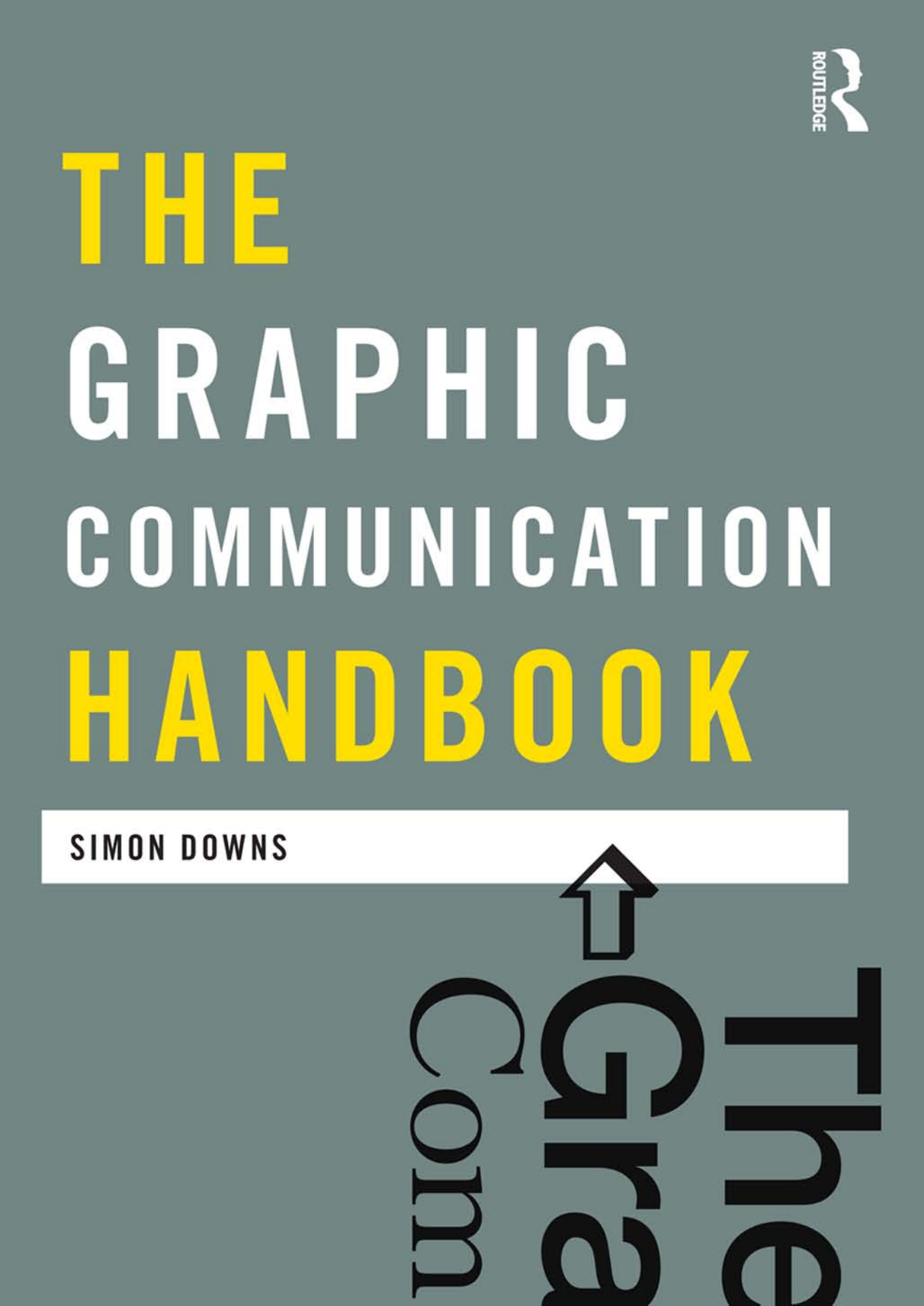
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THE
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HANDBOOK
SIMON DOWNS
The
Graphic
Communication

The Graphic Communication Handbook

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Simon Downs is Lecturer in Graphic Communication at Loughborough University, UK. He is Managing Editor of *The Poster – The Journal of Visual Rhetoric in the Public Sphere*, Co-Editor of *Tracey – The Journal of Contemporary Drawing*, one of the authors of *Drawing Now: Between the Lines of Contemporary Art* (2007), and Associate Editor of the *Journal of Technology, Knowledge and Society*. He is a Fellow of the Higher Education Academy, and a member of the Design Research Society's Special Interest Group on Design Pedagogy.

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The Graphic Communication Handbook

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Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2012
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada
by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging in Publication Data
Downs, Simon.
The graphic communication handbook/Simon Downs. – 1st ed.
p. cm. – (Media practice)
Includes bibliographical references and index.
1. Commercial art—Vocational guidance. 2. Graphic arts—Vocational guidance. I. Title.
NC1001.D69 2011
741.6023–dc22
2011009220

ISBN: 978–0–415–55737–5 (hbk)
ISBN: 978–0–415–55738–2 (pbk)
ISBN: 978–0–203–80466–7 (ebk)

Typeset in Helvetica and Avant Garde
by Florence Production Ltd, Stoodleigh, Devon

This book is dedicated to Claire Lerpiniere:
a fine design educator without whom this
book would not have been possible;
and to Andrew Chong, an inspirational
graphics educator

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Introduction

This book is called *The Graphic Communication Handbook* not *The Graphic Design Handbook*. Getting names right from the off is important: call it *Pokey Cola*, and it doesn't taste as good; call it a *Plum* computer, and suddenly it's not so glamorous to play with; and, over the course of the twentieth century, the title 'Graphic Design' has often come to mean something narrow, something limited. Something less than the subject's history or its future prospects.

This change has been quite rapid, perhaps sparked by reactions to social change (maybe Jamie Reed's punk graphics scared folk) or technical evolution of old processes to new in computer-aided design and manufacture (CAD/CAM) in the 1980s, or it is possible that the art theorists scared the practitioners with their post-modernist talk. So, where once Saul Bass made films, logos, industrial design and posters, without for a moment doubting that he was a graphic designer, and William Adison Dwiggins *knew* he was a graphic designer (he did invent the term), despite being a publisher, practising calligraphy, writing and making puppets (no lie!), there are people who try and pin graphics down to its most constrained historical basics as communication through print. As you are reading this book, I'm going to assume that you are not one of those people, and that you see what the subject is and can be. I'm going to work from the assumption that you want to be part of a bigger, better world, where graphic communication is big and clever, brave and fun!

This change in meaning has come about because, on one hand, technology has allowed us to design graphics with radically new media that our ancestors in design could never have anticipated, and in response to new social needs that tradition could never have anticipated. By contrast, the narrow view of the possibilities inherent in graphics has come about because people with vested interests in the traditional ways of doing graphics have declared that 'the graphic crafts are the graphic arts are graphic design'. Which is simply not true. Let me explain.

GRAPHIC/ART

The word *graphic* is defined by the O*xford English Dictionary* (*OED*) as:

> A. adj. 1. Drawn with a pencil or pen. *Obs*. 2. Of or pertaining to drawing or painting. ***graphic arts***: the fine arts of drawing, painting, engraving, etching, etc.; also, the techniques of production and design involved in printing and publishing . . .

The word *art* is derived from the same root word as artifice and artefact. It carries many meanings, but the most applicable from the *OED* are either:

> I. Skill; its display, application, or expression.
> 1. Skill in doing something, esp. as the result of knowledge or practice.

or

> 8. a. The expression or application of creative skill and imagination, typically in a visual form such as painting, drawing, or sculpture, producing works to be appreciated primarily for their beauty or emotional power. Also: such works themselves considered collectively.

As such, we are left with the meaning of the term *graphic art* meaning something like '. . . a person who skilfully makes artefacts with drawing, painting and printing'.

Unfortunately, this interpretation leads to the fine arts confusions, where the term 'graphic' is used to indicate a style, not a process, so that the work of Roy Lichtenstein becomes a 'graphic art work'. **Graphics is not a style!**

The *graphic crafts* are the historic tools and processes we use, and the ways of thought imposed by these tools. However, the process of making graphics is not the same as communicating graphically. So, where lithographically printing a poster is a craft, using that poster to change the world is design. There are historic reasons for certain ways of making being associated with graphics; time moves on, and we must move with it.

The *graphic arts* are a historic social role that goes with the subject. A role with status, a job description that brings us a certain kudos, a profession you can be proud of. Look at the etymology of the words and you have a person who skilfully makes artefacts with drawing, painting and printing.

However, as with all professions, it is in the profession's interests to solidify the status quo, to define what is in the club and what is unforgivable and foreign. Step out of line and you're out of the club.

Graphic design is the logical combination of the two – the arts and the craft – and as such it does a very fine job. Combining the process with its skilful application was a very good way of describing the subject. But, and it is a huge but, the arts and the craft bring with them ways of doing and ways of thinking that don't cope very well with the new. Craft typographic principles don't translate in a predictable way to screen-based media, nor to other cultures. Rules about applying craft print media don't translate very well to interactive animations: the paint drips off the computer screen, for a start.

By contrast, *graphic communication* does not care about history per se, unless that history serves the job. It does not care if its designs fit the status quo, only that they work for the benefit of those who will use them. A graphic communicator does not

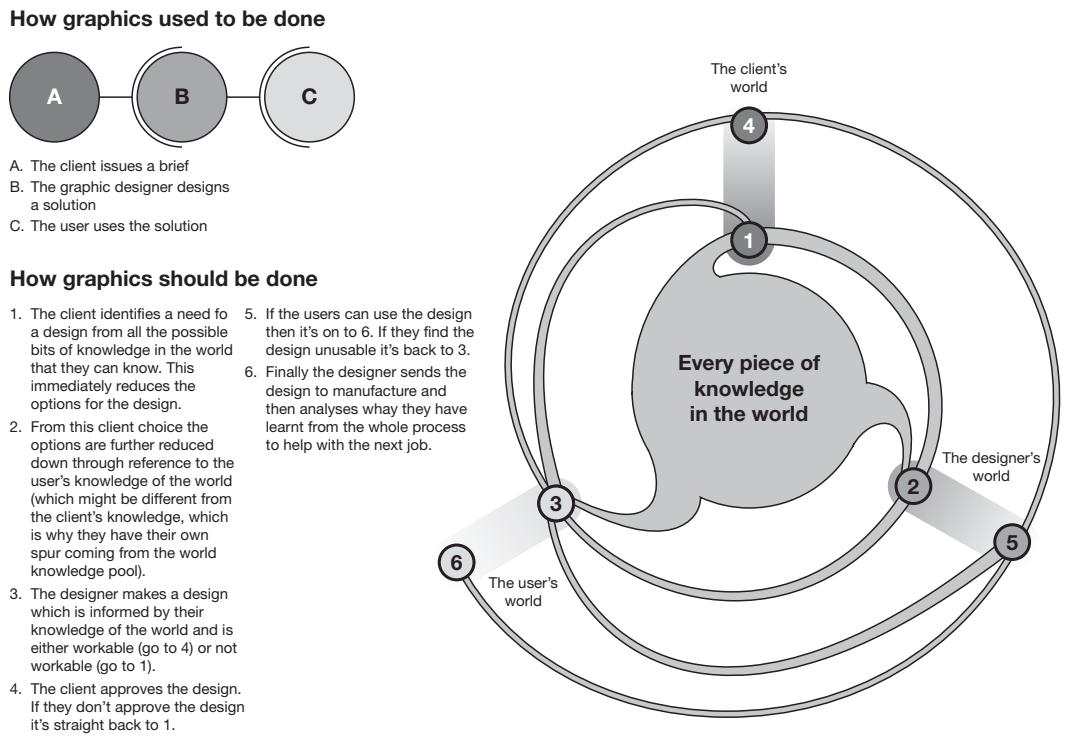

FIGURE 0.1
The traditional model of graphic design was a simple, linear affair; for reasons that are discussed later, the current model gets less linear all the time

have to serve the people with the money and power to make the presses run; it should celebrate the opportunity to play badly, if it makes the world a better place. A graphic communicator will do whatever it takes to get the job done.

Graphic communication is not a way of making, a box of tools, though it uses lots of tools: it is a process of thinking and planning, so that when we do what we have to do, when we make what we need to make, we do it right first time, every time. Graphic communication has a different relationship to those we design for. In the past, graphic designers had to make one person happy: the client. Graphic communicators understand that the client may have the wrong idea about the needs of the user and, by blindly serving the client's wishes, they may be damaging their interests (because, although the client may be happy, the dissatisfaction of the user will mean the client gets no long-term benefit).

I have on my bookshelf at home a copy of Ken Garland's 1966 *The Graphics Handbook.* It is a wonderful book, full of understanding and enthusiasm. I am always struck by the clarity and insight of Garland's understanding of the subject, but also how the number of ways of graphically engaging with people has grown since his book was published. Designers can do more in 2011 than could have been imagined in 1966.

Beyond the process, graphic communication is knowing that people build identity and meaning in their lives with visual symbols: my colleague Malcolm Barnard will talk more about this in Chapter 11. Graphic communication is understanding that those symbols are real – a matter of life and death – to the user and the user's community. It's about understanding that, if we can work with these symbols, we can speak clearly to our users in ways that they understand as honest and meaningful.

Graphic communication is showing people the things they urgently need to understand, in ways that they can understand. We are like shadow puppeteers: we stand between the candle and the night, casting images that illuminate the world for our viewers. This work will inform, entertain, sell to, protect from, agitate, pacify, clarify, illuminate, bring people together and divide them.

Graphic communication is the process through which we can decode the visual culture of those we need to communicate with; it is the process of planning a response; it is the process of making a solution.

Sometimes, most of the time, this means using tools and processes that have their origins in graphic design. Our DNA is the same as graphic design's, in the same way that your DNA is your parents'. But that doesn't make us the same. We proudly carry a heritage and are in some measure defined by this heritage, but we make ourselves through the things we do.

The philosopher Gilles Deleuze neatly summed up this proposition with his observation that many academics are fond of defining the world in terms of trees and branches (this thing is the child of that thing and the parent of something else, and

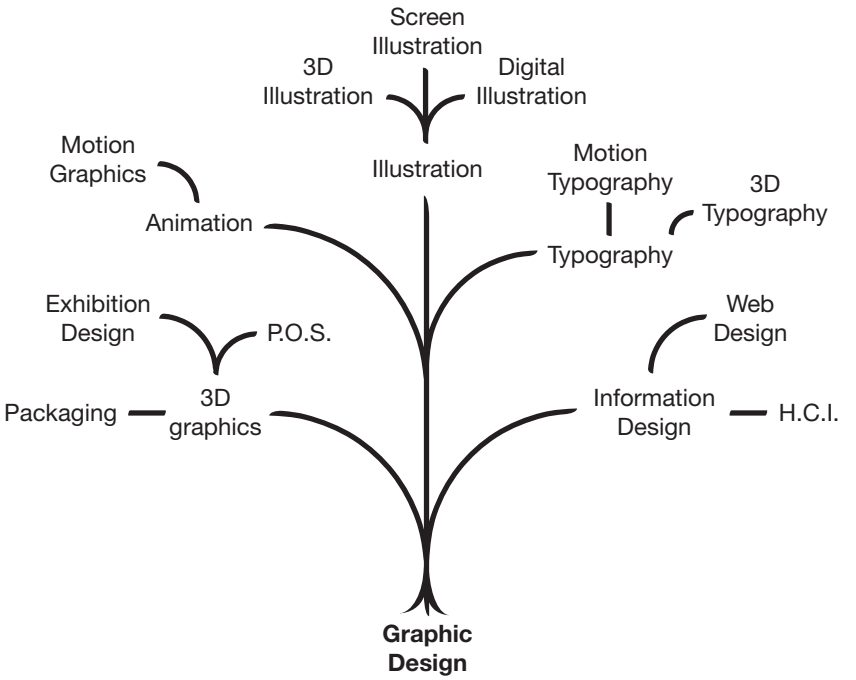

FIGURE 0.2
Graphics as a tree. Everything is distinct; nothing connects. In this diagram, motion typography and animation are completely different branches

is defined by this relationship). 'Not so', says Deleuze: in the case of cultural things (and graphics is certainly a cultural thing), we are like rhizomes. Rhizomes are those knotty masses of root things, where all the parts of the cluster of plants are connected as one organism, sharing and communicating, and yet the tiniest slice, containing the DNA of the whole, can grow into a whole new plant. Deleuze pointed out that this was a smarter model of culture than the tree.

In this model, while all the parts of graphic communication contain bits of graphic design's heritage, and all the parts of graphic communication – from typography to illustration, from HCI to packaging – can stand on their own, they are all inter-connected. All the parts support and nourish the whole, while being distinct. So, we will talk about graphic communication (the whole thing), rather than graphic design (the single part).

This book believes that it helps to look at the whole, the twisted mass of connections, the common elements that bring us together, and to downplay the differences. Which is why this is *The Graphic Communication Handbook*.

In this book, we will work through the main stages of a single graphics job: from the first task (getting the job) to the last (making sure you can get another one); taking

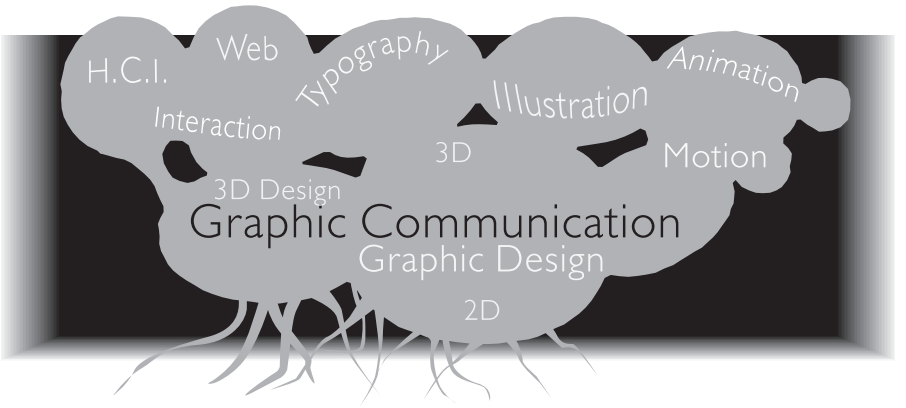

FIGURE 0.3
Graphics as a rhizome

in such popular destinations as briefing, making and the ever favourite, getting paid; and also visiting some less popular but essential destinations such as research, development and self-publicity.

The book is designed to be consulted when you need advice. It was never conceived as a book you will read from cover to cover. (You can if you want. Like Deleuze's rhizome, the parts, while distinct, make a whole.) The handbook was intended to be a reference source to dip into when you need to. If you need to review your plans for putting a folio or CV together, it's there in a form you can reach in and grab.

That said, some of the content of the book is not so easily acquired, and it will require a degree of effort on your part, some thought, *some reading.* The world is complex, and a graphic designer must know the world. An old chum of mine once put it as, 'A graphic designer must be a mini-expert on everything.' This is true of graphic design, and it is even more important for graphic communication. If we don't know the world, all we have is the content of our own head, and that is a terrible position for any designer to be in.

So, there are times when the book will ask, and assume, that you are driving your own studies and practice, because the book cannot do it for you. The book cannot see movies for you or visit clubs; the book cannot travel or read books. These are things you have to do for yourself.

What the book will do is offer you explanations of why doing these things will help you be a better, more imaginative, braver and more exciting designer.

The book is full of facts and it is full of opinions. In writing the book, I have tried to keep the two separate and well marked. If there are disputes about the facts, I'll try and play the debate out for you, but remember: it is always your duty to check and not believe everything that you read.

At the end of your design education, you should be able to do the following things:

1 uncover user and client needs – which may be different from the things they ask for;
2 uncover graphic languages necessary to address these needs – which will be specific to their cultures and their needs;
3 uncover material processes that serve these graphic languages – find the right ways to produce the graphic languages.

The book will offer some pointers that will help you do these things.

Above all, I'd like to thank all the kind people who contributed to the book. You didn't have to, but it would have been dull without you.

NOTE

This book was written using a mix of commercial and OpenSource software as a testament to the maturity of the OpenSource software project:

1 It was written in OpenOffice and LibreOffice. The graphics were made and edited in either the Adobe CS suit or with the OpenSource (and free to use) GIMP, Inkscape and Scribus.
2 It was made on two Macs running OS 10.5 and 10.6, two Ubuntu machines running Ubuntu 9.10 to 10.10 (free to use).
3 Shortage of cash need be no barrier to doing beautiful work.

CHAPTER 1

A step towards the reinvention of graphic design[1]

Gui Bonsiepe

I do not pretend exclusivity of, or paternity over, the proposals presented in this paper; nor do I expect an endorsement of my interpretations of the works consulted.[2]

However, I do claim that the reassessment of graphic design and graphic design education differs from the design conceptions that represent the common-sense understanding of graphic design. I want to draw attention to the fact that I repeatedly had to make use of neologisms and linguistic terms that are generally not related to the discourse of graphic design. This is not the result of pure whim. If we want to reinvent and reconstruct graphic design, we have first of all to create linguistic distinctions capable of grasping a new reality that otherwise would not be understood if we remained bound to standard terminology.

NAME AND JUSTIFICATION OF GRAPHIC DESIGN AS DISCIPLINE

The term 'graphic design' and its corresponding term 'graphic designer' have strong ties with a particular *technology*, i.e. *printing*. Therefore, graphic design runs the risk of not covering new phenomena that result from technological innovations, particularly computers and computerisation. As new concepts arise, such as:

- audiovisual means
- multimedia
- information management

they reveal the limitations of the traditional concept of 'graphic design'. We observe a growth in the domain that has been called '*retinal space*'. This expansion requires a reconsideration of the skills and professional attributions of the graphic designer. This forces us to ponder the convenience of using a new term, recognising the possibility and probability that this is a polemical issue.

It is traditionally understood that the graphic designer is mainly a visualiser, one who organises visual components that are then reproduced with the aid of printing technology. Consequently, among the list of objects of professional action, we find:

- logotypes
- stationery
- book and magazine layout
- advertisements and campaigns
- posters
- packages (labels)
- exhibitions
- displays
- corporate identity systems
- signage systems.

Therefore, I propose to put emphasis on graphic design as information management and link it to the notion of information. Though this concept is far from clear, it would identify the central issue of graphic design today and for the future: information and its organisation. Notions such as:

- information explosion
- information glut
- visual pollution

reveal a set of new issues and problems that the graphic designer should confront.

If there exists a predisposition to consider this possibility, then one can also consider the convenience of using a new name for the specialty: '*information designer*' (or the more compact '*info-designer*'). An info-designer approaches the tasks of efficient communication less from the perspective of visualisation, or 'creation' of images, and more from the perspective of organising information. I propose to shift the role of the graphic designer from translation of information from a non-visual state into a visual state, to the *authorial organisation of information*. This proposal reflects recent changes in technology known under terms such as *hypermedia* and *hypertext*, where the world is seen as a huge data bank, in which the reader is author of the information molecules that he or she collects and establishes connections between. According

to this line of speculation, visualisation would be removed from its prima donna position and put into relation to a central question of today: *the organisation of information for effective communication in the most diverse domains, from education to entertainment*.

It is not by chance that the notions of 'education' and 'entertainment' appear together and are put into relation, though generally they are thought of as mutually exclusive. In this way, one would take into account the domain of play (aesthetics) – and 'play' is a more fundamental concept than 'fun', associated with the ephemeral, the superficial and even the frivolous and the individualistic. This reorientation of graphic design also results in liberation of graphic design from its ancillary status in the domain of advertising and promotion. This unlinking does not mean to deny the economic importance of advertising and marketing, but the environmental crisis leads to questions about the ecological viability of a lifestyle and society centred on stimulation of sales and promotion of merchandises (from detergents to political candidates). Particularly in Latin America, with its torn social fabric, the info-designer, through his or her work, might attend to needs less focused on competitive consumption, thus creating a counterweight to a lifestyle that currently only a small segment of society attains.

PROFESSIONAL PROFILE OF THE INFO-DESIGNER

A profile of a profession can be defined with the help of a three-dimensional matrix:

1. concerns that are brought into play by a particular profession and that are addressed under a particular perspective (approach);
2. the objects of professional activity;
3. the competencies (know-how) necessary to act efficiently in a particular domain.

We can use the medical profession as an example. A doctor looks at the human body from the perspective of illness and provides care. Objects of his professional activity include diagnoses, surgical interventions and prescriptions. In order to be capable of producing these objects, he needs knowledge of anatomy, physiology and causes of illness.

The info-designer approaches the domain of communication from the perspective of organising information with the aim of taking possible effective action. With a slight degree of exaggeration, one could say that the final aim of the info-designer is not communication, but effective action. In the same way that a doctor takes care of human illness, the info-designer concentrates his or her attention on what I call 'informational opacity'. The info-designer would be a specialist in articulating information and provides techniques to navigate in a highly complex information universe. Apart from the traditional printed objects, the info-designer would assume

responsibility for new groups of communication artefacts that are based on informatics or computers:

- interface design for computer programs;
- design of 'information bodies' (texts in both a metaphorical and broad sense) for formation, instruction and entertainment;
- design of audio-visual means.

To intervene as designer in these new fields that are part of the worldwide process of digitalisation, the info-designer needs the following competencies:

- be capable of selecting and structuring information and building coherent bodies of knowledge;
- be capable of interpreting information and transforming it into objects of the retinal space;
- be capable of understanding in productive terms the interaction between language, graphics, sound and music (in the dimension of time);
- be capable of using computer programs for scripting, illustration, image editing, animation and desktop video, as well as programs for layout and letter design;
- be capable of managing the constitutive elements of the retinal space (colour, texture, size, orientation, contrast, transitions in time, transformation, rhythm, etc.);
- be conversant with the analytical apparatus of visual rhetoric;
- be familiar with theories and techniques required to evaluate the communicational efficiency of design proposals;
- be capable of realising design studies and design research (the cognitive dimension of the design process) and presenting design proposals in a coherent manner;
- manage design projects and companies (taking into account that an info-designer as partner or owner of a design studio is and has to be a manager of a firm).[3]

To this incomplete list, I would add the competencies that are considered standard in the profession and academe:

- open historical formation in the domain of graphics, literature, art, music, science, technology and industry;
- training in the professional aspects, such as contracts, determining fees and professional ethics;
- knowledge of production processes in the domain of info-design and the socio-ecological impact of the work of the info-designer.

CORE CURRICULUM FOR INFO-DESIGN

The list of responsibilities and competencies of the info-designer can be mapped on to a study programme in different ways. The resulting programme would reflect the local conditions and, above all, the interests and experiences of the persons who formulate the programme, i.e. the faculty staff. In opposition to current models of design education, I would emphasise that an up-to-date study programme should include the cognitive domain of the design process. As far as I know, this is not standard practice, though there are certainly attempts in different parts of the world to find a new approach to design education. Perhaps there exists a consensus, particularly in the group of design students, that the central function of a study programme consists in stimulating creativity. Sometimes, designers behave as if they own the monopoly on creativity, an attitude that can be found also in art circles. This attitude seems to me arrogant and obnoxious, and probably has contributed to the counterproductive tendency to set the world of design apart from the rest of the world. Creativity is not a gift of a happy few privileged persons selected by divine providence. Furthermore, it might be more appropriate to talk of competence to innovate. To be competent in innovation implies breaking of routines, and therefore courses devoted to creativity techniques consist basically of a set of recommendations to break routines and taboos. I propose to put the term creativity into the deep freeze for a while.

With regard to the terminology for the various disciplines in a graphic design course, we observe a certain incoherence. For example, what in one programme is called 'visual methodology' is called 'basic design' or 'design fundamentals' in another programme. The content of the design discipline sometimes cannot be deduced from its name. If we use the name of a scientific discipline, for instance, psychology, we don't get a clear idea about its content. For this reason, it might be more appropriate to use more descriptive names to characterise the various course items. To create such a programme, it is necessary to refer to diverse areas of human knowledge and to scientific disciplines that provide the know-how for grounding the work of the info-designer and protect it against the danger of short-sighted pragmatism:

- theories (psychology) of perception;
- theory of language (in particular of speech acts);
- semiotics;
- visual rhetoric;
- cultural history (including art, literature, design, science, technology and industry);
- history of visual communication;
- anthropology of everyday life;
- theories of communication and information;

- philosophy of science;
- applied mathematics (analytical and descriptive apparatus for describing shapes);
- basic concepts of programming and computer science;
- basic concepts of management;
- design theory and criticism, to list but a few.

The description of the precise course content would constitute the future work of the group and provide a point of departure to put graphic-design education on a more grounded and cognitively more demanding base.

NOTES

1 This paper was originally prepared in early 1993 for the Education Project developed in Latin America for ICOGRADA (International Council of Graphic Design Associations). Participants were asked to present their proposals following an outline formulated by the coordinator of the working group, José Korn Bruzzone.

2 Several of the proposals presented in this document have been discussed with colleagues in various regions of Latin America. Other sources that directly or indirectly present new perspectives on graphic design and graphic-design education include: the journal *Visible Language*, particularly the articles of Sharon Helmer Poggenpohl; the publications of the Graphic Design Education Association; the works of Richard Wurman and Ted Nelson; and articles by Victor Margolin.

3 I don't think that it is necessary to revive the old debate regarding aesthetic sensibility. I take it for granted that the concern for aesthetics is intrinsic to design.

CHAPTER 2

Broad knowledge

> Clearly, as world citizens, designers are strategically important in terms of the global ecosystem's well-being. Ideally speaking, they should therefore be equipped to discharge this responsibility by being conversant with political, ethical, ecological, technological, economic, and other issues. This is easily said but difficult to achieve.
>
> (John Wood, 'The culture of academic rigour', *Design Cultures* conference, Sheffield University, March–April 1999)

> Without knowledge action is useless and knowledge without action is futile.
>
> (Abu Bakr)

In this chapter, we will be looking at why a designer of graphic communications, of any sort, needs to have a broad knowledge of the world and its cultures. An overview on where things fit, how people live and where their cultural, social and political interests lie. We'll look at why this broad knowledge is essential for a designer and not an added extra. Suggestions will be made of ways to gather and make sense of this knowledge.

If we attempt to design without understanding the visual signs and symbols people use to give shape and meaning to their lives, we are like those who drive cars without knowing how they work: sooner or later the fuel runs out, and everything stops.

AN UNCOMFORTABLE TRUTH . . .

We are born into the world innocent, unknowing and empty. As babies, we are born empty of culture, waiting to be filled up with tasty nuggets of cultural experience: obsessions, hobbies, languages, tastes and opinions. Our very sense of what is real, what is possible and what is right is built this way. *Culture* is the thing.

Commonly, when we hear the word culture, we either think of establishment culture – of galleries, of movie premieres, of fat ladies singing opera, of suits – or we think of culture as a synonym of nationality, which is a kind of culture, but not by any means the whole thing.

Others talk of the *multicultural*, which is a little closer to the truth in that it accepts that people have different cultural frameworks. This is a much better way of thinking of culture, but still too conceptually limited. The idea of the multicultural suggests a difference that is clear to see anywhere where a multitude of nationalities live together; you can see this in big cities such as London or New York. Even the most superficially homogeneous cultures, perhaps a small village in Leicestershire or the Punjab, will be host to a multitude of cultures.

Culture is everything that people make, whether they know it or not, whether they intended to make it or not. A graphic work is certainly culture; so is a football chant, a catwalk dress, a hair cut, the way you kiss, the person you kiss, the language you speak to your Mum and the one you speak to your boy- or girlfriend. The plants in our fields and the tiles on our roof are culture.

When you speak to your lecturer, you speak in a different way than you do to your friends. If truth be known, your lecturers speak in a different way to you than they do to their friends – I guarantee it. Each of these small, local 'ways of doing stuff', each 'way of being' is a culture.

You wear a *national culture* that allows you to function in your own country, a *regional culture* and a *local culture* that you wear to mark you out from others in your nation. Beyond that, you will have an identity built on your sex and your ethnicity, which is another culture. You will have a generational identity that is different from that of your parents (and perhaps from that of your brothers and sisters). You will have interests that might reinforce your community identity, but might exist completely outside it: this is yet another culture you are a part of. You are your own multicultural community.

Each of these cultures, deliberately or accidentally, defines itself as a set of codes: what you wear, speak, think, eat, etc., these codes form the basis of communication.

To communicate, scientists and philosophers tell us, designers need to have a model in their head of the people they are intending to talk to. At some level, the designer and the designed for must have access to the same cultural codes. Communication is not, as many older books of graphic design would tell you, a matter of coldly

FIGURE 2.1
Communication is not a matter of forcing our ideas into others' heads. It is an exchange of ideas, a game for two or more

delivering information to others (like a postman who anonymously delivers 'stuff' to you and leaves you to make sense of it); it is about understanding others, so that we can prepare a message using just the right codes to make it seem as natural to them as a greeting from a friend or a hug from a loved one.

To offer a metaphor, older models of communication suggest that the activity should be thought of as the communicator throwing balls (of message stuff) at the viewer until they stick in the viewer's head. The idea is that a graphic communicator will *deliver* a message to the viewer, who has no option to interpret or personalise the meaning. Not only is this explanation incorrect, it seems patronising and more than a little rude.

Current descriptions of communications favour the metaphor of a tennis game, where the communicator and the viewer both volley the message backwards and forwards: communication is commonly described as a *language game* (*Sprachspiel*, in Wittgenstein's original German, if your lecturers ask). The designer needs to be playing the same game as the people he or she is communicating with, or the design will fail. If designers do their job well, it is entirely possible that the user will never consciously consider that they have just been affected by our work. Don't believe me? Consider this:

If we read a novel that is well designed and never consider the act of reading the text, the story just seems to happen in your head. This ability to unthinkingly use books correctly happens because novels are a very specific cultural form, a form that we are familiar with, and they are designed to follow the rules of the form. If I

were to make a minor change and reorder the pages to follow the Japanese book form, reading from the back forwards (but still in English), it would now be impossible for the reader unthinkingly to use the novel, because he or she would have to be actively thinking about the act of reading and not the story. In a well-designed piece of graphics, the cultural form hides the communication. A good piece of design becomes invisible, allowing the user to concentrate on the message. In the same way, a piece of video, a fight from the *Bourne* trilogy for example, will have cuts every few frames – cuts that we never notice, because they are arranged so artfully that we are swept up in the action and not seeing the craft.

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THE CRYSTAL GOBLET

In 1955, the American typographer and educator Beatrice Warde wrote her book *The Crystal Goblet: Sixteen Essays on Typography*. In the title essay, 'The crystal goblet, or printing should be invisible', she examined this notion of the designer shouldering the burden by relieving the user of the effort of using the design. The whole essay is printed here because it emphasises many of the points that a good graphic communicator should be considering: a responsibility to make our design serve the user, the duty of a designer to plan, and, while the text gets carried away in places about the fine details of typography, it never loses track of the fact that, without the context provided by the user, the craft means nothing.

> Imagine that you have before you a flagon of wine. You may choose your own favourite vintage for this imaginary demonstration, so that it be a deep shimmering crimson in colour. You have two goblets before you. One is of solid gold, wrought in the most exquisite patterns. The other is of crystal-clear glass, thin as a bubble, and as transparent. Pour and drink; and according to your choice of goblet, I shall know whether or not you are a connoisseur of wine. For if you have no feelings about wine one way or the other, you will want the sensation of drinking the stuff out of a vessel that may have cost thousands of pounds; but if you are a member of that vanishing tribe, the amateurs of fine vintages, you will choose the crystal, because everything about it is calculated to reveal rather than hide the beautiful thing which it was meant to contain.
>
> Bear with me in this long-winded and fragrant metaphor; for you will find that almost all the virtues of the perfect wine-glass have a parallel in typography. There is the long, thin stem that obviates fingerprints on the bowl. Why? Because no cloud must come between your eyes and the fiery heart of the liquid. Are not the margins on book pages

similarly meant to obviate the necessity of fingering the type-page? Again: the glass is colourless or at the most only faintly tinged in the bowl, because the connoisseur judges wine partly by its colour and is impatient of anything that alters it. There are a thousand mannerisms in typography that are as impudent and arbitrary as putting port in tumblers of red or green glass! When a goblet has a base that looks too small for security, it does not matter how cleverly it is weighted; you feel nervous lest it should tip over. There are ways of setting lines of type which may work well enough, and yet keep the reader subconsciously worried by the fear of 'doubling' lines, reading three words as one, and so forth.

Now the man who first chose glass instead of clay or metal to hold his wine was a 'modernist' in the sense in which I am going to use that term. That is, the first thing he asked of his particular object was not 'How should it look?' but 'What must it do?' and to that extent all good typography is modernist.

Wine is so strange and potent a thing that it has been used in the central ritual of religion in one place and time, and attacked by a virago with a hatchet in another. There is only one thing in the world that is capable of stirring and altering men's minds to the same extent, and that is the coherent expression of thought. That is man's chief miracle, unique to man. There is no 'explanation' whatever of the fact that I can make arbitrary sounds which will lead a total stranger to think my own thought. It is sheer magic that I should be able to hold a one-sided conversation by means of black marks on paper with an unknown person half-way across the world. Talking, broadcasting, writing, and printing are all quite literally forms of thought transference, and it is the ability and eagerness to transfer and receive the contents of the mind that are almost alone responsible for human civilization.

If you agree with this, you will agree with my one main idea, i.e. that the most important thing about printing is that it conveys thought, ideas, images, from one mind to other minds. This statement is what you might call the front door of the science of typography. Within lie hundreds of rooms; but unless you start by assuming that printing is meant to convey specific and coherent ideas, it is very easy to find yourself in the wrong house altogether.

Before asking what this statement leads to, let us see what it does not necessarily lead to. If books are printed in order to be read, we must distinguish readability from what the optician would call legibility. A page set in 14-pt Bold Sans is, according to the laboratory tests, more 'legible' than one set in 11-pt Baskerville. A public speaker is

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more ‘audible’ in that sense when he bellows. But a good speaking voice is one which is inaudible as a voice. It is the transparent goblet again! I need not warn you that if you begin listening to the inflections and speaking rhythms of a voice from a platform, you are falling asleep. When you listen to a song in a language you do not understand, part of your mind actually does fall asleep, leaving your quite separate aesthetic sensibilities to enjoy themselves unimpeded by your reasoning faculties. The fine arts do that; but that is not the purpose of printing. Type well used is invisible as type, just as the perfect talking voice is the unnoticed vehicle for the transmission of words, ideas.

We may say, therefore, that printing may be delightful for many reasons, but that it is important, first and foremost, as a means of doing something. That is why it is mischievous to call any printed piece a work of art, especially fine art: because that would imply that its first purpose was to exist as an expression of beauty for its own sake and for the delectation of the senses. Calligraphy can almost be considered a fine art nowadays, because its primary economic and educational purpose has been taken away; but printing in English will not qualify as an art until the present English language no longer conveys ideas to future generations, and until printing itself hands its usefulness to some yet unimagined successor.

There is no end to the maze of practices in typography, and this idea of printing as a conveyor is, at least in the minds of all the great typographers with whom I have had the privilege of talking, the one clue that can guide you through the maze. Without this essential humility of mind, I have seen ardent designers go more hopelessly wrong, make more ludicrous mistakes out of an excessive enthusiasm, than I could have thought possible. And with this clue, this purposiveness in the back of your mind, it is possible to do the most unheard-of things, and find that they justify you triumphantly. It is not a waste of time to go to the simple fundamentals and reason from them. In the flurry of your individual problems, I think you will not mind spending half an hour on one broad and simple set of ideas involving abstract principles.

I once was talking to a man who designed a very pleasing advertising type which undoubtedly all of you have used. I said something about what artists think about a certain problem, and he replied with a beautiful gesture: ‘Ah, madam, we artists do not think –we feel!’ That same day I quoted that remark to another designer of my acquaintance, and he, being less poetically inclined, murmured:

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'I'm not feeling very well today, I think!' He was right, he did think; he was the thinking sort; and that is why he is not so good a painter, and to my mind ten times better as a typographer and type designer than the man who instinctively avoided anything as coherent as a reason. I always suspect the typographic enthusiast who takes a printed page from a book and frames it to hang on the wall, for I believe that in order to gratify a sensory delight he has mutilated something infinitely more important. I remember that T.M. Cleland, the famous American typographer, once showed me a very beautiful layout for a Cadillac booklet involving decorations in colour. He did not have the actual text to work with in drawing up his specimen pages, so he had set the lines in Latin. This was not only for the reason that you will all think of; if you have seen the old typefoundries' famous Quousque Tandem copy (i.e. that Latin has few descenders and thus gives a remarkably even line). No, he told me that originally he had set up the dullest 'wording' that he could find (I dare say it was from Hansard), and yet he discovered that the man to whom he submitted it would start reading and making comments on the text. I made some remark on the mentality of Boards of Directors, but Mr Cleland said, 'No: you're wrong; if the reader had not been practically forced to read – if he had not seen those words suddenly imbued with glamour and significance – then the layout would have been a failure. Setting it in Italian or Latin is only an easy way of saying "This is not the text as it will appear".'

Let me start my specific conclusions with book typography, because that contains all the fundamentals, and then go on to a few points about advertising.

The book typographer has the job of erecting a window between the reader inside the room and that landscape which is the author's words. He may put up a stained-glass window of marvellous beauty, but a failure as a window; that is, he may use some rich superb type like text gothic that is something to be looked at, not through. Or he may work in what I call transparent or invisible typography. I have a book at home, of which I have no visual recollection whatever as far as its typography goes; when I think of it, all I see is the Three Musketeers and their comrades swaggering up and down the streets of Paris. The third type of window is one in which the glass is broken into relatively small leaded panes; and this corresponds to what is called 'fine printing' today, in that you are at least conscious that there is a window there, and that someone has enjoyed building it. That is not objectionable, because of a very important fact which has to do with the psychology of the subconscious mind. That is that the mental eye

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focuses through type and not upon it. The type which, through any arbitrary warping of design or excess of 'colour', gets in the way of the mental picture to be conveyed, is a bad type. Our subconsciousness is always afraid of blunders (which illogical setting, tight spacing and too-wide unleaded lines can trick us into), of boredom, and of officiousness. The running headline that keeps shouting at us, the line that looks like one long word, the capitals jammed together without hair-spaces – these mean subconscious squinting and loss of mental focus.

And if what I have said is true of book printing, even of the most exquisite limited editions, it is fifty times more obvious in advertising, where the one and only justification for the purchase of space is that you are conveying a message – that you are implanting a desire, straight into the mind of the reader. It is tragically easy to throw away half the reader-interest of an advertisement by setting the simple and compelling argument in a face which is uncomfortably alien to the classic reasonableness of the book-face. Get attention as you will by your headline, and make any pretty type pictures you like if you are sure that the copy is useless as a means of selling goods; but if you are happy enough to have really good copy to work with, I beg you to remember that thousands of people pay hard-earned money for the privilege of reading quietly set book-pages, and that only your wildest ingenuity can stop people from reading a really interesting text.

Printing demands a humility of mind, for the lack of which many of the fine arts are even now floundering in self-conscious and maudlin experiments. There is nothing simple or dull in achieving the transparent page. Vulgar ostentation is twice as easy as discipline. When you realise that ugly typography never effaces itself, you will be able to capture beauty as the wise men capture happiness by aiming at something else. The 'stunt typographer' learns the fickleness of rich men who hate to read. Not for them are long breaths held over serif and kern, they will not appreciate your splitting of hair-spaces. Nobody (save the other craftsmen) will appreciate half your skill. But you may spend endless years of happy experiment in devising that crystalline goblet which is worthy to hold the vintage of the human mind.

(London, 1955)

In order to achieve this seemingly natural communication, it is vital to remember that design is not primarily about the satisfaction of the designer but about the needs of those being designed for (we're not fine artists, after all). In design terms, you (the designer) are less important than the user of your design. Sorry about that.

So what do we do about this? How do we move from being a potentially magnificent designer hampered by a narrow view of the world, to being a magnificent designer who does work that people care about.

Over the years, you have become an expert in 'you', 'your locality', 'your local culture'. This is not enough to design well. Without working to acquire a really broad picture of the world, you may find that you lack the knowledge to make designs that connect with people. This is recognised by experts in design thinking and psychology, who talk about two different kinds of knowing. There is information we need for a specific job that is related to specific events (*episodic knowledge*) and there is information we have that gives our world its shape (*general knowledge* or *broad knowledge*).

Let me offer you an example. Do you know the book *Treasure Island*, by Robert Louis Stevenson? If the answer is 'no', then we've just encountered a huge blank area you really need to fill. The book is a very common root of a mass of cultural reference (*Pirates of the Caribbean*, a dozen direct film adaptations – one with The Muppets – and much more), a reference that is unavailable because you don't know the source.

However, assuming you said 'yes', we can go on. The book has a lovely map in it. It shows where the buried treasure is (just like *Pirates of the Caribbean*. See?). It is said that Stevenson invented the whole 'X marks the spot' convention in pirate maps. This map is very much like an uninformed designer's world-view: locally detailed, full of interesting stuff and completely disconnected from the world at large. We know where the treasure is on the island. We just don't know where the island is. In short, the map is completely and utterly useless for finding treasure.

You see, the map so lovingly drawn by Stevenson lacks useful navigational directions. There is no latitude or longitude given for the island. So, although the map (like our uninformed designer) is locally informed, it has no external relationship with anything else, which means we can't get from the local to the global. In story terms, we can never get to Treasure Island, because we don't know where it is. In design terms, a local outlook and lack of broad vision trap a designer on an island of his or her own ignorance.

The treasure map is the equivalent of episodic knowledge. It is the good stuff we need to find the treasure, once we know the location of the island. The knowledge to get to the island is general knowledge. An example might be found in designing for a client in another country. To get to the fine detail that will allow us smoothly to insert the client's product into the users' heads, we first need to know enough about the culture of the country to look in the right places.

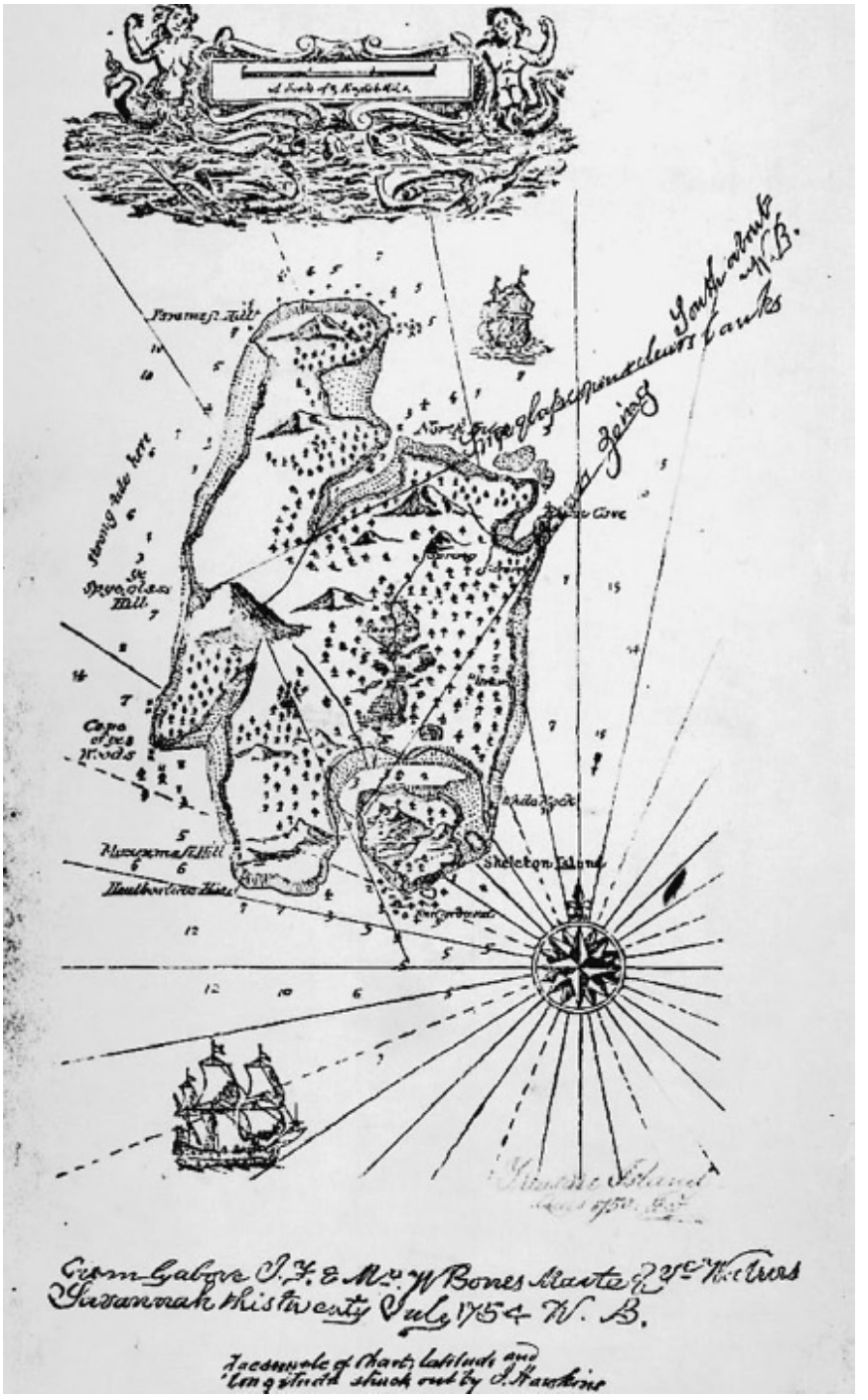

FIGURE 2.2
Treasure Island treasure map

Researchers are largely in agreement that problem-solvers (including designers) cannot generate solutions without having a range of different types of knowledge at their disposal. Having broad knowledge is like having a school atlas. It shows the whole world, but in absolutely no detail. We might be able to use it to show where we're going on holiday, but not to plan a trip. It shows London but not Loughborough (not a bad thing some people would say), shows the Dominican Republic but not my garage.

Most of the time, we have no need of local detail (like my garage), just the broad detail. But, by knowing the broad detail, such as knowing that the Dominican Republic is in the Caribbean, we can find other sources that allow us to zoom in on the specific detail when we have a need. For example, I like Korean food and I know that New York has a compact and vibrant Korean district. Knowing this, I can locate the district. Finding the district makes finding a Korean restaurant simple. Being ignorant of the existence of the district means I don't get dinner.

Consider a design job that requires our design to suggest modern Japanese design influences. If we know that *manga* is a Japanese variant of the comic book, a fusion of traditional *Ukio-e* prints and Western 'funnies' (general knowledge), then we can drill down to the specific forms that mark its internal differences. Knowing the difference between *shōnen* (comics for young girls), *seinen* (comics for young boys) and *seijin* (comics for adults), we can selectively use the correct graphic styles from the correct source materials for appropriate purposes, avoiding an embarrassing, *Japanese style* pastiche. Ignorance of the first nugget of information means we could never get to the good stuff.

Without wanting to labour the point, I'd like to make a plea on behalf of design lecturers everywhere: I'd like to make a plea for a war on ignorance. No matter how good their skills are, no matter how hard they work, ignorant designers are bad designers, and we don't need any more bad designers.

Why is this *broad knowledge* not included in Chapter 5, 'Researching the job'? Both activities are clearly research. The difference is that acquiring broad knowledge should be an everyday activity for a designer. It is not a matter of putting time aside in a project to understand the place of the project in the world; that would be episodic knowledge. It should be a daily activity, on a par with brushing your teeth (you could skip a day or two, but people would start to notice and avoid you).

How do we accumulate 'broad knowledge'? Let's list some of the ways. This is not intended to be a definitive list, but a sample that can act as a guide for your own personal exploration. It is intended to be a provocation.

FIRST-HAND SOURCES

A first-hand source of information is one that we can experience directly.

CLICHÉ – TAKING THE EASY SHOT

Theorists in the realm of emergence talk of a 'fitness landscape', a virtual realm that describes all of the possible solutions in terms of their fitness as answers to a specific problem.

So, if you start from any point on a fitness landscape, there will be low areas that are easy for you to get to (but equally easy for everyone else to get to as well): the low areas represent easy solutions. There will be high areas that are close by (still pretty easy to get to): these represent better solutions that need more effort to get to; and there will be distant peaks that are quite hard to scale: the highest peaks are the killer solutions every designer dreams of finding.

But let's not forget that we are talking about an ideas space. In idea terms, the low areas are seen as pretty ineffective solutions, or solutions that are close to what you started with; the peaks are strong solutions, with the closer peaks being good solutions that refine thoughts you already have; and the farthest, the highest peaks, are ideas having genuine novelty.

This is relevant to designers because it describes the way we work. It describes our responses to the culture around us. If we start from a cultural low point (ignorance), we have to work harder to reach any of the idea peaks. If we only know our own local cultural terrain, we will be unaware of the great ideas over the horizon. We won't even know that a great solution exists.

OK so far?

However, as the fitness landscape is an emergent phenomenon, each change or input from us changes the whole landscape. Design we do today changes the way everybody sees the world tomorrow (remember, 'culture is feedback'). In a way, by scaling that peak, we lower it for everyone else, making it accessible. What was high is now low. Equally, culture that is neglected becomes a very hard peak to climb. So, although today we might (vaguely) know that an Oedipus complex is the male version of an Electra complex, most people are unlikely to know the names of their respective mother and father. What was once such a cultural commonplace that Freud used it as a cultural shorthand (cliché) for mental conditions becomes an obscure fact in a general-knowledge quiz.

Our training places us at a very specific place on the fitness landscape of culture. Globally, designers have common ways of looking at things: