished
and a trip to peru

dream job [idle rich]
& sustainable transport
everywhere

lots of [weekends surfing or
snowboarding trip - with
pristine conditions]
change of attitudes of our
governments

the death of all the Howard
government
time at the beach

a healthy son
finish renovations

lose 25 kilos
spend 2 weeks in the snow

travel round africa
buy home

more rain

moved to beach
got approved for my
exchange to Japan

successful projects
growing friendships

success in business
and relationship

new job [international aid +
development program
coordinator]
less stress

get licence back
get close to dream job
[professional motorcycle
racer]

challenge
travel

long international trip
(on cards)
start university

bulldogs premiers
wallabies undefeated

that's a bit much to ask

a new job
an overseas trip

my business gaining enough
momentum to provide
a good income

family good health
promotion

my partner returns
my passive income increases

a novel complete
adventures in Russia

more money
more holidays

any mention of banning cars.

any mention of cycle lanes
or cycling advocacy

any mention of cycling
or bicycles more generally

no mention of bicycles, cycling, cycle lanes, cycling advocacy or banning cars

Figure 13. BikeWork Stage 2 – Ordering

(taking us to the midpoint category). From this point the clothing and attire distinguish the people as ‘cyclists’ in some way: fluoro jackets and high visibility gear; then people wearing lycra tops; finally the extreme category, lycra shorts.

Ordering the responses by mention (or no mention) of cycling.

I derived 4 simple categories to sort the sixty-five pairs of responses to the question ‘what two things would make next year the perfect year?’ I was particularly interested in differentiating the people who chose to nominate – of all the possibilities that could factor into a ‘perfect year’ – some aspiration related to cycling: from a cycling holiday (‘cycle touring NT’) or a new bicycle (‘new MTB’, acronym for mountain bike), to cycling infrastructure (‘all streets having cycle ways’) and cycling advocacy (‘some positive developments in the saga of making Sydney cycle friendly’).⁸²

I categorised these ‘ludic’ fragments according to the occurrence of, (from left to right, beginning with the category of the most dedicated, enthusiastic idea about cycling): ‘any mention of banning cars’; ‘any mention of cycle lanes or cycling advocacy’; ‘any mention of cycling or bicycles in general’. The fourth category was basically ‘none of the above’: of the two stated aspirations for next year, ‘no mention of bicycles, cycling, cycle lanes, cycling advocacy or banning cars’ occurred.

Combining attributes: comparing ‘lycra-ness’ with cycling-related comments.

Subsequently it occurred to me that you could combine these continuums, in a version of a 2-dimensional x-y coordinate space, to reveal trends in these ‘cycling’ fragments (← FIGURE 14). Here we see the continuum of ‘lycra-ness’ compared with categories of responses in terms of mentions related to cycling. When we plot the sixty-five cyclists on this coordinate axis of sorts, we can observe that most cyclists made no mention cycling or banning cars and wore ‘less lycra’, (the largest ‘cluster’ appears in the lower, right part of the diagram).

d. Discussion: the issues raised by creating Order among these fragments.

These ‘fragments’ can only be taken at face value. It is immaterial whether or not the gentlemen that I have classed as ‘less lycra’ (because on that afternoon he happened to be wearing smart pants and a polo shirt), actually has the full ‘lycra–lizard’ bib and brace outfit drying on the clothes line at home. Similarly it is outside the scope to discern whether the

⁸² Of course, we might speculate that these cycling-related responses are largely attributable to the context of the particular ride on which these cyclists were embarking. See Appendix *Item 4*.

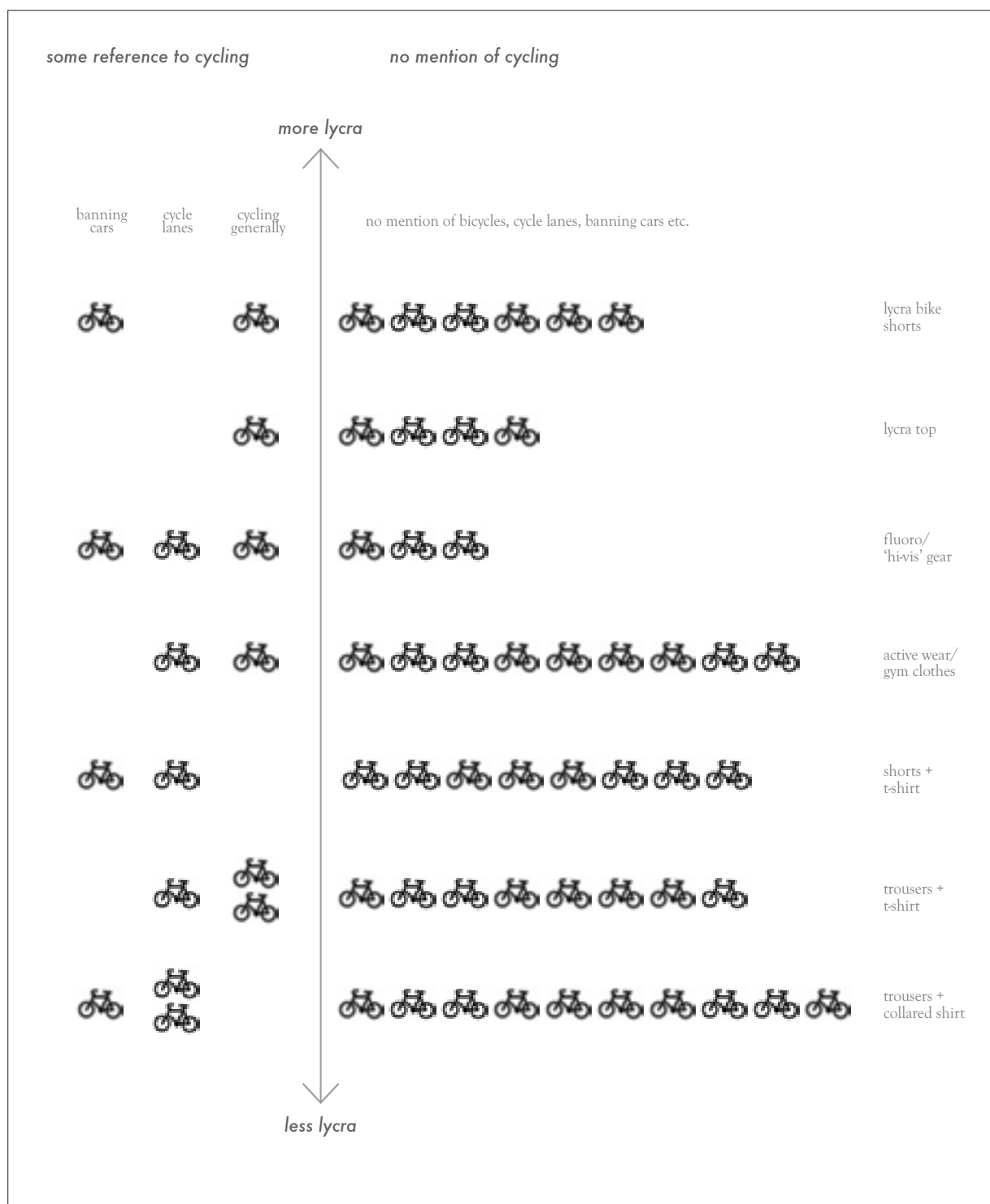


Figure 14. Comparing 'lycra-ness' with mention of cycling.

person who volunteered 'a healthy son' + 'finish renovations', in reality *also* wants to see cars banned, (but, based on what was mentioned on the day, I have categorised his comments in 'no mention of cycling'). Or vice versa. A person who I *have* categorised as more 'cyclist' because they mentioned 'more cycle lanes', actually just felt compelled to nominate this concern given the context in which my question was posed (a Critical Mass bike ride). The reality may well be that she had *borrowed* a bike for the afternoon for social purposes and doesn't regard herself in the least as a 'cyclist', and yet I have categorised her – according to her comment – as more 'cyclist'.

This discussion highlights two related points that must be emphasised. Firstly, I'm *experimenting* with a creative, investigative, visual strategy. These images and responses have not been classified in order to lead to long-term extrapolation about cyclists. Instead the point of organising these images and responses is *to explore the dilemma of Ordering*, not to reach any kind of conclusion about cyclists. And indeed, by this process of Ordering fragments of cyclists, I do now keenly appreciate the dilemmas associated with the strategy of Ordering. Things that are like in some way, have been separated (e.g. categorising according to the mention of cycle lanes, has separated pairs of responses which mention home-owning). Things that are distinct have been lumped together (e.g. the category of 'no mention of bicycles etc.' assimilates diverse aspirations such as for babies, money, rock concerts, weight loss, and rain). Some groups are valorised at the expense of some others (e.g. a focus on the mention [or not] of cycling-related responses, obscures possible non-cycling related trends). Furthermore what seems to be a simple matter of placing an individual into some 'box' or another, turns out to be an ideological act that does 'work' on that individual (e.g. the image category of 'collared shirt' has connotations other than 'not Lycra', i.e. blue and white collared workers, etc.).

However, recalling the ultimate lesson from Ordering, in the end it is to a large extent beside the point that any Order among these cyclists will be tentative and fraught. The point is not to remain concerned by more or less faithful or efficient categories and continuums. Instead what Ordering taught us, is that above all the process of Ordering is about refining our appreciation of the *Collection*. And indeed, as a result of Ordering, I have gained a more refined, vivid understanding of the multi-dimensionality of cyclists, (and particularly appreciate some of the more salient aspects of the Collection). However, maintaining the structured overview and Ordering's requirements for inclusiveness and mutual exclusion becomes *cumbersome*. Reaching such limitations when creating an Order among things, sets the task for Positioning.

Returning to the issues raised by categorising fragments, the second important point is that I am *not* actually categorising people *per se*: instead I am categorising these *images* according to the presence of lycra, and the 'ludic' *responses* according to the mention of 'cycling'. Although, there is a pertinent issue here to do with *looking like social research*. Cyclists are undeniably quite a shift from breakfast cereal. Does Ordering *people* raise concerns about Ordering in *BikeWork*, that were not even brought to mind when considering Ordering in *Periodic Breakfast Table*? As Bowker & Star warned, categorising people is an activity that is not necessarily bad, but certainly dangerous (1999:5-6). And, despite the reality that creating Order among things is discretionary and tentative, the visual rhetoric of categorisation and graphing misleads us to believing otherwise.

Perhaps it more astute to consider the reverse: we could argue that what a visual form does is emphasise how *all* Ordering, and indeed all social research, is also to some extent inescapably discretionary and tentative. This line of thinking has been most shrewdly articulated by Becker (the same who sympathised with the 'which-way-to-organise-it' problem [1986]), when he mounted a case in 1979 for the use of photographs in social research, asserting that photographic images carry an irreplaceable epistemological value. In this compelling argument, Becker makes no claim for the impartiality and comprehensiveness of photographic images, and instead reasons that, on the contrary, it is *precisely* their partiality and non-comprehensiveness that makes them so valuable in a research context:

'visual materials simply make obvious the difficulties we have with every variety of data. Do we worry because the photographic frame, putting a line around much that is of interest to us, excludes everything else? We should, just as we should worry that a questionnaire finds out something about what it asks about, and tells us nothing about the rest. Do we worry about the way the relation between the photographer and the people being photographed affects the material we get? We should, just as we should try to understand the effect of the relationship between the investigator and the people being investigated in participant observation or experiments' (Becker 1979; cited in Emmison & Smith 2000:26; my emphasis).

Notwithstanding Becker's powerful contention, *BikeWork* is unlikely to be admissible as research. It may be vivid and it may be thought-provoking, but it's certainly not conclusive. It is not in anyway statistically significant, despite its 'rhetoric of neutrality' (Kinross 1989). Although systematic and painstaking, this approach is idiosyncratic and fragmentary. By

contrast ‘proper’ research is comprehensive, rigorous and impartial. Therefore the question is, is this approach valuable even if it isn’t social science?

On reflection, we might say that although this approach isn’t verifiable or conclusive, it is methodical, intentional, transparent and vivid. This introduces the possibility that perhaps the ‘validity’ of this work, though not its accuracy, is its *agency*. In terms of social science, while we might safely say that this approach does not have a role to play in *theory testing*, perhaps this vivid approach to an inquiry has a role to place in *theory building*. In fact, we can say the same with regard to design: while not a mass communications campaign in itself, this approach may vividly provide the *rationale* that underpins the design of a campaign.

Section 2. The problems with Ordering, and what we need from Positioning.

There are three aspects to this discussion that bring this chapter on Ordering to a close. Firstly, I will review the key findings of this chapter. Not only has Ordering set about alleviating some of the problems unresolved by Collecting, but also a language has been derived for attending to projects (that are not quite the same as Collecting) such as *Periodic Breakfast Table*. Secondly, I’ll take the central problem of Ordering – the alluring idea of perfection, despite inescapable imperfection in practice – to its dolorous extreme. Is the obsession with organising and categorising at an epistemological cost: the pursuit of some perfect place for everything is at the cost of really saying *something*? In previous discussions we have established that while Orders (as outcomes) are ‘tentative’ and ‘discretionary’, the *process* of Ordering is an opportunity to gain an appreciation of the various and enumerable facets of a thing. In this section, I contend that despite these benefits of the Ordering process and the certainty that a satisfactorily operational order can be achieved, the process of ordering and re-ordering must eventually be ‘abandoned’. This recommendation is based on the observation that at some point Ordering seems to lose sight of the *Collection*. The point of Ordering was not to achieve some structural perfection of things – or even to achieve some satisfactorily workable one – the point of Ordering was to *make sense of the Collection*. Thus in concluding this chapter, we appreciate the demand to develop another stage subsequent to Ordering, where we can return our attention to the Collection, having benefited from the multivalent insights of Ordering. But first, I will review the pros and cons of Ordering.

We have made several realisations whilst informing our scrutiny of *Periodic Breakfast Table*, *I [heart] [heart]* and *Endcommercial* with various Ordering literature. Above all Ordering is useful for countering the problems of Collecting: no longer ‘flattening’ and indiscriminate, Ordering instead recognises, acts on and facilitates finer distinctions and patterns of similarity/likeness. Initially, Ordering seemed like a reasonably straightforward process, which helped us to better see microscopically (the specific attributes of individual entities) as well as macroscopically (useful groupings and generalisations). But we soon understood how Ordering could be problematised and shown to be a fraught process: in grouping things that are ‘like’ in one way, we are doomed to separate things that are ‘like’ in another way. This wasn’t just an inconvenience but ideological – you do ‘work’ on something when you file it: some things are valorised, while other are suppressed. This all gave rise to the proposition that the lasting insight of Ordering is not in the end result/*outcome* (which is pragmatically achieved but inescapably tentative). Rather the insight of Ordering is as a *process* of deliberation: of considering alternative ‘grain’ sizes; of deeming various attributes as the ‘relevant attribute’; and in so doing, gaining a remarkable intimacy with the entities being ordered; and, with the benefit of fresh perspectives, newly able to perceive some of the more compelling aspects of the collection.

The ‘sick mind continues to infinity’.

Although we have established that it is helpful to continue experimenting with alternative orders among things for a time, stubbornly persisting with revising alternatives is not only unhealthy, it is moreover epistemologically undesirable.

It is worth noting the sheer joy that *can* be associated with relentlessly Ordering things.

Evoking a kind of existential therapy, Robert Belknap enthuses:

‘lumping and splitting, grouping and dividing the world about us, finding similarities and differences between things and creating patterns of possibility with them, making assessments of things that are important to us....momentarily allowing us to order our surrounding world... putting everything into a sequence and an arrangement we desire....it can be exceedingly gratifying to get our list exactly right – and then to remake it all over again’ (Belknap 2004 xii).

But just as Darnton’s refusal to worry about definitions of ‘dogness’ suggested, we might infer that if we too were to remake and remake (say, our cyclists) as Belknap does, this might be at the expense of getting on with our lives. Indeed, Belknap might not be too far off ‘aphasia’, when considering alternatives and re-ordering has become pathological.

According to Foucault an aphasiac is one suffering from the endless grouping and regrouping of collected objects:

'no sooner have [the objects] been adumbrated than all these groupings dissolve again, for the field of identity that sustains them, however limited it may be, is still too wide not to be unstable; and so the sick mind continues to infinity, creating groups then dispersing them again, heaping up diverse similarities, destroying those that seem clearest, splitting up things that are identical, superimposing different criteria, frenziedly beginning all over again, becoming more and more disturbed, and teetering finally on the brink of anxiety' (Foucault 1986; cited in Blair 1998:37).

So the first problem with Ordering is the potential to become obsessed by rearranging in pursuit of some perfection. However, an associated and more serious problem is that this fated pursuit of a never arriving perfection, is at the expense of *saying something*. By attempting to deal with everything, Ordering says nothing. Alice Twemlow has magnificently articulated this eventual problem with Ordering (and has been paraphrased for the title of this chapter).

'A list, especially one that ranks or categorises, can be a salve for the anxiety of living in an era of information overload. But the relief is short-lived. *Listing the options is not the same as selecting one of them to stand by*. Unless you have something to say with your list, the experience of both its creation and use ends up being hollow' (Twemlow 2003:39, my emphasis).

She continues, asserting that

'compilers, writers, artists and designers – or anyone seduced by the simplicity of the list's form – all risk taking a passive stance, and ignoring the need to make critical choices' (Twemlow 2003:46).

In this account of the risks associated with Ordering as an end in itself, Twemlow here effectively sets the brief for the subsequent stage, Positioning. Thus the mission of Positioning, we might infer, is to *say something*, and this requires *critical choices* to be made.

In the next chapter, we will explore how Positioning can express a selective point of view *on the Collection*. While Positioning benefits from the intimacy and appreciation of the multivalence of things gained by the process of Ordering, it is no longer constrained by the fundamental rules of classification which Ordering entails. Indeed in the end, abiding by the rules that we can't eliminate things (cereal, cyclists etc.) that are not interesting or don't

quite fit, is frustrating. Furthermore, while we have benefited from the ‘truncation’ of defining things in terms of their attributes, in so doing we have lost sight of the rich particulars that add up to an individual. Thus in Positioning we also regain access to a richer picture of individual things assembled by the collection, but now benefiting from the ‘conceptual shorthand’ of Ordering.



In closing, let’s return to the three projects we have iteratively considered throughout this chapter, and speculate how we might draw on the insights gained by their Ordering, that might lead to forming some kind of Position on the original Collection.

We’ll start with *Periodic Breakfast Table*. We might decide that seeing all these cereals in this tentative taxonomy has become cumbersome, but by considering alternative ‘relevant’ attributes, we have started to notice a particularly interesting perspective on cereal. We might decide to develop an investigation into the notable absence of a Kelloggs’ variety of ‘Fake’ cereals (as revealed in Weese’s project). Even Quakers, having previously released only the healthiest cereal options at the turn of the century, *Puffed Rice* and *Puffed Wheat*, seemed to ‘lose their way’ and release the sugar and sodium loaded *Crunchberries* in 1968. Now it wasn’t that Kelloggs was abstaining from launching sweet and salty cereals during this era. Instead, Kellogg’s just appeared to avoid producing overtly *fake* shaped cereals in the 50s and 60s, preferring to stick with more conventional shapes, such as ‘Flake’ (*Frosted Flakes* in 1952), ‘Orthogonal’ (*Frosted Mini-Wheat* in 1957), ‘Grain’ (*Cocoa Krispies* in 1958) and ‘Round’ (*Froot Loops* in 1963). Did Kelloggs recognise that while a taste for salt and sugar would be timeless, novelty shapes would come and go?

Let me here stress the point: this kind of thinking represents a return to considering in detail some aspect of the original Collection, *but* this thinking could not have come about without the insight of Ordering.

Similarly, we can think about what kind of ‘Position’ could be taken with regard to *Endcommercial*. We could relinquish the 32 chapters of images of broken bicycles and dodgy signage, to instead focus in on the most salient features of the compelling category of ‘Membrane’. Perhaps by returning to closely inspect only the photographs of the widespread, multifarious use of blue tarpaulin and shopping bags, we might develop a visual narrative concerned with the role of *plastic* when coping in the city.

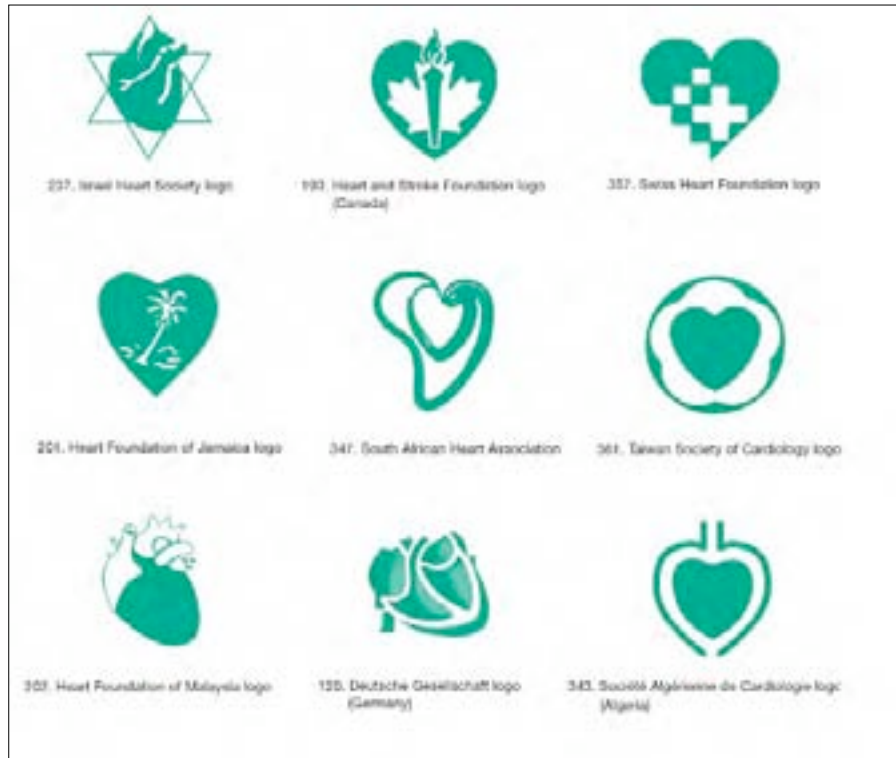


Image 28. Selection of logos exploring nationality, adapted from *I [heart] [heart]* (Daly 2007[2005]).

In *I [heart] [heart]*, no longer constrained by the rules of Ordering and attempting to achieve some degree of mutual exclusion, exhaustiveness, consistency among the categories, we are free to return to the various logos and symbols, and to scrutinise the more interesting features, which have been obscured in the matrix of the taxonomy. We might decide to consider the equivalent Heart Foundation organisations from various countries, and explore the symbolic graphic expressions of nationality in their logos (↑ IMAGE 28).

For example the Israel logo features the Star Of David, Canada features the Maple leaf, and Switzerland features a recognisable variation on their cross motif. Additionally, we might consider the more lateral graphic expressions of each country: South Africa exploits the similar shapes of the heart and the African continent; the Heart Foundation of Jamaica features a palm tree complete with crashing waves, while Taiwan's Society of Cardiology seems to have a distinctive oriental feel with strong motifs (a heart, a five sided flower and a circle) arranged in a concentric and asymmetrical composition. Furthermore, the more or less intricate and literal representation of the anatomy of the heart in various cultures' logos,

is similarly thought-provoking. (In the bottom row, we see Malaysia, Germany, and Algeria, from more to less intricate.)

So now let's turn to Positioning and see what formal graphic devices and strategies might be available to articulate such perspectives.

CHAPTER 5.

POSITIONING: FROM THE EXPLORER TO THE GUIDE

STAGE THREE

Positioning, the third and final stage of the Model, is put forward to attend to two matters. In the first place, two ‘sticky’ projects (including *Newsmap*) remain, which resist the explanations provided by the terminology derived in both Collecting *and* Ordering. In the second place, as we have observed in previous chapters and has been especially demonstrated in *BikeWork*, there are several shortcomings associated with applying Collecting and Ordering as strategies. Thus this chapter attempts to derive a language appropriate for projects (like *Newsmap*), and resolve the limitations of Collecting and Ordering as strategies.

In Part 1, I derive a language that employs terminology such as ‘slices-of’ and ‘paths-through’, which describe how *selectivity* in visual representations can be advantageous for articulating a particular perspective.

Subsequently, in Part 2 these principles are adopted in *BikeWork*, to explore how Positioning can make sense of the ‘tentative’ configurations of cyclists, which resulted from the process of Ordering. I conclude by reflecting on the benefits and difficulties associated with using Positioning as a strategy.

Part 1.

Deriving Positioning as a language to talk about projects like *Newsmap*.

Section 1. The problem with Ordering, and the question of how to talk about *Newsmap*.

Positioning addresses projects that are ‘like’ *Newsmap*, a project to which we were first introduced in the preface (and reviewed alongside *Lipstick* and *Periodic Breakfast Table* throughout Chapter 2). Just one additional project, *NameVoyager* (Wattenberg & Wattenberg 2004-5) joins *Newsmap*, and together these constitute the third category of ‘homeless’ ‘puzzling’ work. Indeed, to a certain extent, this final stage is less about making sense of a trend of projects, as seeking a resolution. Thus recalling that the stated mission of this thesis is to find a language to talk about curious phenomena, in this chapter the ‘curious phenomenon’ requiring our attention – as much if not more than the question of ‘curious’ ‘puzzling’ projects like *Newsmap* – is the *legacy* of Collecting and Ordering.

We begin by reviewing the limitations associated with Ordering, since these shortfalls bring about the need for a third stage and, in essence, set the brief for Positioning.

a. The need to augment Ordering.

The aspirations of the process of Ordering are admirable and practical: getting organised and making a ‘shapeless mass’ of crudely accumulated things more manageable. From fundamental everyday Ordering – sorting ‘dirty dishes from clean, white laundry from colorfast, important email from e-junk’ (Bowker & Star 1999:2) – to more sophisticated scenarios. We might sort our books in alphabetical order, family photos in chronological order, music by country of origin, our clothes by use: *work / sport / bedtime / formal / gardening / winter / summer*. Larger collections require yet more complex structuring that is the conceptual work of classification which entails a logical hierarchy of categories: *natural science > zoology > mammals > domestics > dogs > Alsations*.

By the end of Ordering, ideally, in theory, each thing should have a definite place in a logical structure, but in reality this rarely happens. Firstly, all things never fit perfectly. Things can’t

go nowhere, and things can't go in more than one place. (Perhaps Alsatians are more meaningfully filed within *police*??) Secondly, organisational structures ideologically 'force your hand'. This is the case even in the scenario of sorting clothes by use: this organisation forces one's wardrobe to comply with conventions of propriety: pyjamas are not to be worn in the garden, bathers are not appropriate at work (unless you are a lifeguard).

This inevitability can be handled in two ways. Either you resign yourself to the reality that things end up in the wrong spot, which is a serious problem, for Alsatians are lost forever in 'dogs' not reflecting their important work for the police. Or you continue to (endlessly) restructure your classification and groupings in pursuit of an illusory ideal where everything fits perfectly, which is an even bigger problem, since you risk never leaving the house for rearranging your wardrobe. Ultimately, these are both unsatisfactory ways to handle all of the interesting data gathered by Collecting, and it is Positioning that recommends that Ordering be judiciously abandoned.

However, *Ordering has not been for nothing*: instead Ordering's conceptual processes of classification, abstraction and generalisation have allowed the Orderer 'to fly high for a little while, in order to see something in the real world more clearly' (Mills 1970 [1959]; cited in Porter 2003:93).⁸³ Briefly reviewing the Model proposed thus far, the purpose of Collecting was to uncover something new: to get out (using some 'visual constraint' or another) and learn something 'empirically' about the real world. As we have now established, the intention of Ordering is to start to make sense of the Collection: so *a means not an end*. Becoming preoccupied solely with the process of Ordering – 'an arid and elaborate formalism' (Mills 1970 [1959]; cited in Porter 2003:93) – is to lose sight of the Collection. The fact that imperfection is unavoidable is in the end beside the point. Ordering has afforded a

⁸³ Since Ordering aspires to solve grounded *practical* concerns by soliciting conceptual *theoretical* procedures, the complementary recommendations made by a proponent of grounded theory, C. Wright Mills (1970 [1959]), are rich and illuminating. Mills promotes a 'judicious balance of theory and empiricism' (Mills 1970[1959]; cited by Porter 2003:93), and condemns both those who rely too much on theory and those who rely too much on empiricism.

Relying too much on theory (we might read, *Ordering*) is denounced by Mills as 'an arid and elaborate formalism in which the splitting of Concepts and their endless rearrangement becomes the central endeavour' (Mills 1970[1959]; cited by Porter 2003:93). Indeed, 'in their obsession with the creation of sophisticated and unifying theoretical models, grand theorists lose their connection with the real world', (Porter 2003:93), and staunch theorists risk failing to ever realise the benefit and application of their theoretical work.

On the other hand, collecting data without contextualising the significance of that data – as Porter terms it, the 'almost random gathering of social facts without any theoretical framework to order those facts or to assess their significance' – is 'accused of fetishising reliability at the cost of relevance' (Porter 2003:93). Just as the lack of connection to the 'real world' results from a lack of empiricism on behalf of excessive theorists, a deficit in theory produces trite and banal results on behalf of immoderate empiricists. Developing sophisticated but isolated data collection methods are doomed to remain a 'formal and empty ingenuity' (Mills 1970[1959]; cited in Porter 2003:93).

structured overview, and the process of being 'torn', of struggling to choose one way to organize or the other, *gives rise to the point you wish to make*.

It is Positioning that can finally assert what salient understanding the Collection holds, made apparent by the multivalent intimacy of the process of Ordering. Without a Position finally asserted, the Collection (though productive) is both un insightful and unmanageable, and so remains largely mute (except for conveying defining characteristics as per Wurman's 'cabbage-ness'). Equally without a Position asserted, Ordering is like a mirage or hologram that is unstable and alternating, and provides only an alluring though elusive oasis of Order. Centrally, positioning recognises that *omissions* are necessary to convey a particular perspective that finally makes sense of the various ways a Collection could be organised. Exploring how Positioning achieves such a point of view is the concern of this chapter.

b. The final set of 'homeless' projects: refamiliarising with *Newsmap* and introducing *NameVoyager*.

We previously established that *Newsmap* (← IMAGE 3), a web-based interactive tool for observing trends in online news, like *Lipstick* and *Periodic Breakfast Table*, was 'puzzling': for it is a project distinguished by an expertly produced, refined and systematic visual approach, yet focussed on a basically trivial subject. Although its visual translation of trends in online news is engaging and vivid, it is approximate and inconclusive. In view of these characteristics, the utility of such a tool seemed uncertain.

NameVoyager is a similarly web-based, interactive, database driven visual project. It was researched and created by Laura and Martin Wattenberg, who describe this graph as an 'interactive portrait of America's name choices' (Wattenberg & Wattenberg 2004-2005c). It displays the 1000 most popular names for Northern Americans since the 1880s based on data from the US Social Security Administration. As one commentator from the online communications industry puts it '[if] you have a thing for cool graphs and trivial information', well then *NameVoyager* is for you (Teeling 2006). Ultimately this blogger celebrates *NameVoyager* as a graphing technology that 'is able to integrate complexity and organisation...[displaying] a massive amount of information, yet is in no way confusing' (Teeling 2006).

As in previous chapters, we will come back to *NameVoyager* iteratively during the ensuing discussion, so for now I will only briefly explain its operations. On first arriving at *NameVoyager*, the display of the top 1000 boys and girls names for the past century resembles a detailed gleaming cross-section of pink and blue sedimentary rock. As you

begin to tap a name in the search field at the top of the window, the graph morphs and changes. If, for example, you enter 'B' then 'E', (as shown in ↓ FIGURE 29), you only see the top 1000 names from the past century beginning with 'Be': e.g. *Benjamin*, *Beverly*, *Bernard*, *Bessie*. The changing thickness of each stripe represents the changing popularity over time, and displayed side by side – boys names in blue, girls in pink – 'meaningful historical comparisons' can be made (Wattenberg & Wattenberg 2004-2005a). Thus in our 'B' example, when it came to popular choices for naming girls, we can see that in the nineteenth century *Bertha* and *Bessie* were highly popular before dropping off in the first half of the twentieth century, by which time *Betty* and *Barbara* were enjoying more popularity, (and finally we might observe the surge in *Brittany* in the 1980s and 1990s).

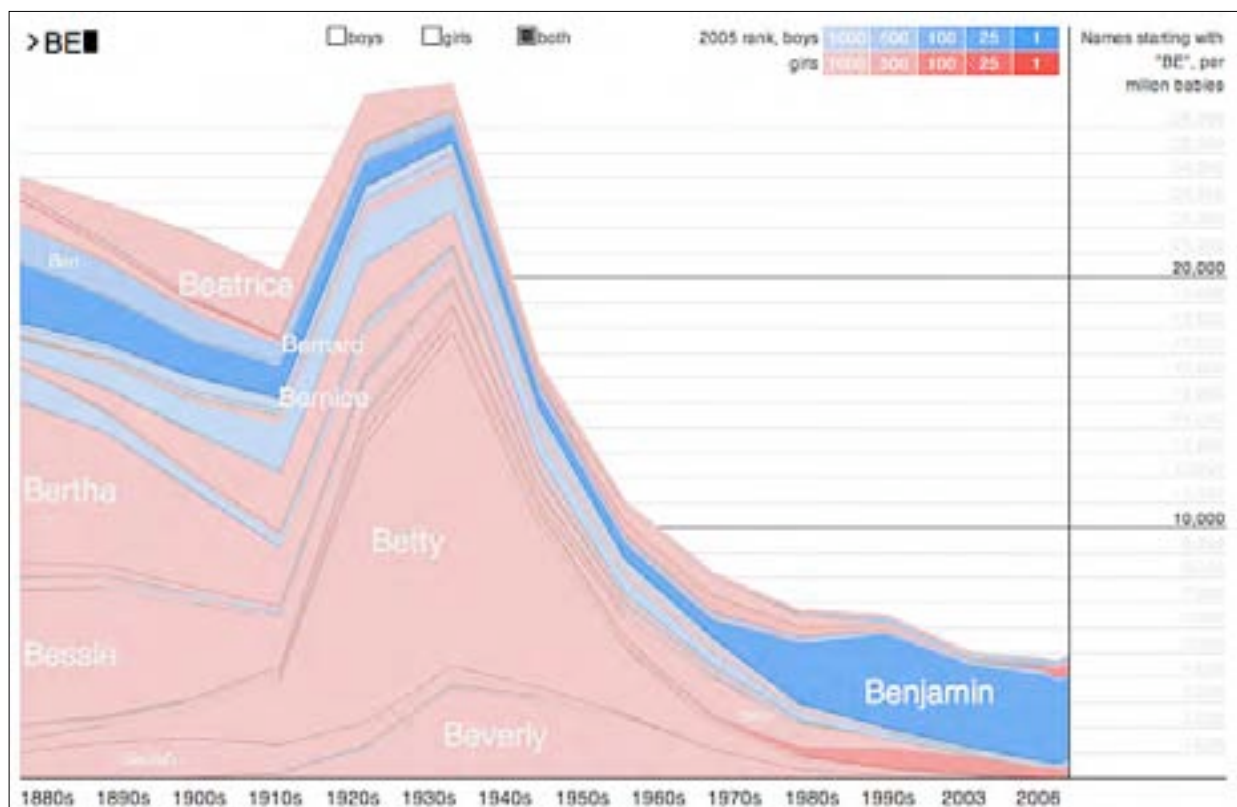


Image 29. Screen-grab of searching for 'BE' in NameVoyager (Wattenberg & Wattenberg 2004-2005b) (source: <http://www.babynamewizard.com/namevoyager/lnv0105.html>, viewed 17 July 2005)

While *NameVoyager* is powerful for statistical displays, its graphical displays lack contextual explanations. In this regard *NameVoyager* is fortunately supplemented by Laura Wattenberg's *Baby Name Wizard Blog* (2004-2007), which contemplates the various social, political, popular cultural and ethnic events reflected in the *NameVoyager*. In this blog Wattenberg explains, for example, that the surge in *Dorothy* at the turn of the century coincides with the time *The Wizard of Oz* was published (Wattenberg 2004-2007).

NameVoyager is perhaps an interesting tool for anyone expecting, but even if you are not in the market for a baby name, it is still compelling from the perspective that we all have a name. Inevitably the first thing one will do with *NameVoyager* is type in one's own name, to discover how original or unoriginal one's parents were. (No wonder my sister had five Carolines in her class at school. And apparently, although I have never ever personally encountered another man or boy with his name, my dad's name was an absolute *hit* in the forties.)

Now that both *NameVoyager* and *Newsmap* have been generally introduced, we can begin to more specifically unpack them with reference to the Model proposed thus far.

c. The Collecting and Ordering heritages of *NameVoyager* and *Newsmap*.

To some extent both *NameVoyager* and *Newsmap* can in fact be accounted for in terms of Collecting and Ordering. However, neither of these previously established languages attend to the particular capacity of these projects for imparting insights. Indeed it is only when subsequent steps are taken *beyond* Collecting and Ordering that *NameVoyager* and *Newsmap* are particularly effective and communicative.

When you first load *Newsmap* (→IMAGE 30), the home page you encounter is a matrix that incorporates news of all genres, and the interface is crowded with a variety of colours, font sizes, oblong shapes, and vertical and horizontal lines, (not to mention languages other than English, once you start adding news from Spain, India, France etc.). In this way *Newsmap* is a Collection: items (news story headlines brought together in the Google News aggregator) have been accumulated that are 'the-same' (all taken from online news at that moment in time) 'but-different' (different genres, different sources, and different countries).

Demonstrating Collecting strategies, *Newsmap* approaches an understanding of the worlds' enormity by using the 'constraint' or lens of online news.



Image 30. *Newsmap* as a Collection: Screen-grab when initially loading inclusive of all types of news (source: <http://www.marumushi.com/apps/newsmap/newsmap.cfm>, viewed 5th October 2007).

But in another way, since this all-inclusive homepage is carefully sorted by *country* of origin, as well as arranged and colour-coded by *genre* of news story, *Newsmap* exemplifies Ordering. Every news headline can be incorporated into this system (thus fulfilling Bowker & Star's requirements); and we can also appreciate that it is underpinned by a combination of the principles outlined by Wurman in his acronym, 'LATCH' ('location' and 'category'). Split up and classified in a hierarchically structured overview, what would otherwise be the 'shapeless mass' of a Collection of online news headlines, is instead manageable and indeed trends can be discerned.

Similarly, *NameVoyager* begins with what the authors refer to as a massive 'sea' of names, explaining that over 5000 names are displayed when *NameVoyager* first loads (Wattenberg & Wattenberg 2004-2005c) (→IMAGE 31). In very much the same way (though lacking a photographic component) as *Ava Gardner Dies* was assembled by the preset constraint to collect only the obituaries from the front page of the New York Times from 1990 to 2001, this initial 'sea' of names is assembled according to the constraint of the top 1000 baby names

reported by the US Social Services Administration, from 1880 to 2006 (Wattenberg & Wattenberg 2004-2005c).

But in another way, *NameVoyager* is a highly *Ordered* Collection of names. From top to bottom the 'stripes' are arranged alphabetically: so *William* appears at the bottom, while *Betty* appears at the top. The stripes themselves are sorted into the categories of male and female, as indicated by colour. Additionally each name is ranked hierarchically and chronologically: the number (population) of babies given a name is indicated on the scale to the left; and this is organised according to the dates plotted along the x-axis.

To summarise, we could say that both of these projects begin as Ordered Collections. A sea of names and a matrix of news are assembled by indiscriminate accumulation according to an established constraint. Subsequently these have been Ordered, indeed highly Ordered: the news is classified by country and genre, while the names are sorted alphabetically, hierarchically, categorically and chronologically. But what I want to emphasise is that both

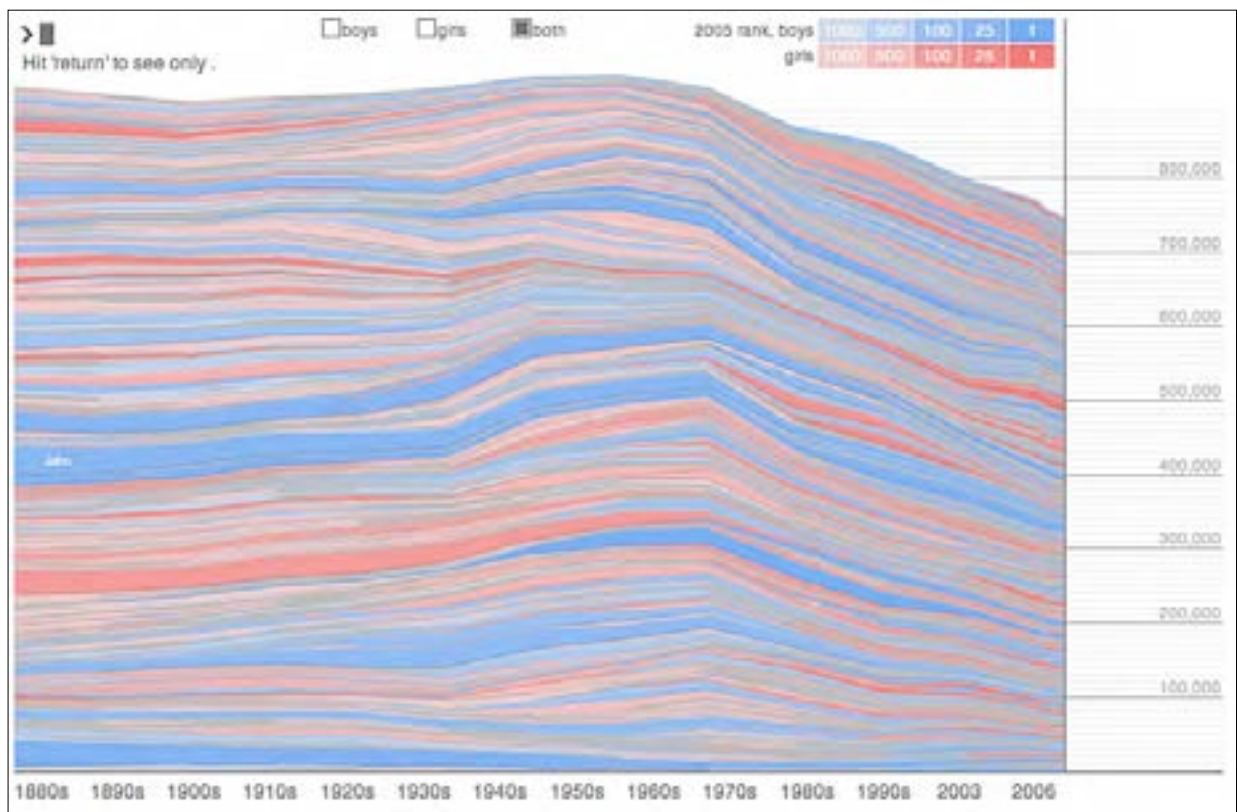


Image 31. Screen-grab of the initial 'sea' (Collection) of names displayed when *NameVoyager* first loads (source: <http://www.babynamewizard.com/namevoyager/inv0105.html>, viewed 17 July 2005).

take these Collections of things, these Orders among things, to a new level: indeed, I assert that the real power of these projects is that we as users are able to make *selections* of their Ordered Collection.

The chief benefit of *Newsmap* is not as a structured overview of everything, but as a device that permits selections and omissions to be made. Whereas the initial view is detailed, inclusive and difficult to decipher, when selections are made of the data – for example, to only view sport, arts and current affairs types of news stories, from only Germany, Italy and Japan – *Newsmap* unmistakably conveys trends and bias in news coverage. In contrast to the acquisitive and inclusive spirit of Collecting and Ordering, in *Newsmap* clarity and insight are achieved by *reductions*, rather than comprehensiveness. Similarly insights into *NameVoyager* are gained when we move away from Collecting and Ordering, by striking ‘B’ and then ‘E’, and so omitting all names not beginning with ‘Be’. *This* is when I can make observations and comparisons about the trends in popularity for *Beatrice* compared to *Bernard*. When I reduce the entire ‘sea’ to just the area graph for *Betty*, this particular perspective becomes clear.

Section 2. Unpacking *Newsmap* and *NameVoyager* as ‘leaver–outers’.

a. Some initial generalisations about *Newsmap* and *NameVoyager* : acknowledging the field of Visualization, but ultimately turning to ‘mapping’.

It is undeniably the *interactivity* of these online projects that permits these useful selections to be made of the data. Unlike the previous sets of ‘homeless’ projects (such as Collecting’s *Lipstick* and Ordering’s *Periodic Breakfast Table*), *Newsmap* and *NameVoyager* in fact are already discussed in computer science, programming and visual analytics literature. In other words, we could say that *Newsmap* and *NameVoyager* are less ‘homeless’, to the extent that they are covered in what is collectively known as the field of *Visualization*. This is a specific term that pertains to digital graphical techniques, with a particular emphasis on innovative back-end programming (such as ‘flash’ and ‘java’), and is an area that is typically of interest to computer scientists, web developers, designers and programmers, as well as geographers and statisticians. Two excellent and complementary places to begin familiarising oneself with Visualization are: Card, Mackinlay & Schneiderman’s classic anthology *Readings in Information Visualization: Using Vision to Think* (1999); and Andrew

Vande Moere's (since 2004) thorough, dedicated and up-to-date blog, *infosthetics* (subtitled 'information aesthetics; form follows data - data visualization & visual communication').⁸⁴

Visualization can explain that *Newsmap* is an example of a particular kind of 'visual analytic' tool, that uses a 'treemap algorithm' (Schneiderman 2006). Treemaps, we can learn, are an excellent approach for meaningfully displaying masses of data in a single hierarchically divided screen, distinguished for their capacity to visually convey three levels of information simultaneously: by *grouping*, by *colour*, and by *size* (Schneiderman 2006). This is clearly exploited in *Newsmap*: groupings indicate country, colour indicates news genre, while size indicates prevalence (i.e. of kind of story in given country).

Similarly, we can learn from professional Visualizers in various 'techie'-industry blogs, that *NameVoyager* is in fact known as a 'Java enhanced graphing applet' and 'an excellent example of what you can do when you combine interactivity with databases' (Dube 2005; Teeling 2006). In this way *Newsmap* and *NameVoyager* can be said to not be as 'homeless' as projects such as *The Readers Before Us* and *I [heart] [heart]*.

However, in another way, locating a home for *Newsmap* and *NameVoyager* in the field of Visualization is quite uninformative. For Visualization seems to be as nomadic and scattered throughout the Dewey decimal classification as Visual Communication Design.⁸⁵ Indeed, the current state of the Visualization discipline has been described as 'emergent', 'highly unstructured' and 'fragmented': made up of 'many parallel, unconnected streams' and involving 'scholars from such distant domains as human-computer interaction, graphic design, management, or architecture' (Lengler & Eppler 2007:1).

Notwithstanding such explanations for *NameVoyager* and *Newsmap* by the emergent specialisation of Visualization, my particular interest is to unpack these projects for clues on how to *resolve the issues emergent from Ordering*. With this end in mind, I found that a focus on more fundamental and critical discussions of '*mapping*' was more illuminating, than specific technical conversations about Java or treemap algorithms.

⁸⁴ More recently Swiss based Lengler & Eppler have compiled the latest version (version 1.5) of their 'Periodic Table of Visualization Methods', which is an excellent systematic overview of 100 visualization methods. This homage to Mendeleyev's *Periodic Table of Elements*, features techniques from the most basic, (timelines, icebergs, flow charts and pie charts) to the more complex, (Toulmin's maps to Gantt Charts, Decision Trees, Technology Roadmaps and Stakeholder Maps) (Lengler & Eppler 2007).

⁸⁵ For example, I found books with the subject heading of 'Visualization' at my university library clustering at: presentation of statistics (001.4); computer graphics (006.6); reasoning (153.4); maths (510); geography (526); applied physics (621); and sport (!) (796).

'Maps' and 'mapping' are terms that can actually refer to all manner of things and processes. With regard to maps, Wurman points out,

'A CAT scan is a map of the human body. A grocery list is a map of a trip to the grocery store. A chart of a company's production over a year maps its output. A loan application is a map showing the route from your actual to your desired financial status. You can map ideas and concepts as well as physical spaces... [even] two cans of beer on a counter [can show] the relationship of a friend's new house to his old one' (Wurman 2001:157).

Meanwhile, Janet Abrams & Peter Hall (2006) explain that they prefer the verb *mapping*, since the noun *map* tends to conjure ideas of static completed paper artefacts, while the verb properly conveys mapping as an activity that is an 'ongoing' 'way of making sense of things' (Abrams & Hall 2006:12).

Despite this potential lack of specificity, 'mapping' is an appropriate and useful collective term encapsulate the three kinds of literature that we will be reviewing in this chapter to unpack *Newsmap* and *NameVoyager*. We will be drawing on discussions that critique scientific imagery (such as Arnheim 1969; McKee 2005), information design (Tufte 2006; Wurman 2001; Manning & Amare 2006) and cartography (Monmonier 1993; Wood 1992; Turnbull 1993; Harley 1992 [1989]). In addition I will analyse further visual examples such as Psathas' (1979) ethnomethodological work with hand-drawn maps, and Wurman's (2001) diagram of outdoor recreation to explore key ideas.

As I shall reveal, these various perspectives fundamentally concur on the benefit of selectivity. A map, cartography explains, is useful because it is *not* entirely inclusive and never at a 1:1 scale. A diagram, scientific imaging explains, is informative by virtue of its omissions and *lack* of detailed realism. Through the examination of projects like *Newsmap* in view of these 'mapping' discourses, we glean effective terminology – not only for accounting for *Newsmap* – but for describing strategies for augmenting Ordering. We come to understand that Positioning is characterised by a 'path' or 'slice' through the matrix of options of an Ordered Collection. Thus Positioning provides terms that describe how these projects are insightful because they enable drastic reductions in the amount of data that must be encountered. Fundamentally, Positioning asserts that an un-comprehensive, incomplete, partial picture of things can in some circumstances be more meaningful, pragmatic and informative.

b. Using scientific visualisation and information design to unpack *Newsmap* and *NameVoyager*.

In this discussion we draw on the field of graphics for informational purposes, which Tufte has recently gathered under the expression of ‘explanatory, journalistic, and scientific images’ (Tufte 2006:12). Initially we consider the specific case of *scientific visualization*, which includes visuals such as microscopic photography of a colony of baker’s yeast on a Petri dish, star charts, and cause-and-effect diagrams explaining water pollution (McKee 2005), before expanding this consideration to take in information design more generally.

The mission of scientific representation: translating the intricate sight of the real thing.

In an article published in *eye* magazine, Stuart McKee (2005) reports on the enterprising MIT sponsored forum held in Los Angeles called ‘Image and Meaning 2: Discovering New Visual Expressions for Science and Technology’ which uniquely invited both scientists (from biologists to astronomers) and designers (from animators to graphic designers) to debate contemporary problems in visualising science. When the 175 attendees to the forum were grouped and set assignments in workshops, it apparently became especially clear that there was a huge potential for mutually beneficial collaboration, whereby scientists and designers could benefit from each others expertise, and make up for each others shortfalls.

‘[Scientists], as a whole, lack visual literacy, and do not have the artistic training to explain their research using the tools of text and image. Designers, on the other hand, lack specialised training in science yet must understand what they are representing before they can successfully visualise it [McKee 2005].

We might observe that this kind of conclusion is logical but basically unsurprising. However McKee’s review includes several points highly pertinent to our present discussion, since they articulate ways to discuss what makes *NameVoyager* and *Newsmap* so useful. It seems that the central problem for scientists – indeed echoing the sentiments of Twemlow on the passive stance of stubborn list keepers – is salience. McKee explains,

‘Many scientists have difficulty settling on an appropriate degree of accuracy, culling what they need to show from what they know’ [McKee 2005].

McKee relates that a computer science professor at Stanford asserted ‘that abstraction poses the greatest challenge for researchers in science today’ (McKee 2005). Meanwhile Harvard based environment lecturer Ben Fry explains, ‘[it] is easier to collect than to clarify’ (quoted in McKee 2005). This opposition – collecting versus clarifying, knowing versus

showing –and the pivotal role of *culling*, is compelling for our present discussion for unpacking how *NameVoyager* and *Newsmap* provide insight.

As James Elkins explains, it is widely agreed that the mission of visual representation in science is to ‘propel scientific images away from the chaos of phenomena’.

‘Historians and philosophers of science have studied how scientific visualisation depends on simplifying, abstracting, labelling, marking, and schematising the chaotic phenomena of nature into orderly graphic forms.... Bruno Latour, Françoise Bastide, Michael Lynch and others have written about the “cascade” of successive abstractions that propel scientific images away from the chaos of phenomena’ (Elkins 1999:40).

For clarification on this ‘cascade’ we can turn again to Rudolf Arnheim, (who we previously reviewed with regard to the ‘diminishing returns’ that result from over-classifying). In the closing chapter of his book *Visual Thinking* (1969), Arnheim makes a careful case for the particular kinds of illustrations that are useful for education in science. Significantly, he reminds us that not all images are conducive to understanding, pointing out that,

‘The mere presentation, by photograph, drawing, models, or live exhibition of things to be studied does not guarantee a thoughtful grasp of the subject’ (Arnheim 1969:308).

Correspondingly, Arnheim states as a fact that scientific representations ‘fail not because they are not lifelike or devoid of detail’ (Arnheim 1969:313). Instead he explains that a student requires an illustration to provide a relatively ‘simple version’ in place of ‘the intricate sight of the real thing’ (Arnheim 1969:305). Arnheim conjures the scenario of a student’s hopeless attempt in trying to understanding how the human heart works based only on the ‘bewildering complexity of primary observation’: ‘twisted chambers, its tangled arteries and veins, the asymmetry of shapes and locations serving symmetrical functions’ (Arnheim 1969:305).

To alleviate the great pain of this student, Arnheim refers to Paul Klee’s *Drawing of the human heart* (Paul Klee undated; reproduced in Arnheim 1969:305) (→IMAGE 32), which he apparently made for his students’ benefit. Arnheim celebrates the radical reduction of shape to the simplest representation of process: held in a two dimensional plane, made symmetrical, and restricted to just two circuits involving this central pump: ‘one sending the blood to the lungs for purification and returning it to the heart, the other picking it up and sending it to work through the body’ (Arnheim 1969:305-306). Subsequent to grasping the basic principles with reference to a simple diagram such as Klee’s, Arnheim expects that they will move on to ‘closer approximations of the real situation’ (1969:306).

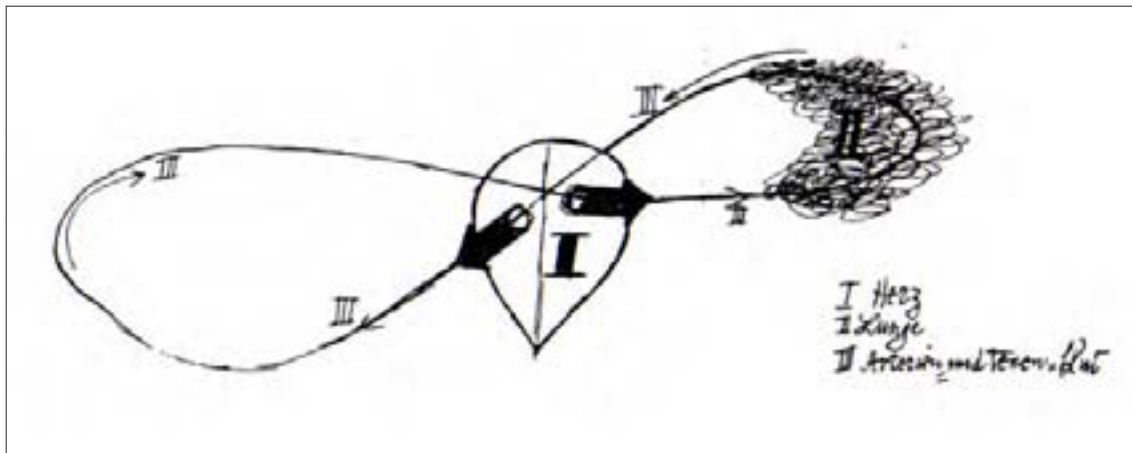


Image 32. Drawing of the human heart (Paul Klee undated; reproduced in Arnheim 1969:305).

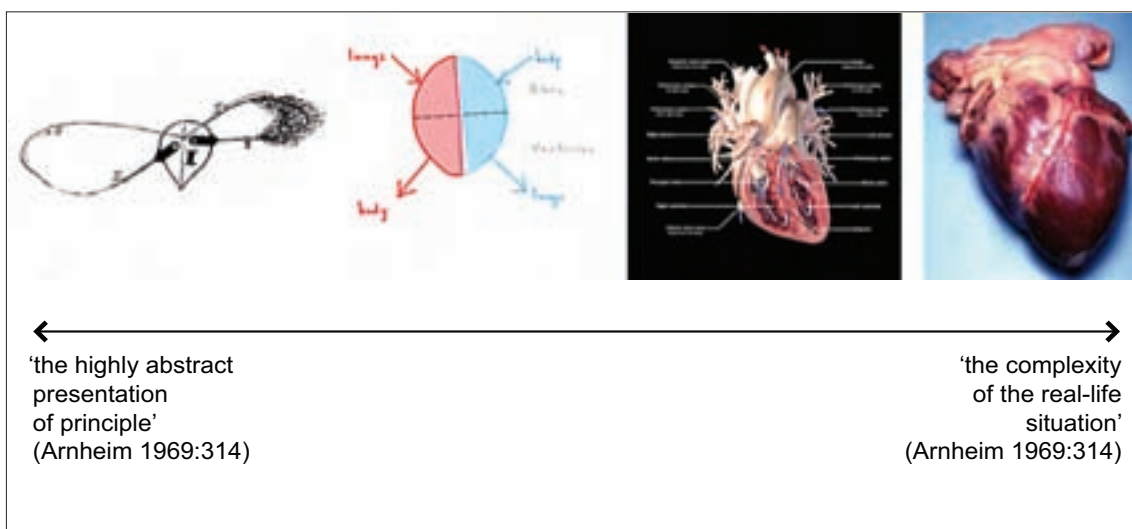


Figure 15. A continuum of heart visuals less to more intricate from left to right.

Drawing of the human heart (Paul Klee undated; reproduced in Arnheim 1969:305); my own more detailed sketch of the human heart based on *précis* for 'Heart' (Wikipedia contributors 2007); 3DScience Human Heart (courtesy of Zygote Media Group 2006, used by Wikipedia contributors 2007); photograph of the human heart (Wikipedia contributors 2007).

Indeed we could develop this point by inserting further diagrams of the heart as ‘closer approximations’, betwixt ‘the complexity of the real-life situation’ and the ‘highly abstract presentation of principle’ (Arnheim 1969:314) (←FIGURE 15). My own diagram (second from the left, based only the précis for ‘Heart’ in Wikipedia [Wikipedia Contributors 2007]) includes a *little* more detail than Klees’: featuring all four heart chambers, and using colour to denote that the left side of the heart deals with the oxygenated blood (receiving it freshly from the lungs before pumping it out the body) while the right deals with the deoxygenated blood (receiving it now depleted by the body’s organs and tissues, before sending it onto the lungs for gaseous exchange). Then, as an even ‘closer approximation’, we might consider the almost lifelike representation of the image from 3D Science.com – rendered three dimensionally with a cutaway, showing the true shape and proportions of the heart, as well as the detail of the vessels in and out of the heart.

In summary, the central mission of scientific representations is to translate the baffling complexity of actual observable phenomena. To this end, as Arnheim (1969), McKee (2005) and Elkins (1999) have described, science representations aim for an ‘appropriate amount’ of abstraction – making selections and reductions – from ‘bewildering’, comprehensive reality. This has been shown by the example of the various visual approximations of the intricacy of the actual human heart – from a line drawing to a 3D rendering. To further examine the visual strategy of selectivity, we can consider the distance *between* these various approximations by drawing on ideas about information design more generally, for patently Klees’ line drawing has ‘culled’ a good deal more than the 3D rendering. In other words, while we have looked at the gap between *reality* and *representations* which science is particularly concerned, now let’s look more closely at the *gap between* different versions of these representations. Interestingly enough, again it is the *less* realistic visual representations that can impart considerable insights.

The mission of information graphics: searching between ‘unclassifiable detail’ and ‘unhelpful reduction’.

We begin our consideration of information design more generally, with the lucid account of a situation with which we can all sympathise. Thomas Walsh describes his frustration with a presentation on Baroque architecture that he had to endure, and in so doing provides exceptional demonstration for the preference for ‘culling’ above collecting.

‘One speaker used literally hundreds of slides to illustrate Baroque art without ever managing to explain exactly how one might identify a Baroque church as opposed to, say, one from the Renaissance, or Early Christian periods. Two and a half hours and two hundred detailed

photographs resulted in total confusion, but a half-dozen good line drawings showing what detail is relevant to each period would have down the trick in fifteen minutes' [Walsh 1998; cited in Manning & Amare 2006:203].

Walsh demonstrates his point by devising several such diagrams that do effectively show the distinguishing feature of Baroque compared to pre-Baroque architecture. (As we can see in ↓ IMAGE 33, Baroque architecture [shown in the central black line drawing and photograph] *interrupts* geometric shapes [such as triangles], which were previously preserved in the pre-Baroque style [shown in grey].)

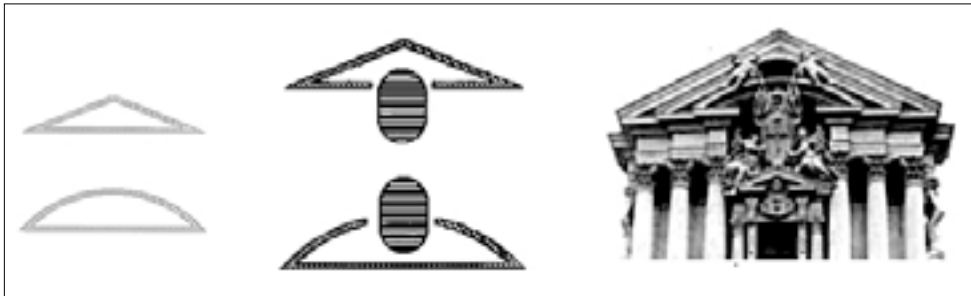


Image 33. Adapted from Walsh (1998:209-212)

While we can rapidly appreciate how time would have been saved should a handful of diagrams be presented rather than hundreds of photographs, it is interesting to stop for a moment and reflect on how remarkable it is (and how we take for granted) that a *handful of un-detailed* line drawings could be more informative and provide Walsh more insight than a *multitude of realistic* vivid photographs.

James Elkins provides a very instructive account of what he calls 'schemata' (Elkins 1999: 213-235), which we can bring to Walsh's frustrations with two hours of photographs of Baroque architecture, and indeed to the various truncations of the functioning of the heart in the above diagrams.⁸⁶ He explains that schemata are visual structures which provide an 'intermediary clarity' between 'greater definition' and 'lesser definition' (Elkins 1999:213). In a

⁸⁶ In his committed and meticulous although at times obscure treatise, *The Domain of Images* – which seeks to consider the domain of images in its entirety based on the recognition that 'Manet is interesting but so is a prehistoric potsherd with an indecipherable mark' (1999:x) – Elkins distinguishes 'schemata' as images that are not just pictures nor just texts but strongly heterogenous and dominated by notation. For our purposes we can interpret Elkins' neologism – schemata – as essentially referring to information design, diagrams, and mapping, where images, text and graphic elements are combined.

way that is very reminiscent of our discussion in the previous chapter of the search for the middle grain in classification, Elkins explains that diagrams aim to provide 'a middle ground between unclassifiable detail [greater definition] and unhelpful reduction [lesser definition]' (Elkins 1999:213).

We can explore the problem of 'greater definition' in visuals with reference to Manning & Amare's (2006) fascinating discussion of the ethics in creating and using effective visual representations. Drawing on Pierce, they conclude that the '[overuse of] decorative and indicative strategies [bullet points] in...presentations are more often driven by a marketing philosophy than an ethics of clear and accurate information' (Manning & Amare 2006:211). Central to their case for choosing the most effective graphics possible, Manning & Amare particularly delineate a preference for diagrams over natural images. This sentiment is closely echoed by Tufte who asserts in the opening chapter to his most recent book exquisitely titled *Beautiful Evidence* (2006), that

'Sensibly mapped pictures [representational images combined with scales, diagrams, overlays, numbers, words and images] nearly always outperform purely pictorial representations for presenting, explaining and documenting evidence' (Tufte 2006:12).

Manning & Amare (2006:201-208) explain that it is *because* photographic images are more life-like that they are so ineffective for informative purposes, as Walsh experienced. Pictorial representations such as natural photographs are 'cumbersome' and inefficiently time wasting because such realism cannot distinguish the salient features of the image from the irrelevant details. In a photograph for example, the most pertinent, defining, and critical attributes blend seamlessly with absolutely inconsequential incidental features. By contrast a diagrammatic mode of presentation can work to filter out all but the most relevant details, making them far more effective for informative, communicative presentations (Manning & Amare 2006:201-208).

The preference for 'leaver-outers': taking a 'slice' is when you really make things clear.

Thomas Wolfe apparently characterised all writers as either 'putter-inners' or 'leaver-outers' (Wolfe; cited in Turchi 2004:41).⁸⁷ This distinction is a helpful one to bear in mind as we start to bring these threads together, before moving on to consider cartography. Thus we can observe the striking parallel between sciences' drive to cull from the intricate complexity of

⁸⁷ Turchi recounts that Wolfe proposed this in a letter to F. Scott Fitzgerald, who would be the quintessential 'leaver-outer'. Meanwhile Wolfe, who apparently delivered manuscripts to his editor in large trunks, himself exemplifies the 'putter-inner' (Turchi 2004:41).

phenomena, and this recommendation for line drawings over pictorial realism. It seems to me that Elkins' ideal graphic middle ground between greater and lesser definition, parallels McKee's suggestion that scientists need to sort what they need to show from all that they know – and indeed Walsh's pained longing for a fifteen minute diagrammatic presentation in place of a two and half hour photographic one – and that these are akin to a kind of contest between Wolfe's 'putter-inners' and the 'leaver-outers'.

Ultimately we understand that in the end the fullest picture of things is often not the most desirable. When the 'putter-inners' are in front, we are forced to grimly try to learn about the functioning of the heart by observing the bewildering intricacy of an actual heart. We must try to decipher the key features of Baroque architecture in myriad photographs that cannot distinguish the critical tell-tale feature in all the detail. Indeed, we might say that the 'putter-inners' are behind the matrix of colour, text and shape we must comprehend when first loading *Newsmap*, and the deep blue and pink sea of names that launches *NameVoyager*. By contrast perhaps we could say that the 'leaver-outers' have managed a 'come back', when we just see the sports and arts news from Germany compared to Italy, and just the top 1000 names from the last century beginning with 'Be', just as when we are freed of cumbersome detail and intricate phenomena and instead learn about the hearts' pump and church facades from drastically reduced line drawings.

Of course, as Wurman reminds us, essentially all this conforms to the common wisdom that when something is too complex to be grasped as a whole, you can still approach understanding it by breaking the subject down into manageable components. Indeed, when you consider Wurman's central thesis – that you can 'make something clear' and 'really see information' when you simplify, select a restricted point of view on things, when you divide it up into 'slices' and take one (2001:44-45, 265-271) – we might now celebrate Wurman as a professional 'leaver-outer'. It is especially interesting to note how this strategy seems to ensure Wurman's consistent confidence. Wurman asserts that '[new] ideas are not so much discovered as *uncovered*': therefore he doesn't need to 'worry about discovering *new* information, but in connecting *existing* information in new ways' (Wurman 2001:265-271).

It is this particular image of taking different 'slices' of vast information conjured by Wurman that strikes me as chiming most productively with the preceding account of information design and indeed the two projects in question, not to mention what is required to focus our ordered collection of cyclists. Therefore, it is helpful to finally consider a particularly effective and embodied insistence of his 'slicing' approach. In this case, Wurman explains that he was commissioned to develop a handbook on recreation, for an upcoming exhibition on one

of the founders of Central Park in New York (2001:265-269). Wurman explains that the topic of recreation is a 'vast, complex and ambiguous concept...which means something different to everyone': the 'opportunities, problems, possibilities, physical and personal characteristics, age groups, desires, needs and locations of recreation' can not be easily summed up (2001:265). Instead, he began work on *The Nature of Recreation* by taking various 'slices': one from the perspective of age (considering needs from the very elderly to the very young), another slice by seasons (activities as they take place in winter through to summer), another slice by numbers of people (from activities involving one person [writing poetry] through to activities involving huge groups of people [football grand finals]) (2001:265). We can see how taking these 'slices' serves to not only simplify a vast topic, but also intensify Wurman's understanding of it.

Possibly the most striking evocation is Wurman's elevation style of diagram, labelled 'Flat/Sloped' (Wurman 2001:32-33) (→IMAGE 34), which experiments with slicing the vast topic of recreation by thinking about it from the perspective of *topography*. This approach brings our attention to the fact that many activities can only take place in particular terrains. Some recreation is suited to only absolutely vertical terrain (abseiling) or absolutely horizontal terrain (croquet); some can take place only above ground (golfing) or only below ground (caving); some activities ideally take place on sloped land such as hills or mountains (sleeping in the grass, hiking); others can only take place in water such as the deep sea or flat lakes (scuba diving, water skiing), not to mention the beach between (building sandcastles or collecting seashells.) By dividing this subject into 'slices', Wurman achieves more than just overcoming complexity: he creates innovative and efficient insights.

In this way, such 'slicing' epitomises Elkins' cascade and search for a middle ground, Arnheim's approximations of bewildering complexity, Walsh's desire for a line drawing version of the Baroque era, and the essential task of culling for science, as identified by McKee. In fact, we can use Wurman's expression to describe the interactively enabled insights provided by *NameVoyager* and *Newsmap*: we can learn about trends in online news and baby names, because these websites permit 'slices' to be taken through their matrices and seas of information. Taking a 'slice' is thus our first strategy for attending to Twemlow's calls to not include everything (indeed, every cyclist) and instead to achieve a 'position'.

To enrich information design's 'slice' strategy, we now turn to cartography since here we learn that a map is useful *because it does not show everything*. Indeed, in the scenario where we need to find our way to a new destination, the most effective map in fact only shows us a 'path' cutting through the territory.

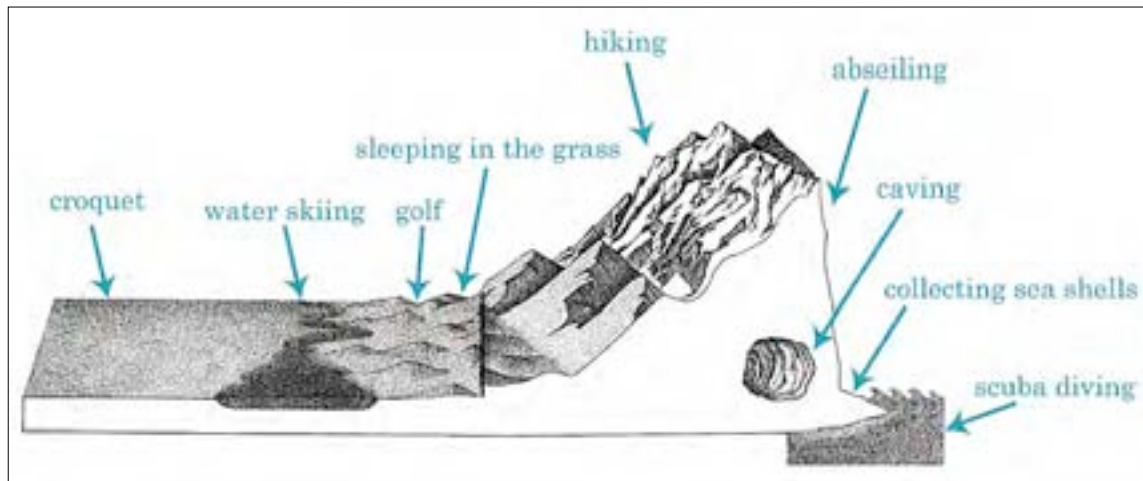


Image 34. 'Flat/Sloped', *The Nature of Recreation* (Wurman 2001:266-267), my annotations.

c. There is no such thing as a 1:1 map: using cartography (and its intriguing parallel with writing) to unpack *Newsmap* and *NameVoyager*.

To use Wurman's term, taking a 'slice' is even more urgent when making a map of some part of the world. If we had no choice we could tolerate and adapt to learning – albeit inefficiently – from the complex reality of an actual heart or even a two hour presentation of photographs of churches. By contrast, failing to make drastic reductions when representing the world is completely impractical. The case of a map scaled at 1:1 – with 'full resolution' and 100% realistic, detailed accuracy – has been ironically contemplated by writers of fantasy, Jorge Borges and Lewis Carroll.

In *Of Exactitude in Science*, Borges – our imaginer of a 'certain Chinese encyclopaedia' (cited in Foucault 2003[1966]:xvi) – conceives of an Empire where subsequent Generations attained increasing Perfection in the craft of Cartography (Borges 1975; cited in Turnbull 1993:2). Even when the Map of the Empire was so detailed that it covered an entire Province, it was still 'found somehow wanting' so further improvements were made:

'the College of Cartographers evolved a Map of the Empire that was of the *same* Scale as the Empire and that coincided with it point for point' (Borges 1975; cited in Turnbull 1993:2, my emphasis).

Despite the detail provided by such a map scaled from 1:1, Borges explains that it was eventually abandoned by 'succeeding Generations [who had come] to judge a map of such Magnitude cumbersome' (Borges 1975; cited in Turnbull 1993:2).

Similarly, in the tale of *Sylvie and Bruno concluded* Carroll tells the story of a country whose cartographers experimented with larger and larger maps ‘until they finally made one with a scale of a mile to mile’:

‘It has never been spread out, yet....The farmers objected: they said it would cover the whole country, and shut out the sunlight! So now we use the country itself, as its own map, and I assure you it does nearly as well’
[Carroll 1893; cited in Turnbull 1993:3].

Instead it is a fact there is no such thing as, nor any use for, a map scaled at 1:1. Turnbull summarises somewhat drolly explaining ‘if the map were identical with the territory it would literally be the territory....apart from anything else, it would be unworkable as a map since you have to be standing on it’ (Turnbull 1993:3). Less worried about the practical problems of a map scaled 1:1, Denis Wood emphasises that this would also be conceptually undesirable. Wood explains that even if a map could show everything ‘it would not more than reproduce the world, which, without the map, we already have’ (Wood 1992; cited by Turchi 2004:40).

This physical and logical ridiculousness of the 1:1 map is frequently noted (e.g. Turchi 2004; Turnbull 1992; Abrams & Hall 2006), since this folly highlights the fundamental operation involved in creating any map: *making omissions*. Just as Wood asserts that ‘[it] is only its *selection* from the world’s overwhelming richness that justifies the map’ (Wood 1992; cited by Turchi 2004:40, my emphasis), Brian Harley similarly explains that the key steps in making a map begin with ‘selection, omission [and] simplification’ (Harley 1992[1989]:243).

Since all maps are abbreviations in some way or another, it is a fact that technically – in Turchi’s words, ‘[under] the most rigorous examination’ – no map is ‘accurate’ (Turchi 2004:91). Gombrich negotiates this point by asserting that maps are constructed to ‘any *required* degree of accuracy’ (Gombrich 1960; cited in Turnbull 1993:41, my emphasis). Gombrich notes, ‘clearly’ the key word here is ‘required’: ‘The form of a representation cannot be divorced from its purpose’ (Gombrich 1960; cited in Turnbull 1993:41). Turnbull asserts that it is simply erroneous to rate a map (or indeed any representation) ‘in terms of accuracy’ and instead maps can only be judged in terms of their ‘workability’ (Turnbull 1993:42).

Thus the crucial question facing any cartographer is ‘how to choose’ (Wood 1992; cited in Turchi 2004:90)? And this is not only a question of *what* should be included, but *how* what is chosen should be represented (Turchi 2004:73). In a remarkable echo of Wurman’s account of ‘slicing’ up recreation (where Wurman described taking various ‘slices’ from young to old,

horizontal to vertical terrain etc.), Monmonier explains that ‘an indefinitely large number of maps’ can be produced based on an examination of the same data (Monmonier; cited in Turchi 2004:73). The decision of ‘which map’, Wood reminds us, is not a value free process:

‘The selection of a map projection is always to choose from among competing interests, to take... a point of view’ (Wood 1992; cited on Turchi 2004:90).

Accordingly, a prevalent postmodern theme in critical cartography literature is that maps are inherently, unavoidably biased and partial constructions (e.g. Wood 1992:22, 24; Harley 1992[1989]:243). However, many cartography scholars assert that the map’s inherent partiality and selectivity are not purely disadvantageous, and instead recognise that these characteristics are also opportunities. As Harley points out:

‘While the map is never the reality in such ways it helps to create *a different reality*...Sometimes agents of change, they can equally be conservative documents. But in either case, the map is never neutral’ (Harley 1992[1989]:247, my emphasis).

In other words, the very same, inherent selectivity that can invite accusations of bias and social construction, also brings about the ability of maps to expound a kind of argument and for viewers to perceive a particular point of view. Wood recommends that once the partiality of a map is embraced, once it is ‘freed from a pretense of objectivity that reduced [a map] to the passivity of observation’ (Wood 1992:183), it becomes available for use as a tool for reasoning and persuasion. He asks,

‘Why struggle to evade it? Why not admit the interest in the map...? Once the map is accepted for the interested representation it is...it is no longer necessary to mask it. Freed from this burden of...dissimulation...the map will be able to assume its truest character, that of an instrument for...data processing...for... reasoning...for...*persuasive argument*’ (Wood 1992:182, my emphasis).

Wood asserts that maps are valuable precisely because they provide us with a ‘reality as differentiated from the reality we see and hear and feel’: maps ‘present us not with the world we can see, but to point toward a world we might know’ (Wood 1992:12). In other words, maps are useful because they can ‘let us know what others have seen or found out’ (Wood 1992:6-7). More than being useful as a selective version of the world, maps are useful because this selective version *represents someone else’s point of view*.

This line of thinking is particularly well supported by the fascinating parallels between writing and cartography put forward by Peter Turchi, in his book, *The Writer as Cartographer*

(2004). Mounting a case for *writing* that conveys a biased perspective, Turchi clarifies why someone else's point of view is desirable. He explains that 'we want to understand how others see the world' because this is how we can 'grow beyond the confines of our own perspective' (Turchi 2004:141-142). While such a partial perspective 'might seem arbitrary...and unreliable', the point is 'we don't always want objective information' (Turchi 2004:142). Even if the world could somehow be duplicated in writing or a map, we don't want it: wholly inclusive realism would only 'evoke a large and complicated world, one with potentially overwhelming detail and sensation' (Turchi 2004:142).

Turchi is himself a writer who teaches writing at a masters' level (Turchi 2004:241). He openly confesses that he has 'no training in geography or cartography' instead, finding mapping a potent metaphor for writing, his is 'strictly an amateur's enthusiasm' (Turchi 2004:24). As its departure point, this book describes the two fundamental stages of writing, (which in reality are difficult to separate and more likely taking place simultaneously): the act of *exploration* and the act of *presentation* (Turchi 2004:12). The mode of *exploration* can be characterised by ambling and stumbling, as well as searching and discovering. However in the mode of *presentation*, there is a significant shift in priority. We might say that the act of *exploration* is about the writer's journey, while the act of *presentation* is about the readers' journey. When concerned with presentation, it is no longer about the writer's travels (and dead ends and false starts) or writer's experience (of surprises and inventions). Instead, presentation is about '[creating] a context for, and to lead the reader on, a journey' (Turchi 2004:12). Turchi summarises this shift in perspective elegantly, explaining that 'at some point [the writer turns] from the role of Explorer to take on that of Guide' (Turchi 2004:12).

Clearly, in putting forward this model of writing, Turchi is invoking the corresponding steps in cartography. In *Mapping it out: expository cartography for the humanities and social sciences*, a book about scholarly 'map authorship', Mark Monmonier (1993) observes that while written prose 'allows authors to announce goals, discuss sources, explain research strategies, narrate events, and summarise arguments' it has 'a sequential linear structure that can be painfully insufficient for discussing places, regions, and spatial relationships' (Monmonier 1993:ix). Monmonier's central thesis is that '[mapping]...is not solely a medium for communication, but is also a tool of *analysis* and *discovery*' (Monmonier 1993:12, my emphasis). Thus he argues maps can convey a definite message in their own right, and can serve in a scholarly article as an 'integral and unambiguous part of the author's narrative', and not just in support of or supplementing the author's words (Monmonier 1993:x).

Accordingly Monmonier makes the related recommendation that the writer of such a scholarly article should always also 'be the map author' (Monmonier 1993:117).

It is Monmonier's characterisation of the *exploratory* and *expository* functions of a map that reiterates Turchi's account of the writer as Explorer and Guide. Monmonier describes a very similar duality in the use of maps: on the one hand as a presentation tool (superior for helping the reader 'visualise locations, routes'); on the other as a research tool (helping 'the scholar explore data and search for revealing patterns, relationships, and anomalies') (Monmonier 1993:209). He explains that these exploratory and expository roles of maps merge 'when the researcher who discovers or demonstrates a meaningful pattern or relationship' by mapping, subsequently uses 'a map to communicate this finding to colleagues and readers' (Monmonier 1993:209).

A particularly acute manifestation of how maps usefully abbreviate the world they represent, is provided by the sociologist George Psathas (1979) who carried out an ethnomethodological study into the 'Organizational features of direction maps'. Psathas is interested in how rough, hand-drawn maps can be studied as evidence of practical reasoning (of the map maker as well as the map reader). Psathas reflects that '[it] is remarkable that a number of lines on paper can be interpreted...as being about a world' (Psathas 1979:224).

Psathas distinguishes two kinds of pen-on-paper drawn directional maps: 'maps to our place' and the 'occasioned map' (1979:204-205). Occasioned maps are those we solicit when we ask the bar man for directions to the train station or cab rank, and he over turns a partially soggy beer mat and sketches a rough little map on the back. Psathas explains that because these maps are drawn in the 'reader-user's presence', any necessary clarifications are made verbally at the time: the map drawer can establish 'righto, you know the intersection out the front?'; while the map reader can clarify 'hang on, what's on that corner?' Since it is supplemented by a kind of verbal consensus reached between the maker and reader at the time it was drawn, the occasioned map is characterised by very partial, selective visual cues.

The Sydney based artist Holly Williams carried out a project based on the collection of such 'occasioned' maps (although without explicit reference to Psathas' ideas), which she recounts in an essay entitled 'Mapping the trivial / How do I get to the Art Gallery of New South Wales?' (Williams 2003) (→IMAGE 35). She approached passers-by in Sydney city, and asked them, as the title suggests, to draw directions to the Art Gallery of New South

Wales. Psathas' comment that as a stand-alone map, the occasioned map can not be understood (Psathas 1979:204-5) is clearly demonstrated in Williams' collection.

Taking a moment to reflect on such hand drawn maps (often sketched out on the quintessential train ticket or serviette) in view of Psathas' study, we can observe that these shoddy little graphics somehow provide someone with orientation and direction. The point must be stressed: these maps are functional because they show only the most relevant, necessary and purpose-driven details, and simply omit all roads, areas and places that lie beyond the proposed route home. It is almost too obvious to say that when you need directions to the art gallery, you don't need to know *that four blocks over to the right* there is a large park with a lovely Art Deco fountain: you just need to know that your route takes a right at the dark statue of the severe looking hunched Queen Victoria. Similarly you don't need to know what lies *beyond* the art gallery. Instead these maps are an exercise in pertinence (relevance) and salience (noteworthiness): this is a task carried out in the spirit of the 'need-to-know basis'. These maps are useful for understanding the key issues in map-making, as they are an extreme embodiment of the features of cartography: prioritising, selectivity and partiality.

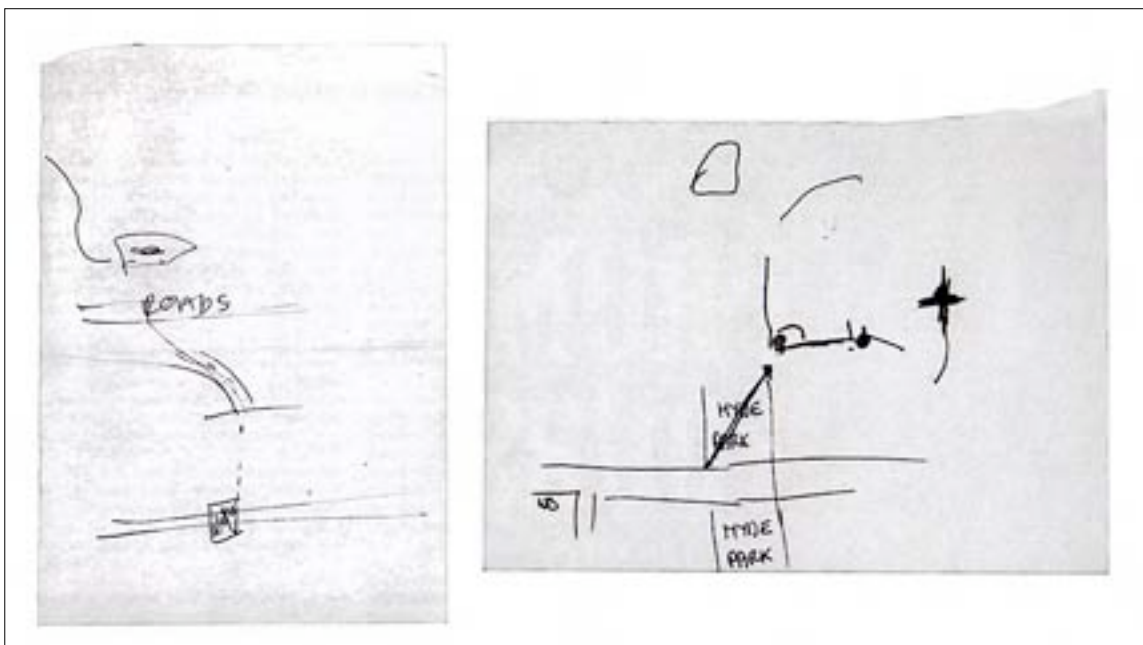


Image 35. Samples of maps from 'Mapping the trivial / How do I get to the Art Gallery of New South Wales?' (various authors, reproduced in Williams 2003)

Returning to Psathas' theorising, 'maps to our place' (→FIGURE 36) are the kind of hand-drawn map that a friend might post you when they invite you to stay at their holiday cabin on the South Coast; or if that you might be emailed when another asks you to help out on their family farm out West, and correctly assumes that you don't have a street directory for the area. Psathas explains that such 'maps to our place' are intended to be 'read independently by the reader without the presence of the maker, as self-explanatory and self-contained maps' (Psathas 1979:204). Accordingly these hand drawn maps typically include a good deal more detail than the 'occasional maps'. This said, 'maps to our place' are still characterised by their extreme selectivity. Psathas explains,

'The ["map to our place"] begins and ends at its edges....There are connections to, continuations of, and extensions onto other roads, areas, and places from the roads, areas, and places shown; but these other roads, areas, and places *are not shown*' (Psathas 1979:207, my emphasis).

Accordingly Psathas evokes these kinds of maps as a 'selection out of, lifting up from' the actual geographical layout and features of a place (Psathas 1979:207).

Psathas concludes asserting that these maps can be most meaningfully interpreted as solutions to the practical problem of how to get to some place: as such all of its streets and landmarks can therefore be examined in relation to this task. To portray a route, these maps present a 'set of sequential particulars and relational features' (Psathas 1979:224). It is particularly interesting to observe the parallels here between this extraordinarily low-tech mapping, with the high-tech, online interactive mapping provided by *Newsmap* and *NameVoyager*. In sum, cutting a route or showing a path is an extreme embodiment of the role that we have now assumed of Guide, which seems to be very useful for describing the efficacy of *Newsmap* and *NameVoyager*: these enable a 'path' to be plotted, or a 'slice' to be cut, through the territory which features only the most salient features relevant for expounding this perspective.

d. Reviewing the principles of Positioning, and pointing forward to *BikeWork*.

This discussion has provided several useful terms for unpacking the insights of *NameVoyager* and *Newsmap*. We can now recognise that these websties allow us to first 'Explore' a detailed sea of names and vast matrix of online news, and so stumble upon and search for patterns, relationships, and anomalies. Subsequently, indeed moreover, as interactive tools these websites allow us to at some point change gear and become the 'Guide': to make selections from the initially overwhelmingly inclusive view, in order to

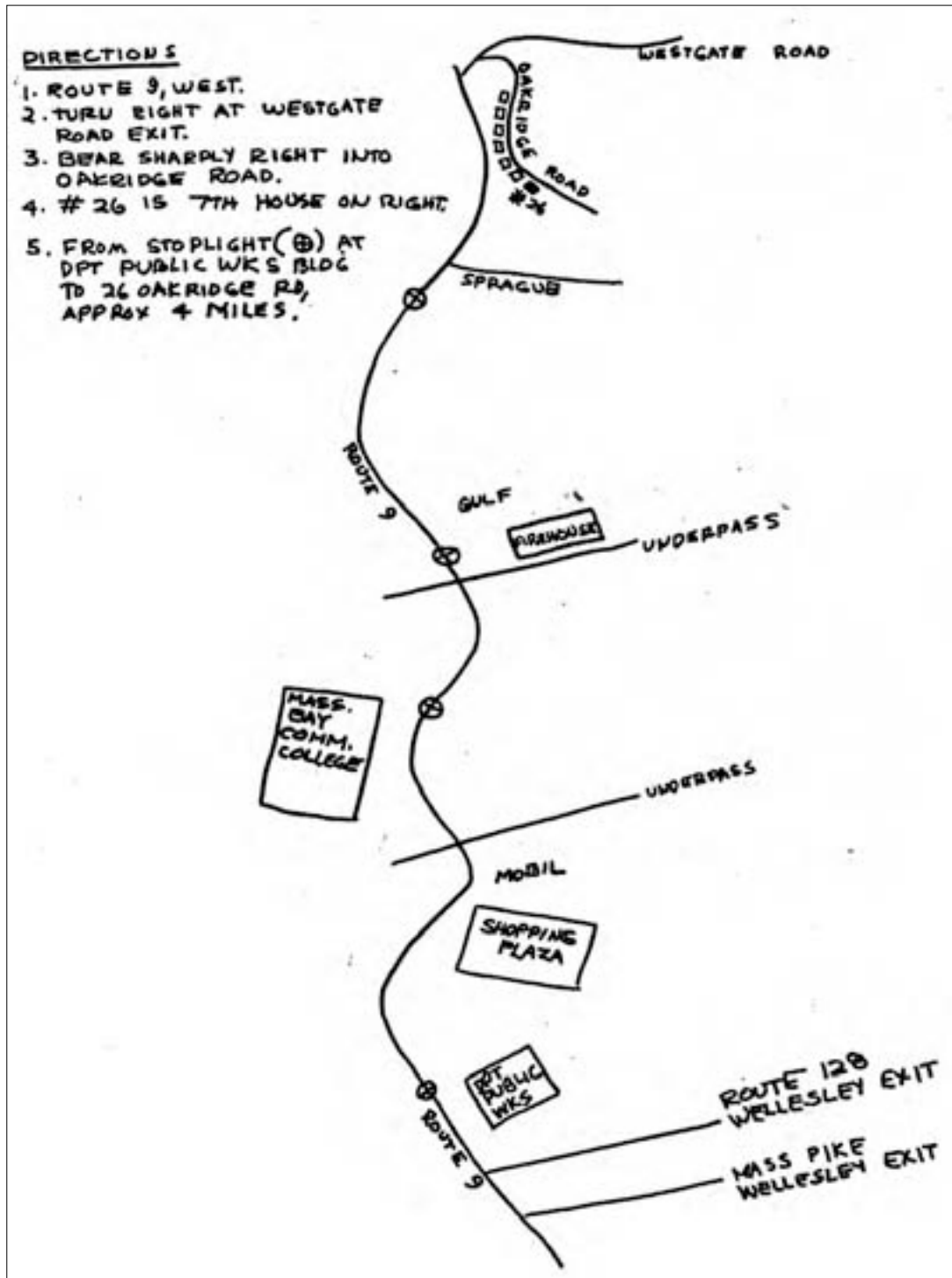


Image 36. Example of Psathas' 'maps to our place' (various authors, reproduced in Psathas 1979)

convey some select aspect. Positioning explains that these projects are able to convey a point (about the comparative predominance of Austrian online news concerned with Health; about the persisting popularity of the girls' name *Ruby*), precisely when they do not try to say everything.

In drawing this discussion to a close, it is helpful to sum up the key points of Positioning *in the context of the model*, for Positioning is not a discreet language nor a strategy in itself but the third stage of the tripartite Model I have proposed. By way of a brief review: the point of Ordering was to make sense of the Collection, but to become preoccupied with the organising processes of Ordering was to lose sight of the Collection. Instead we recognised that Ordering is a *means*, rather than an end. Indeed it is through the *process* of 'being torn' and struggling to choose one way to organize or the other when seeking a structured overview, that Ordering gives rise to the *point* you wish to make.

Through considering alternative Orders, we gained an intimacy with the things that previously only added up to the 'shapeless mass' of the Collection. By the iterative process of Ordering, we came to appreciate the numerous features that characterise each thing, and as a result the Orderer becomes familiar with the more salient features of the Collection. As an Explorer (of various configurations for creating an Order among things), the problem is that the Orderer is compelled by the ambitions that underpin Ordering, in particular the aspiration for inclusiveness: all individual items from the original Collection must be included in any Order.

However, in Positioning we see a shift (from the Explorer of Ordering) to the role of the *Guide*. As is demonstrated in *Newsmap* and *NameVoyager*, and informed by our exploration that found both cartography and information design fundamentally underpinned by selectivity and exclusion, Positioning provides the opportunity to convey a meaningful (albeit restricted) perspective on the original Collection. The role of the Guide calls for 'slices' to be cut through complex matters and 'paths' to be plotted through vast territories.

This brings me the point at which I turn to apply Positioning – and its terminology of 'cutting a slice' and 'plotting a path'. In particular, the shift from the Explorer to the Guide, is a powerful notion to bear in mind as we turn for the last time to *BikeWork*. In taking on the role of the Guide – indeed heeding Twemlow's call for choices to be made in order not to risk a passive stance – I am obliged to select just one 'slice' of cyclists, and plot only the most salient and pertinent features that mark the 'path' through the world (Ordered Collection) of

cyclists along which I will usher my viewers. What sense can be made of my 'tentatively' Ordered Collection of cyclists, by making selections and omissions? What issues arise through the practical application of this final stage of the Model?

Part 2.

Adopting Positioning as a creative strategy.

Section 1. The final strategy for approaching *BikeWork*.

This final discussion of *BikeWork* involves two main aspects. In the first place, I will consider how I adopted the language of Positioning as a strategy. In view of the preceding exploration of cartography, scientific visualisation and information design carried out to unpack *Newsmap* and *NameVoyager*, I create two Positions from my Ordered Collection cyclists. A drastic reduction in the numbers of cyclists was central, featuring a selection of eleven and twelve cyclists respectively. Significantly, as I discuss, each of these two Positions (referred to as *Version 1* and *Version 2*) asserts a more definite message about cyclists, than when the cyclists were Collected and Ordered. In version one, ideas about representing the diversity of the 'image' of cyclists are explored, while in version two a more polemical position is taken to contradict 'anti-cyclist' views that can be traced in the mainstream media.

Finally we will draw some conclusions about Positioning in itself as a strategy, for our course our chief concern is not cycling, but in exploring Positioning as the third stage in a model developed to attend to 'homeless' creative, visual, investigative projects.

a. 'How to choose?' The position I took on cyclists.

We begin by examining how I adopted the ideas emergent from the preceding discussion deriving the language of Positioning to create two 'Positions'. How did concepts such as 'cutting a slice' (Wurman 2001) and 'plotting a path' (Psathas 1979) assist and guide this final exploration of the sixty-five cyclists I had gathered and arranged?

Thinking now about how to adapt concept of Positioning as a strategy for approaching *BikeWork*, it is clear that to actually say something about our assembled Collection of cyclists, and to make sense of the myriad insights gained by Ordering (and re-Ordering) them, it may be actually more helpful to not include everything. Instead (like Wurman) I need to take a *slice*, or (in the manner of Psathas' 'maps to my place') to plot a *path*, through the

'territory' made up by the 'data'. In complete contrast to Ordering's emphasis on inclusiveness and 'total coverage' and finding a place for everything, if I am to adopt the subsequent stage of Positioning I must observe the key aspect of this strategy of 'culling in order to clarify' (Fry; cited in McKee 2005). In assuming the role of the Guide, I am aware that providing a 'selection out of, lifting up from' (Psathas 1979:207) my assembled and arranged cyclists is inherently biased and rhetorical, but that this can be embraced, as Positioning recognises that there is value in knowing 'what others have seen or found out' (Wood 1992:6-7) since this is how we 'grow beyond the confines of our own perspective' (Turchi 2004:141-2). Above all, as Monmonier emphasises, the process of Positioning in fact *merges* exploration with exposition (Monmonier 1993:209). That is, persuasive elements are both *explored* (as part of a process of discovery) and *exposed* (for the process of presentation), when omissions and selections are made from the data.

An indefinitely large number of Positions could have been produced from the same Ordered Collection of cyclists

Just as Monmonier pointed out that 'an indefinitely large number of maps [can] be produced from the same data' (Monmonier; cited in Turchi 2004:73), and Wurman could 'slice' up the subject of recreation in numerous ways (Wurman 2001:265), any number of 'positions' on cyclists could be developed. Before we go on to consider the Position I eventually asserted, we might speculate on the alternative selections and reductions – or 'slices-of' and 'paths-through' – which could be taken of the Collection of cyclists.

With reference again to the diagram of combined attributes (first explored in Ordering cyclists), we can identify several alternative positions, as shown in → FIGURE 16. I could just select the cyclist marked as region 1, who mentioned banning cars and whose clothing that day included Lycra and omitted the rest, to support a position about cycling enthusiasts in the extreme. Or I could select the cyclists from region 2 – dressed in Lycra, but who don't mention cycling – to assert an argument along the lines that a book cannot be judged by its cover, (although looks very 'cyclist', is not preoccupied with cycling). Or as a twist, selecting just the cyclists from region 3 could emphasise that individuals, despite being not distinctively dressed as 'cyclist', can in fact be very enthusiastic about cycling. Finally region 4 indicates an interesting breed of 'cyclist', who neither wears Lycra nor mentions cycling.⁸⁸

⁸⁸ Further to these possibilities I could have developed even more Positions based on the other attributes for Ordering cyclists explored in the previous chapters, to assert a Position related to age, gender or bike type, or categorises of statements (babies, career, politics etc.).

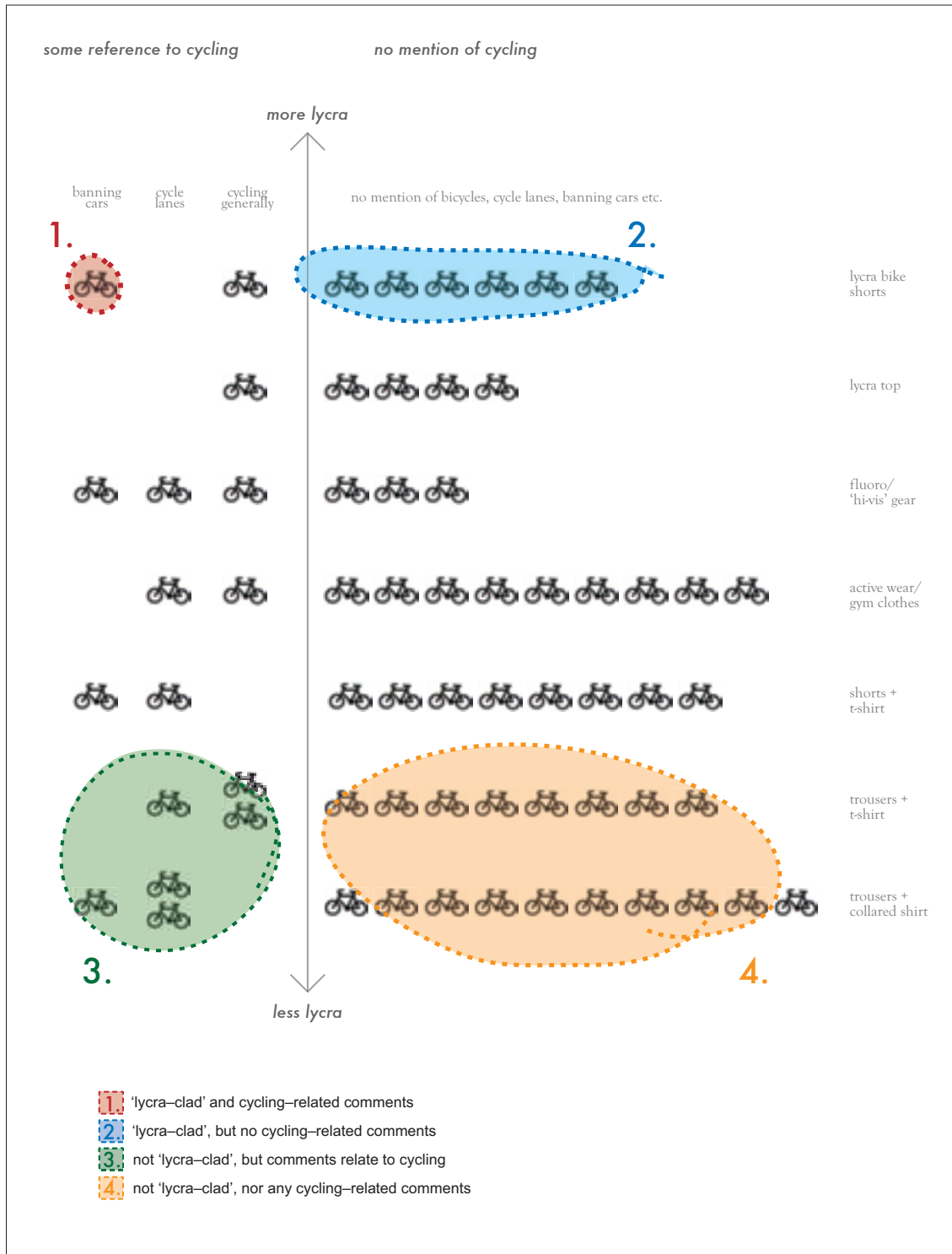
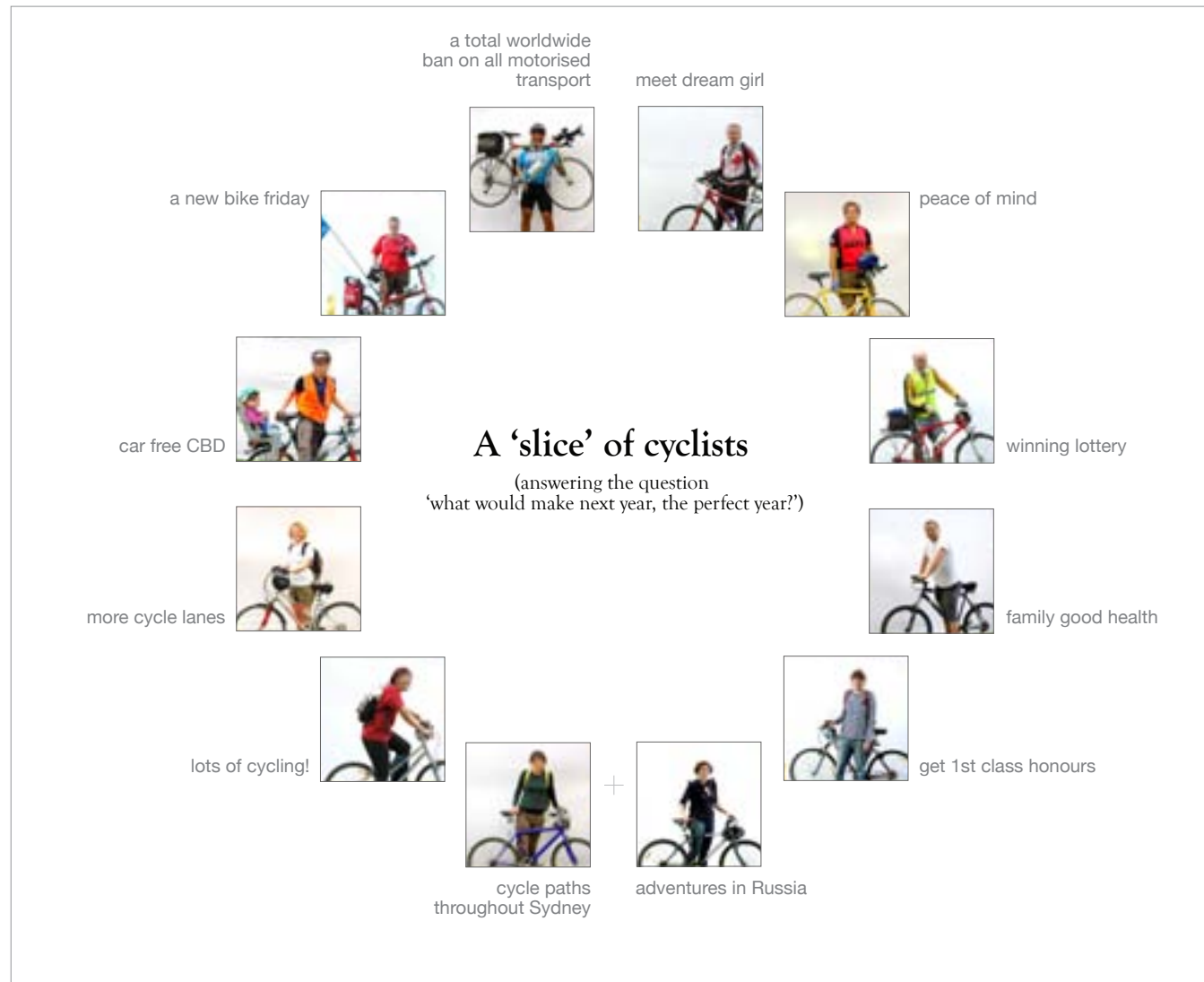


Figure 16. several 'slices-of' / 'paths-through' an Ordered Collection of cyclists.

The first Position (labelled as *Version 1* on the left-hand side of the poster  FIGURE 17) that I carried out was based quite literally on the idea put forward by Wurman of taking a 'slice' through these cyclists to produce a cross section. Here representative cyclists from *each* region have been selected, and portrayed are in a circle that corresponds with the array plotted in the coordinate axis, shown in  FIGURE 16. This selection and drastic reduction of the original collection serves as a distillation showing the diversity of cyclists uncovered in *BikeWork*. The variety of ideas and appearances and the various combinations of the two are particularly presented in the pairings to the left and right, top and bottom. Consider the pair at the top (and similarly for the pair at the bottom): these are cyclists who that day wore very similar attire, yet conveyed categorically distinct aspirations. Of the two cyclists in street wear (at the bottom), while one would have the perfect year if she had 'adventures in Russia', the other expresses the cycling-related desire for the 'cycle paths throughout Sydney'. And looking at the two cyclists in Lycra (the pair at the top): while one certainly embodies the extreme cyclist 'stereotype', yearning for 'a total worldwide ban on all motorised transport', the other wants to 'meet [his] dream girl'. We can make similar observations in consideration of the pair to the left (as well as the pair to the right). Despite being in quite disparate attire (the upper of each pair in lycra / fluoro, the lower in streetwear) these cyclists express categorically comparable priorities: the pair to the left are both broadly concerned with cycling advocacy ('car free CBD', 'more cycle lanes'); while the two cyclists to the right both express non-cycling related, – perhaps we could say more 'mainstream' – wishes ('winning lottery', 'family good health').

It is important to acknowledge that the 'positions' I have created are visually quite a departure from the graphic appearance of the projects we previously considered, *Newsmap* and *NameVoyager*, and that in retaining the photographs of cyclists, my approach contradicts Walsh's recommendation that photographic realism is not as effective as line drawings for informative purposes. Nevertheless, I maintain that the approach I have used still prioritises the same key principles of *making a selection*, and *omitting all features not relevant* to the particular communication purpose.

In contrast to *Version 1* where I experimented with a more representative cross-section of cyclists, I developed the *Version 2* Position (to the right in the poster  FIGURE 17) by more entirely embracing the bias and rhetoric inherent to making selections and omissions and forming a Position. For this Position, I decided to explore how the dissuasive stereotypes of cyclists expressed by some journalists in the media could be contradicted in view of my



Version 1



Version 2

BikeWork Stage 3: Positioning

Figure 17. BikeWork Stage 3 – Positioning: Version 1 – a ‘cross-section’ of sorts; Version 2 – more polemical.

Ordered Collection of cyclists. The kinds of stereotypes I had noticed are for example, the assertion made by Piers Akerman that cyclists ‘seem to believe that ... [they are imbued] with a moral superiority’ (Akerman 2005), or Michael Duffy’s article which explained that cyclists ‘tend to be unhappy and resentful people’ (2005), or Georgia Lewis’ conclusion that cyclists ‘look upon drivers with sneering superiority’ (2004). Although it may be true to say that these stereotypes are on the whole simply unfounded generalisations, they are nevertheless frequently published.⁸⁹

In forming this (second) Position, I took cues more strongly from Psathas’ ideas about cutting an intentional, restricted, directional *path through a terrain*, rather than Wurman’s *slice across*. I considered how Psathas theorises that in creating ‘maps to our place’, all but the most pertinent features are omitted in order to transport someone from point a to point b. I wondered if in a similar way I could similarly set out to transport someone so to speak from ‘reality a’ (according to Akerman and others), to ‘reality b’ (which we have attained empirically by conducting *BikeWork*), and so omit all but the most salient features to support this path?

Shown in *Version 2* (on the right side of the Positioning *BikeWork* poster  FIGURE 17), this more polemical position juxtaposes quotations that convey the various negative stereotypes of cyclists, with a selection of the cyclists who contradict such claims. While Lewis (2004), Akerman (2005), Duffy (2005) and Devine (2006) might assert that cyclists are ‘arrogant’/‘sneering’, ‘superior’, ‘resentful’ and ‘militant’/‘pious’, respectively, the kinds of aspirations expressed by the cyclists I have selected do not support such accusations. By juxtaposing wishes ranging from ‘no family bereavements’ to ‘my mum falls in love’ and ‘a harem of hot black studs’ and ‘to lose 25 kilos’, the generalisations about cyclists made by these Sydney-based journalists are rendered quite absurd.

These ‘positions’ demonstrate how the ideas emergent from our study of *Newsmap* and *NameVoyager*, and a review of literature concerning cartography, information design and scientific visualisations, can be used to approach our Ordered Collection, and form a ‘Position’ about cyclists. Ultimately however my concern is *not about cyclists, but about Positioning*.

⁸⁹ Perhaps in recognition of the need to overcome such dissuasive stereotypes, I noticed that recent advertising related to cycling seems to work very hard to convey a more inclusive, less extreme image (e.g. Transport for London 2005; Trek 2005, 2007). Interestingly, the problem that cycling is perceived as a ‘non-mainstream’, marginal activity has recently been identified by cycling advocates (e.g. Unwin 2007). A fuller discussion of these matters is included as *Item 5* of the Appendix.

b. Final reflections on Positioning cyclists.

Positioning both surpasses the dilemmas and shortfalls of Collecting and Ordering, yet also takes advantage of their insights. Collecting gave rise to the openness and exploration in the first place, and assembled this set of cyclists. Ordering enhanced our appreciation of the multivalence of these cyclists, not to mention practically providing a more efficient way to grapple with such a large number of individuals. Collecting was discontinued having gathered just too much stuff, while Ordering was renounced in the realisation that no perfectly faithful configuration of things could ever be reached. In Positioning, we are no longer constrained by self-imposed visual limits (as in Collecting), or the rules of classification (as in Ordering). By contrast, and unlike the former two stages, we experience the freedom to make selections and omissions.

Rather of erring on the side of inclusiveness Positioning gives us a chance to jettison categories and particulars that don't fit how we see the data. Instead, in Positioning cyclists, I was free to use the images and statements that best fitted my purpose. No longer concerned to be faithful to the Collection as a whole, or obliged by Ordering's rules, I was able to leave behind the cases that didn't support my argument. In this way, we can detect an important change in attitude in Positioning: a shift from openness to discernment.

Section 2. The limitations of deploying Positioning as a strategy.

Two processes, each inferred by the other: reducing and selecting as a way to make sense of things [cyclists]

I will conclude by asserting that Positioning involves *two* processes, each inferred by the other: reducing options, *and* 'selecting one of them to stand by' (Twemlow 2003).

We now recognise that a pictorial illustration is useful precisely because it is 'not a faithful record of visual experience' (Gombrich 1960; cited in Turnbull 1993:41). Instead an information graphic seeks to provide a simpler version constructed only to a 'required degree of accuracy' (Gombrich 1960; cited in Turnbull 1993:41), *in place of* the 'intricate sight of the real thing' of experience (Arnheim 1969:305). Accordingly Turnbull asserts that an information graphic is most sensibly judged its 'workability', rather than its likeness to reality (Turnbull 1993:42). Elkins refers to the visual search for 'intermediary clarity': 'the search for a middle ground between unclassifiable detail and unhelpful reduction' (Elkins 1999:213).

Thus it is through not saying everything, that a restricted view can say something. As Wurman explains it is 'by simplifying, by taking one point of view, one *slice*, [that] you can make something clear' (Wurman 2001:44-5, my emphasis). Indeed as Wood recognises a map is only justified because it makes a 'selection from the world's overwhelming richness' (Wood 1992; cited in Turchi 2004:40).

A preferred direction for Collectors and Orderers? The particular propensity of Visual Communication Design to put forward a Position.

A Collection is valuable as a Collection, just as an Order is valuable as an Order, but neither can provide the selective, lucid, efficient communication of a Position. While Collecting finds trails of similarity in the enormity of the world, and Ordering finds and articulates patterns of distinction within the Collection, *Positioning* is a time requiring the harder decision to *omit*, in order to put forward a point of view. Perhaps this explains why I was able to source comparatively fewer instances of Positions, while there was no shortage of examples of creative, investigative, visual projects that could be classified as Collections or Orders. Indeed, Positioning seems to be a commitment less frequently made, reflected in the noticeably less numbers of 'homeless' examples of Positioning discussed in this chapter, compared to the more numerous examples in the previous chapters on Collecting and Ordering. Thus there has been a significant shift in Chapter 5: rather than a full typology of existing work, it may be more accurate to characterise Positioning as a *recommendation* for how to augment the limitations of Collecting and Ordering.

Despite the paucity of examples sourced, the preceding examination of scientific representations, information design and cartography can be taken to strongly suggest that Visual Communication Design has a particular aptitude and propensity for putting forward a Position. Visual representations of complex phenomena are useful because they are *not* precise, accurate or realistic; instead they are useful because they are able to provide a *reductive, selective version* of things. This observation leads to my contention that designers, who seem to be confident Collectors and Orderers, could contemplate how their own Collections and Orders can be evolved by making selections and omissions, the critical steps for taking a Position and 'saying something'.

CHAPTER 6.

CONCLUSION AND FUTURE IMPLICATIONS

a. Findings.

At the beginning of this dissertation I explained that this research was motivated by the desire to better understand a series of 'sticky' projects. Now, at the close, I can summarise my findings as two-fold. Firstly, I have shown how we can characterise these 'sticky' projects as 'creative, investigative, visual' work that lies between Visual Communication Design and Visual Research. Secondly, I have developed a preliminary Model that is useful for more attentively discussing these 'sticky' 'creative, investigative, visual' projects, and applying it as a strategy for creating new 'creative, investigative, visual' projects.

By demonstrating how a series of projects do not fully satisfy expectations of both Visual Research and Visual Communication (as they are presently defined), I have been able to identify these with the spacer 'creative, investigative, visual', and in so doing, begun an excavation into the interesting relationship of these two disciplines. This research has shown that the 'creative, visual, investigative' strategy is an approach *between* Visual Research and Visual Communication. This has been particularly demonstrated by my own (creative, investigative, visual) project, *BikeWork*. It is clear that this project is neither a promotional campaign, nor a visual social research project into cyclists, but nonetheless this work does *explore* a particular subject, and does *communicate* this exploration vividly.

This brings me to the second finding that results from this research, a tripartite Model. The three stages, Collecting, Ordering and Positioning, provide a language that can be used to more closely discuss 'sticky' 'creative, investigative, visual' projects and approaches. Using this new, more sensitive terminology, I can now explain that a project is benefitting from the insights of 'the-same-the-different', or has grappled with the 'which way to organise it' dilemma, or needs to 'plot a path', and we now appreciate the various issues that each of these terms entails. Furthermore, my research has shown that this Model can be adopted as a strategy for creatively, visually, investigating some subject or another. Beginning with an initial stage of confident openness, focused by a visual constraint allowing indiscriminate accumulation; followed by an interim stage of productive frustration considering different attributes (but ultimately gaining insight to the multivalence of things); eventually making any

necessary omissions and selections in order to effectively communicate a particular perspective or salient point.

To summarise this second finding, by adopting this Model, which formalises the processes of Collecting, Ordering and Positioning, I have demonstrated that not only do we have a way to talk about things differently, but a way to do things differently. Thus this research contributes both to Visual Communication Design *criticism* and Visual Communication Design *practice*.

b. Recommendations for Future Research.

In view of these findings, I am recommending two areas for future research. Firstly, additional work is needed to advance the development of the Model. Secondly, future research should be carried out to further explore the creative, investigative, visual approach.

As it stands, while promising, the existing Model can only be regarded as a rudimentary tool, which requires further research to more thoroughly delineate the three stages. My own research started with questions about visual projects, and the process I undertook to derive the Model was driven up and out from these projects. However, during the course of my work, I became fascinated to note that the Model – *in its three stages* – was being evoked time and time again throughout diverse literature.

In this dissertation I have clearly benefited from Wurman's indications of the Model: first evoking Collecting in his anecdote about buying cabbages in the threes (2001:40); then Ordering in relation to organising dog breeds (2001:259), and finally Positioning in his 'cutting a slice' through recreation (2001:265). Yet the treatise put forward by Wurman in *Information Anxiety 2* is pragmatic and conversational, rather than theoretical and academic. In this regard Wurman provides an interesting point of departure for future research: the analysis of circumstances and discourses where the Model of Collecting, Ordering and Positioning is reflected on, employed and even recommended, yet in a way that is not formalised.

Collecting, Ordering and Positioning is similarly revealed in Frascara's account of the steps involved in developing a mass communications campaign, identifying the first step as 'gathering...isolated bits, issues to pay attention to'; then he recommending '[trying] a great variety of possibilities of organization', creating different groupings and hierarchies, and stressing that the goal is to find an 'operational organisation' rather than the 'true connection' between the units. Based on this operational organisation, Frascara explains

that 'a few lines of argument' can be 'selected', to serve as the basis for the campaign (1997:42 – 43). As a further example of the Model in design discussions, I have noted that Poynor also invokes Collecting, Ordering and Positioning. Achieving an 'impressively focussed instance of visual journalism', Poynor recounts how a designer '[turned a shapeless] mass of material into a pungent, revealing and accessible commentary' by a process of 'many anguished rethinks' particularly at the deeper level of 'organisation and structure' (2000:12).

It is particularly significant to observe the presence of the Model in characterisations of activities that are not Visual Communication Design. For example, Donald Norman suggests Collecting Ordering and Positioning in modes of learning ('accretion', 'tuning', and 'restructuring') (1993:19-41). Meanwhile I noted a germane account of Collecting Ordering and Positioning in Becker's recommendations to the scholar who fears they can never write down all that they have come to know through research. Beginning with Collecting, Becker sympathises,

'Scholars know that the subjects they write about involve so much that ought to be considered, so many connections between so many elements, so much of everything that it seems inconceivable that it can be given a rational order' (1986:133).

Yet Becker is firm, stressing that creating Order is the pertinent: 'that's our business: to arrange ideas in so rational an order that another person can make sense of them' (1986:133). Finally, in a remarkable echo of Wurman's 'slices', Becker stresses the importance of selectivity and culling for clarifying a point, which are also central to Positioning.

We know we cannot describe everything. In fact, one aim of science and scholarship is exactly to reduce what has to be described to manageable proportions. But what to leave out? And where should we put what we leave in?' (1986:133)

And further afield, Muir Gray, Director of Clinical Knowledge from the British National Health Service, reiterates the Model of Collecting, Ordering and Positioning in the *water* metaphor he employs to describe their systematic review of the health information published in medical journals. Beginning with *catchment* ('there's plenty of rain falling...500,000 new articles every year fall down'); then *filtration* ('the rubbish filters to the bottom of reservoirs'); and finally *pumping* (so only the most salient and relevant facts ['clean water'] reach time-poor doctors and nurses, and overwhelmed patients) (interview in *Healthcare Knowledge* 2005).

In each case the process of distilling a communicable message begins with accumulating and dealing with 'a lot of stuff' as a 'shapeless mass'. Then the frustration of all the alternative ways organise that 'stuff' (and recognition that no one way can capture a 'perfect' constellation of all the clusters and relationships). Finally the assertion that to make a point accessible, manageable, pungent, that most of the things have to be left out, and just a few lines should be selected. Significantly, in each of the scenarios outlined above – designing, learning, writing, knowing – *all three* stages of the Model are reported together as a single unit. Does this interdisciplinary presence of Collecting, Ordering and Positioning suggest that there is designing in learning, in writing, in knowing?

Therefore, my first recommendation for future research is to examine the presence of Collecting, Ordering and Positioning across the disciplines, taking the brief observations made above as a possible starting point. I believe that this is a rich area for better delineating the three stages of the Model, and substantiating what appears to be its broader relevance and transferability. Perhaps such research can contribute to the mutual appreciation of presently disparate disciplines, following the recognition that the strategies of Collecting, Ordering and Positioning are common and fundamental practices.

This brings me to the second and final recommendation, where I turn from the three-part Model proposed as a way to account for 'sticky', 'homeless' projects, to concentrate on possibilities surrounding the 'sticky' 'homeless' projects themselves.

Whilst the tag of 'creative, investigative, visual' has been workable for the purposes of this dissertation, I feel that future research can build on this (still early) understanding of the relationship between Visual Communication and Visual Research. I have referred to creative, investigative, visual work as a third way between Visual Research and Visual Communication Design, but does this approach actually represent a *gap*, or is it an *overlap*? Or could this approach be subsumed *within* either Visual Research or Visual Communication Design? What other ways are there – other than the present Model of Collecting, Ordering and Positioning – that we can use to explore 'creative, investigative, visual' projects and strategies?

A key area of interest is to identify the contexts or scenarios where a 'creative, investigative, visual' approach and their 'sticky' insights are in demand, such as the world painted by John Thackara. To begin his book, *In the Bubble: Designing in a Complex World* (2005) Thackara asserts that many of the difficulties that we presently face in the world arise not by accident,

chance or by unfortunate coincidences as is often believed, but *by design*. He describes how urban sprawl is an example of such a ‘troubling situation’ (2005:1):

‘We deplore the relentless spread of low-density suburbs over millions of acres of formerly virgin land. We worry about its environmental impact, about the obesity in people that it fosters, and about the other social problems that come in its wake. But nobody seems to have designed urban sprawl, it just happens – or so it appears’ (2005:5).

He superbly builds the case for how this situation – which seems to be inevitable, but is in fact one that we have ‘designed our way into’ (2005:1) – is made so much harder to tackle because the complex interactions between the numerous systems, human behaviour and policies which amount to urban sprawl are difficult to perceive.

‘On closer inspection, however, urban sprawl is not mindless at all. There is nothing inevitable about its development. Sprawl is the result of zoning laws designed by legislators, low-density buildings designed by developers, marketing strategies designed by ad agencies, tax breaks designed by economists, credit lines designed by banks, geomatics designed by retailers, data-mining software design by hamburger chains, and automobiles designed by car companies’ (2005:5).

However Thackara appears to remain optimistic, working from the premise that ‘[if] we can design our way into difficulty, we can design our way out’ (2005:1). And it is his account of how we can ‘design our way out’ of ‘deplorable’ situations such as urban sprawl, which specifically suggests a promising area for future ‘sticky’ researchers.

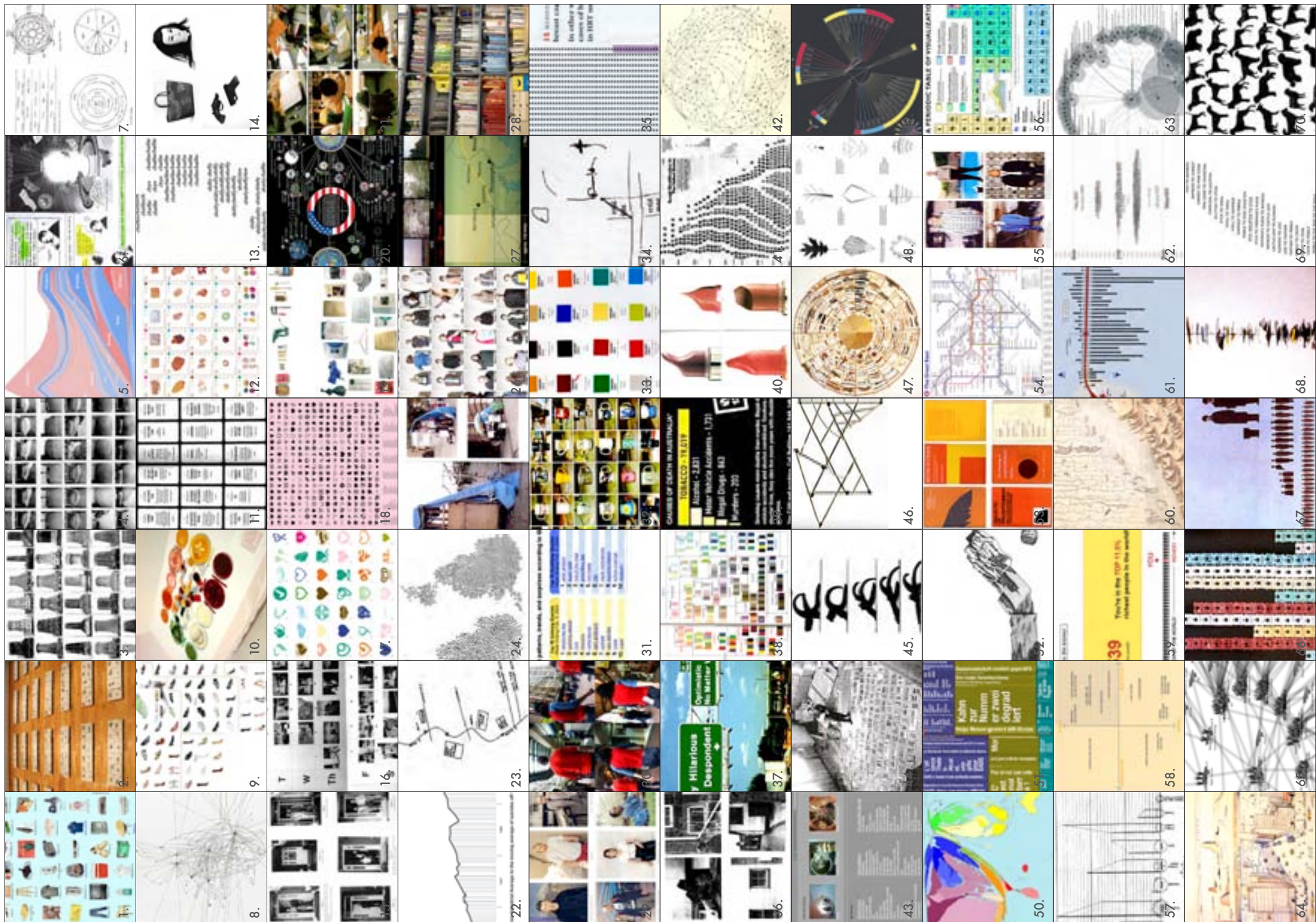
‘To do things differently, we need to *perceive* things differently....One of the most important design challenges ... is to make the processes and systems that surround us *intelligible* and *knowable*. We need to design *macrosopes*, as well as *microscopes*, to help us to understand where things come from and why: [such as] the life of a hamburger...or urban sprawl. Equipped with a fresh understanding of why our present situations are as they are, we can better describe where we want to be. With alternative situations *evocatively* in mind, we can design our way from here to there’ (2005:7, my emphasis).

Thackara’s call for this ‘new lens’ through which to look at the world, strikes me as a particularly exciting appeal to investigators skilled in the visual and creative, and who appreciate the sticky and strive for the vivid. We can see in Thackara’s imperatives a central need for expertise in *making things visible*: to see things macroscopically and microscopically; to reveal and convey complex, hidden, problematic processes; and to generate a clear picture of a possible future scenario ‘evocatively in mind’.

Thus my second recommendation is that future research could examine what contribution designers can make as creative, visual *investigators* of the 'processes and systems' and 'alternative situations' that Thackara describes: not centrally concerned (employed) to communicate an (already determined) message to a target audience, but engaged in the 'sticky' exploration of these matters, carried out in a striking way. The continued examination into the relationship of Visual Communication Design and Visual Research, in view of Thackara's energetic calls for visual expertise, I assert, is a compelling brief for the next researcher.

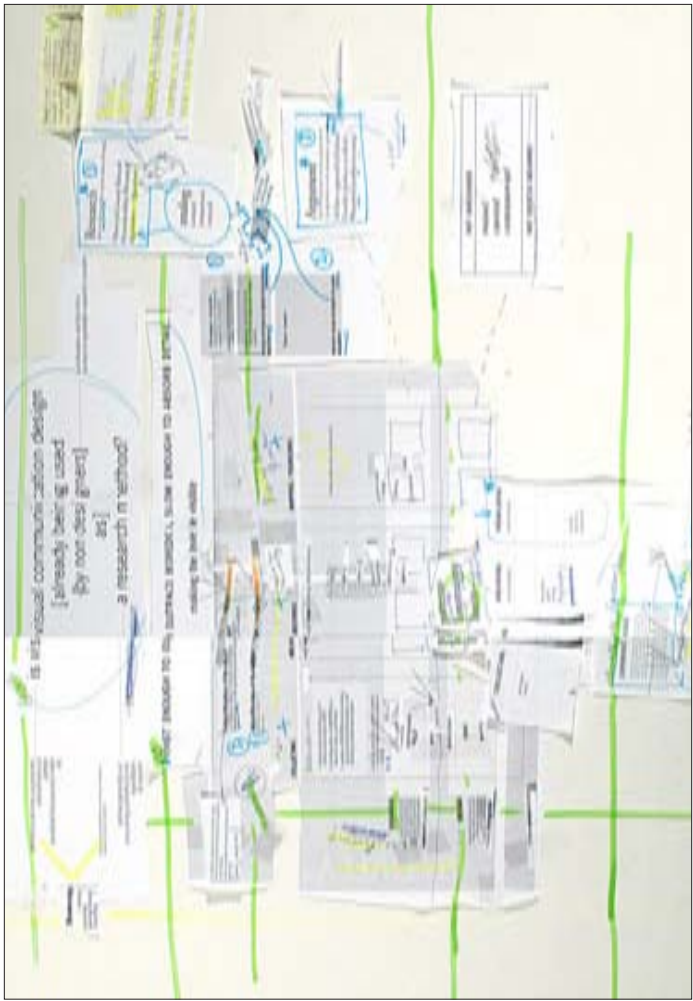
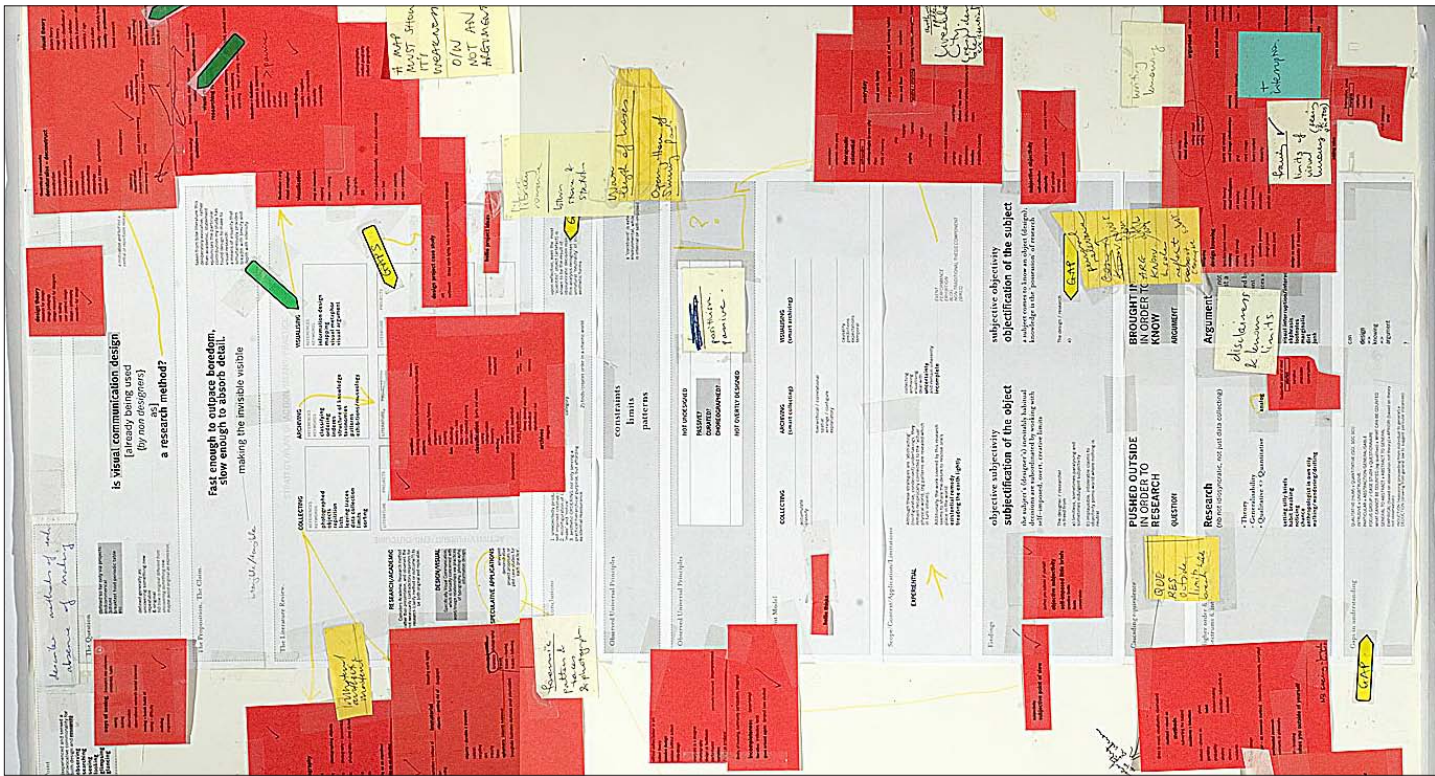
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Item 1. My process: Collecting.



Item 2. My process: Ordering.

Item 3. Cycling conundrums.

A full review of the systemic and interconnected benefits and obstacles related to encouraging cycling is largely outside the scope of this research. However here I outline two specific cycling promotion 'conundrums', so-called since our common sense reasoning is confounded by statistically-determined logic, which highlight the complexities involved in promoting cycling.

A risk worth taking: the risk of fatality when cycling is slight compared to the risk of fatality from not gaining the physical activity health benefits gained by cycling.

Director of Health Promotion Chris Rissel warns that to become 'fixated on the injury and risk-management aspects of cycling' is to 'forget the physical-activity benefits'. In fact the British Medical Association has calculated that the ratio of *benefit of cycling* (improved life expectancy resulting from regular cycling etc) to *risk involved* (accidents, death) is 20:1 (British Medical Association 1992; cited in Rissel 2006:19). Rissel states,

'physical inactivity is the second greatest contributor to the burden of disease in Australia. Only tobacco is worse. Physical inactivity contributes directly to almost 10 000 deaths each year through coronary heart disease, type II diabetes, colon cancer, breast cancer and stroke' (Rissel 2006:19).

Rissel calculates that approximately 31 fewer deaths would occur in one year among a group of 100 000 Australians ('evenly spread between the ages of 20 and 60'), if they were to take up regular cycle commuting and so gain from the physical-activity benefits. Even in the worst-case scenario where statistically we might expect seven of these 100 000 to die on the roads while cycling, we still gain a 'net benefit of 24 lives saved' (Rissel 2006:19).

More cycling makes cycling safer, which in turn encourages more cycling (and conversely less cycling makes cycling more dangerous, which in turn discourages cycling).

The concept of 'safety in numbers' was first established in 1949 by Smeed when investigating motor vehicle travel (Smeed 1949 cited in Robinson 2005:47). This principle describes a negative exponential curve in transport statistics, whereby as the amount of travel increases, the fatality and injury risks associated with that travel decrease. Jacobsen published the first formal analysis considering cycling in 2003 '[examining] the relationship between the numbers of people walking or bicycling and the frequency or collisions between motorists and walkers or bicyclists' (Jacobsen 2003:205). He found a similar non-linear relationship, concluding that

'A motorist is less likely to collide with a person walking and bicycling if more people walk or bicycle. Policies that increase the number of people walking and bicycling appear to be an effective route to improving the safety of people walking and bicycling' (Jacobsen 2003:205).

Robinson (2005) concurs, having later repeated the study in Australia and finding that 'If cycling doubles, the risk per kilometre falls by about 34%; conversely, if cycling halves, the risk per kilometre will be about 52% higher' (Robinson 2005:47). Accordingly Robinson recommends that 'policies that adversely influence the amount of cycling ... should be reviewed' (Robinson 2005:47), although this unexpectedly and controversially includes compulsory helmet legislation, since 'In Victoria, after the introduction of compulsory helmets there was a 30% reduction in cycling [which] was associated with a higher risk of death or serious injury per cyclist, outweighing any benefits of increased helmet wearing' (Robinson 2005:47).

These two conundrums suggest that promoting cycling can be approached both from a bottom-up and a top-down perspective, which reflects a kind of supply-and-demand catch-22. Policy makers in charge of government budgets can dedicate funding for building cycling infrastructure (top-down). On the other hand individuals can cycle and can 'vote with their wheels' so to speak – not only gaining personally from the health benefits – but contributing to the trend of increasing the safety of all cyclists (bottom-up). However, both of these options require significant commitment. Such budget allocation requires vision and leadership, to overcome the argument that there is no demand for these facilities in view of the currently low numbers of people cycling, and to instead *lead by supply*, maintaining that once the facilities are built 'they will come'. Similarly, the decision to cycle despite the absence of dedicated cycle lanes in order to *demonstrate the demand* for dedicated cycle lanes, is a far from ideal proposition to be faced by an individual each morning.

Item 4. Running *BikeWork*: preparation and data collection.

a. The event chosen: Critical Mass.

As I have mentioned, the chief goal of this project is to apply my model, and so the actual subject of the project is immaterial. It happens to be cycling as a result of my own interests and activities. Cyclists are a notoriously difficult group of people to investigate, since they make up a relatively small proportion of the general population and there are several problems associated with 'intercept surveys' of commuter cyclists *en route* (Australian Bicycle Council 2000:17). Therefore my chief concern is to gain access to a convenient sample – rather than an accurate representation – of cyclists.

'Critical Mass' is a monthly global protest to raise awareness of commuter cycling. In the past I have been semi-regular participant of the Sydney Critical Mass that meets at Hyde Park. This project took advantage of the November Critical Mass that traditionally rides across the Sydney Harbour Bridge, attracting larger numbers and more varied cyclists. My choice to focus on the November Sydney Critical Mass represents a practical trade off: this is a warped sample of cyclists since Critical Mass is a cycling protest, but less warped than usual because of the novelty of the November Bridge ride.

A background to Critical Mass.

The first Critical Mass took place on the last Friday of September in 1992 in San Francisco, led by Chris Carlsson, and involved the 'spontaneous' gathering of numbers of cyclists on a main city thoroughfare during Friday night rush hour. He described the goal as to give 'bicyclists of all persuasions the chance to see that [they] are not alone, and that [they], too, have a right to the road' (The editors of *Bicycling* magazine 2003:117).

The phenomenon of Critical Mass has remained consistent across the world and throughout the years. In sixty cities in the early evening on the last Friday of the month, cyclists (as well as roller bladers and skate boarders) continue to meet (Sydney Critical Mass 2003). The Sydney Critical Mass, who meet at Hyde Park fountain at 5.30 p.m., describe their monthly ride as 'an organised coincidence where large numbers of cyclists... happen to ride in the same direction, at the same time, through city traffic' (Sydney Critical Mass 2003).

Although the reality is once a month Critical Mass disrupts Friday night rush hour city traffic, the Critical Mass slogan asserts that Critical Mass 'doesn't block the traffic – [it is] the traffic' (Sydney Critical Mass 2003). The Critical Mass reasoning is that 'cars clog up the streets

twice a day 29 days of the month' which puts into perspective 'cyclists doing the same on a limited scale once a month' (Sydney Critical Mass 2003). But '[for] most participants slowing the traffic is incidental to their primary aim of raising the profile of cycling' (Sydney Critical Mass 2003). We might say that despite the modesty of what Critical Mass actually is – a small group of cyclists meeting to ride home together on Friday night – its aims are ambitious: '[reclaiming] the street space for people', '[campaigning] for safe, useable cycling facilities' and '[being] seen and vocal about creating a vision and experience of a possible future' (Sydney Critical Mass 2003) (→IMAGE 37).

The November Critical Mass in Sydney

In Sydney, the November Critical Mass is renowned for taking on the 'Bridge' (→IMAGE 38).

'Once a year, [Sydney] Critical Mass rides over the Harbour Bridge in a colourful celebration of human-powered healthy and environmentally friendly transport. Join 1 000 cyclists, roller [bladers], skaters and velocops on this police and RTA approved community event' (Critical Mass Sydney 2005).

Based on my previous experience, I knew that this ride attracted a much larger number of participants, and not only the regular, core advocates. My understanding is that the numbers have to be high in order for the event to be permitted by the authorities, and so it is extensively publicised on email lists as well as street flyers. People are attracted by the novelty of a free, legal and safe ride across the bridge: cycling across the bridge is usually confined to a segregated cycle lane, and while there is an annual event that includes cycling freely across the centre of the bridge, this has a considerable entry fee.

b. Running my project.

Three days prior to the ride, I posted the Sydney Critical Mass mailing list introducing myself as 'a commuter cyclist (member of LBUG, BikeSydney and BNSW, and semi-regular Masser), as well as a doctoral researcher in Visual Communication Design, UTS'. I described my intentions to photograph and very briefly survey interested riders at Critical Mass that Friday, stressing that this was for a PhD research project and not market research.



Image 37. Sydney Critical Mass, at an intersection at Town Hall, November 2005
(courtesy Moz 2005)



Image 38. Sydney Critical Mass, crossing the Sydney Harbour Bridge
(courtesy Moz 2005)

On the day

My team included two people to hold up the temporary makeshift studio (who also handed out the Chuppa Chumps lolly-pops), two photographers operating simultaneously, a manager for each 'studio' Collecting and displaying the surveys, and art directing the shots, and three recruiters moving through the crowd and handing out surveys and pens.

(→IMAGES 39–41)

The process for the participant was: explained the project; asked if they wished to participate; provided with a survey and biro; bring the completed survey, biro and the bike to the studio set up; their survey is put in the shot and they are directed to stand in front of the backdrop photographed with bike and their survey; receive their Chuppa Chump 'thank you'.

The team was told that Critical Mass was a relaxed friendly atmosphere but there were certain things I needed to be done exactly.

- The participants needed to be informed, willing and to provide a signature.
- Preferably helmet off, sun glasses off, and with the bike and with all their gear and on a white background
- The photographs had to include both the participant and their survey to capture their survey number. (Otherwise the survey could not be matched with the image.)

Consent and anonymity

All participants signed a consent before participating, developed from standard human research ethics guidelines (Human Research Ethics Committee 2005).

'I, _____ (your name) agree to participate in the research project, that involves having my photograph taken and completing a written survey, being conducted by Helen Box.

- I understand that my image and responses will be used to develop a visual approach to bicycle advocacy that will be reported and viewed in an academic setting at UTS.
- Helen Box will contact me by email to seek permission, if my image and survey responses were to be used in anyway outside of this setting, such as in an exhibition or publication.
- I understand that my name and email will only be used by Helen Box to contact me and will never be disclosed as part of this study, or to a third party.



Image 39. The bike team
(courtesy Rojas & Marcusson 2005)



Image 40. A cyclist approaches
the 'studio'
(courtesy Rojas & Marcusson 2005)



Image 41. After Critical Mass has
left - as the 'studio' has been
'dismantled', the photographers
decide to shoot each other
(courtesy Rojas & Marcusson 2005)

- I understand that I can contact Helen Box if I have any questions about this project and I can request to withdraw from this study at any point without providing a reason.
- I agree that the research data gathered from this project may be published in a form that does not identify me in any way.'

Ultimately, I made the decision to keep all images unrecognisable (anonymous). As this project was an evolving, exploratory, heuristic practice, I could not adequately inform the cyclists at the time of how their image would be used, and so in my mind they were unable to give suitably informed consent for the use of their image as I have finally used them. If, in the future, I wanted to use these images without obscuring the faces, since participants also provided their email addresses (at my request), they would be contacted to grant permission.

Item 5. Not ‘non-mainstream’: recent trends concerning the ‘image’ of cycling.

a. Cycling advocacy.

Recent advocacy thinking recognises that a significant obstacle to more people choosing to cycle (related to motorist attitudes and the lack of dedicated bike lanes) is that the perception that cycling is not a *mainstream* activity, despite in reality having a very wide appeal.⁹⁰ In his article for *Australian Cyclist* magazine, Nick Bone explores this ‘misconception’ that cycling is a ‘fringe activity’ (Bone 2007:46). One of his interviewees (a pro-cycling politician) points out that the reality is cyclists are a ‘disparate group of people, some of [them] cycle for transport, sport, recreation, commuting, it’s a very diverse constituency’ (Schmigel; quoted in Bone 2007:46). Accordingly the CEO of Bicycle NSW, (the peak body for the promotion of cycling in NSW), Alex Unwin explains that ‘(cycling is) a mainstream activity really....[everyone wants] to make transport work better, improve public health and reduce greenhouse gas emissions. It’s not something only a select few [in] our community are interested in’, and indeed insists that cycling ‘doesn’t need to be treated as anything that’s non-mainstream’ (Unwin quoted in Bone 2007:46).

Interestingly enough Unwin and Bone suggest that a good deal of cycling’s fringe/non-mainstream reputation is maintained by cycling advocates themselves. Bone asks,

‘Have cyclists got the capacity to graduate from *insurgency* to being a part of the mainstream? Have [they] got the ability to stop being anti-car and [instead] start being pro-bike?’ (Bone: 2007:46 my emphasis)

Unwin points out that conventional advocacy messages, albeit ‘passionate’ and ‘right [correct]’, are unfortunately ‘almost seen as preaching’ and are not ‘palatable’ (Unwin quoted in Bone 2007:46).

b. Cycling-related advertising.

These magazine advertising examples (→IMAGES 42 & 43) from the bicycle manufacturer, ‘Trek’, seem to work very carefully to counter the ‘unpalatable’, ‘insurgent’ impression of cyclists and cycling accounted for by Unwin and Bone. In the first example (→IMAGE 42), a

⁹⁰ At a cycling promotion workshop I learned from one of Sydney’s most experienced and dedicated advocates that it is best practice to refer to cyclists ‘as people who ride bikes’. Apparently the term ‘cyclists’ is taboo for promotional purposes, because it conveys discouraging and exclusive associations such as ‘hippies’ and athletes.

couple is in street-wear having lunch, incidentally accompanied by bicycles. The copy appeals to the person that is in tune with the 'fast pace of city life': 'Whether you're ... on [your] way to work or making a refueling stop at your favourite cafe', it seems that cycling (of course specifically with a *Trek*) is for you. The second example (→ IMAGE 43) again depicts an individual again in street-wear (rather than bright Lycra) who is cycling, and the typography evokes non-confrontational contemplations we understand are drifting from the cyclist's mind, such as '[I] just burned off that piece of cake from last night'.

In other cycling related advertising, I noted additional overt attempts to project a 'normal' image of cycling. The Transport For London 'Get on your bike' campaign featured television advertising, which portrayed and made appeals to three specific target groups: *Youth* ('well I like going out on my bike because I like checking out ... guys on their bikes'); *Family* ('You go to the parks and feed the animals with them on the bike – and that's good exercise for the kids and for us!'); and *Young Professionals* ('[When I travel around London by bike] I feel that the city's mine – it's my patch, it's my territory') (Transport for London 2005).



Image 42. *Trek* bicycle magazine advertising (circa 2005)

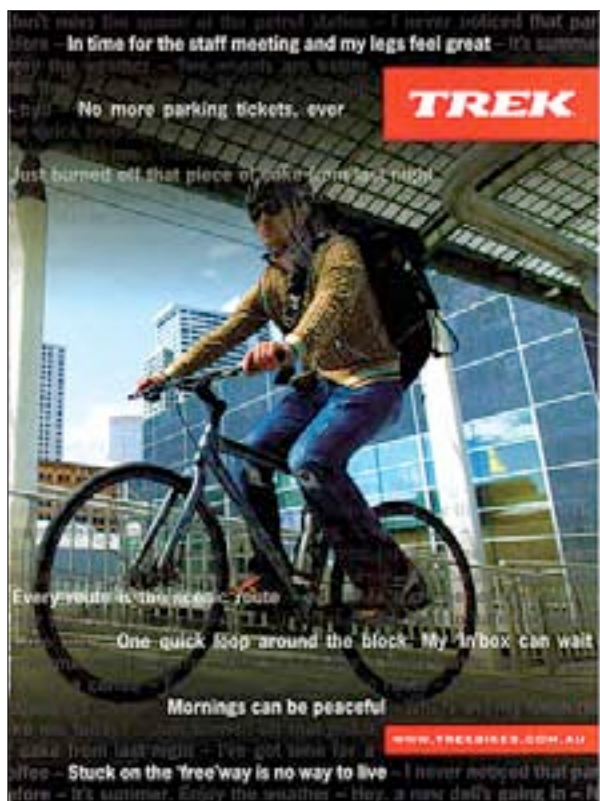


Image 43. *Trek* bicycle magazine advertising (circa 2007)

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