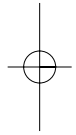
What is information design?
by Andrew Boag





Boag Associates, 2001

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About this booklet

In 2000 'Andrew Boag: Typographic problem solving' became 'Boag Associates' and our expanding organization moved into Central London. To mark the transition we have spent some time reconsidering what we do and how we do it, which has resulted in us looking afresh at the design and content of our publicity material. As a consequence, we decided that rather than producing throwaway objects like Christmas cards or calendars, we will instead produce a series of rather more engaging – and lasting – publications that will explain our current thinking on various aspects of the information design, typo/graphic design, and type design professions. This first booklet starts off the series by presenting our understanding of what information design is, while the ongoing series will allow us the space to publish material we research and produce throughout the year which might not otherwise find a suitable place for publication.

Recent publications:

Andrew discusses the Monotype Corporation's approach to the development and marketing of phototypesetting systems between 1952 and 1976, in *Journal of the Printing Historical Society*, new series, 2, 2000, pp. 57–78.

Andrew 'Replies to Peter Burnhill', in *Typography Papers*, 4, Dept of Typography, University of Reading, 2000, pp. 121–2, and discusses Burnhill's theory that Manutius, an early printer, used a rational unit-based type spacing system.

In December 2000, Andrew took part in the Institute of Printing's Annual Debate in the House of Commons and the text of his opposing speech – the motion was 'This house believes that printing has become a science devoid of art and craft' – is available at www.boag.co.uk


OLD MANOR
STEAK BAR · STEAK & DUCK BAR
4 LICENSED BARS
CAR PARK AT REAR
Reading A 329
Wokingham
Crowthorne (A 3095)
Maidenhead A 3095
Windsor B 3022
Motorway
M 4 M 3
Temporary
Bagshot (A322)
Railway station
Town Centre
Western & Southern
Industrial Areas
Winkfield
Berks College of Education
Multi-Storey Car Park 2
WILKINS
DIVERSION
CHURCH ROAD CLOSED EXCEPT FOR ACCESS
DOCTOR'S SURGERY

"Good information design results in the clear and effective presentation of information. It combines skills in graphic design, writing, and human factors to make complex information easier to understand"

Information Design Association

What is information design?

We are all used to the feeling of drowning in a sea of information – it comes at us so thick and fast that it is increasingly hard to sort out the irrelevant from the vital. We are bombarded by content: advertising, critical commentaries and reviews, news, sales banter, suggestions, questions, directions, offers – and it comes at us from all angles, from both organizations and individuals: through the letter box, on our computer screens, on our television screens, on the radio, in the newspaper, even on our mobile phones. We then have to filter all this stuff, deciding what may be necessary, useful, or important. Even when we get to what seems relevant, the information it contains is difficult to decipher: emails present information in long strings of visually unstructured sentences; the telephone bill – one of the most utilitarian information documents we receive – displays information beyond our comprehension; tax forms are impenetrable; and benefit claim forms seem to have been designed to put us off making a claim. Then there's that old chestnut, programming the video, a laughably hit-and-miss affair due to the unfriendliness of the interface and the mysteries of the instruction manual.

Good information design means everyone wins

Information design – design which helps people cope with this information overload – has now emerged as a recognised discipline, with the clearly defined objective of presenting information in an organized, and clear way so that users can rapidly and effectively filter and understand it. But what exactly differentiates information designers from graphic (and other) designers?

Graphic design and information design

The roles of graphic design have been defined as being concerned with: (1) presentation and promotion; (2) identification; and (3) information and instruction.

On the face of it, the role of the information designer would seem to parallel role number three of graphic design, and there is no doubt that much excellent informational and instructional designs are created by graphic designers working in this area. However, like graphic design in general, much of this sort of work is judged primarily on the quality of its appearance rather than the clarity of the message it purports to convey.

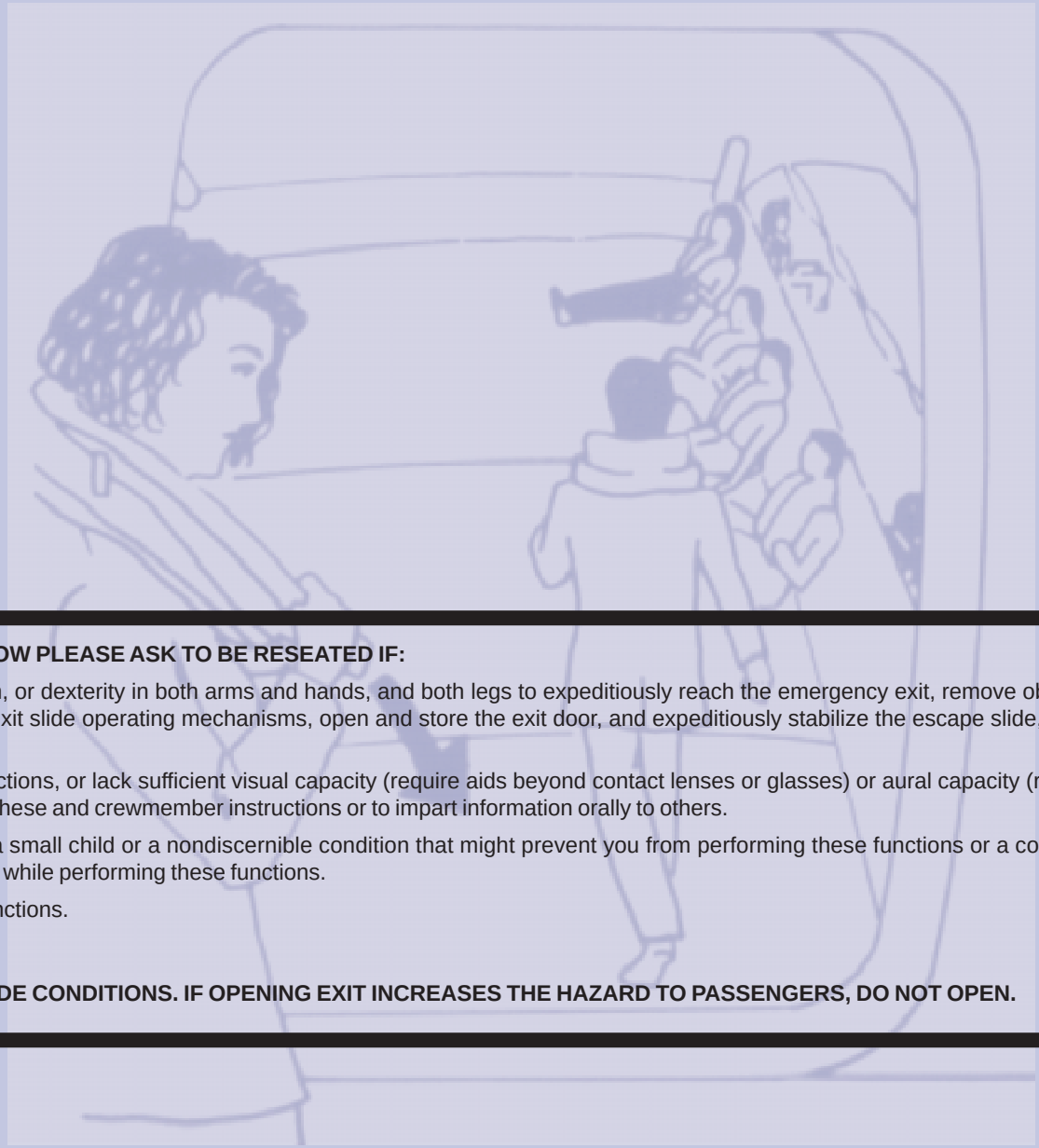
Information design seems therefore to be ultimately distinguished from related design professions by two core requirements: that it is user-centred, and that it demands a wider range of skills.

User-centered design

Not necessarily purely graphic in nature, user-centered design puts the user first, and is effective – in the sense that it specifically does *not* put the expressive needs and demands of the client or designer first. It is therefore not to be judged primarily on the quality of its appearance (not that this is unimportant) but should, above all, be judged on the quality of its performance. The objective is to design the required message in the clearest possible way, allowing rapid and accurate assimilation by the user.

Take, for example, a set of instructions on how to leave an aeroplane in the event of emergency evacuation. What's the point in laying it out beautifully and printing it in full colour, if the words themselves are





Reproduced from an airline safety card

IF YOU ARE SEATED IN AN EXIT ROW PLEASE ASK TO BE RESEATED IF:

- You lack sufficient mobility, strength, or dexterity in both arms and hands, and both legs to expeditiously reach the emergency exit, remove obstructions, manipulate the emergency exit and exit slide operating mechanisms, open and store the exit door, and expeditiously stabilize the escape slide, and assist others in getting off the escape slide.
- You do not understand these instructions, or lack sufficient visual capacity (require aids beyond contact lenses or glasses) or aural capacity (require aids beyond a hearing aid) to understand these and crewmember instructions or to impart information orally to others.
- You have a responsibility such as a small child or a nondiscernible condition that might prevent you from performing these functions or a condition that might casue you to suffer bodily harm while performing these functions.
- You do not wish to perform these functions.
- You are less than 15 years of age.

EXIT OPERATION: ASSESS OUTSIDE CONDITIONS. IF OPENING EXIT INCREASES THE HAZARD TO PASSENGERS, DO NOT OPEN.

hard to understand, or indeed if it takes users a long time to understand what is being illustrated in the pictures.

There is little point in publishing a form which looks attractive, and conforms to a company's identity guidelines, if in fact the questions are inappropriate, are not clearly written, or if they are arranged in the wrong order, or, indeed, if they ask for redundant information.

Similarly, there is little point in paying for jaw-dropping animations on a web site if the site's structure isn't clear, if important sections are difficult to get at, or if it makes excessive demands on the users' system.

Designers don't read

This is perhaps too radical a proposition for many graphic designers who often find 'reading the text' beneath them. For many graphic designers – because of their focus on visual appearance, brand image, and surface appeal – the idea of ensuring that their design work puts the consideration of their users first would be anathema. Responding to user-test results, or meeting the requirements of clarity standards, might 'cramp their style'. And, believe it or not, some designers have even been known to argue that they should not need to make concessions (as they might see it) to the user. They have argued that good visual design attracts users and draws them in: users might struggle to comprehend the information contained, but the result of this struggle is heightened understanding.

The objective is to design the required message in the clearest possible way, allowing rapid and accurate assimilation by the user

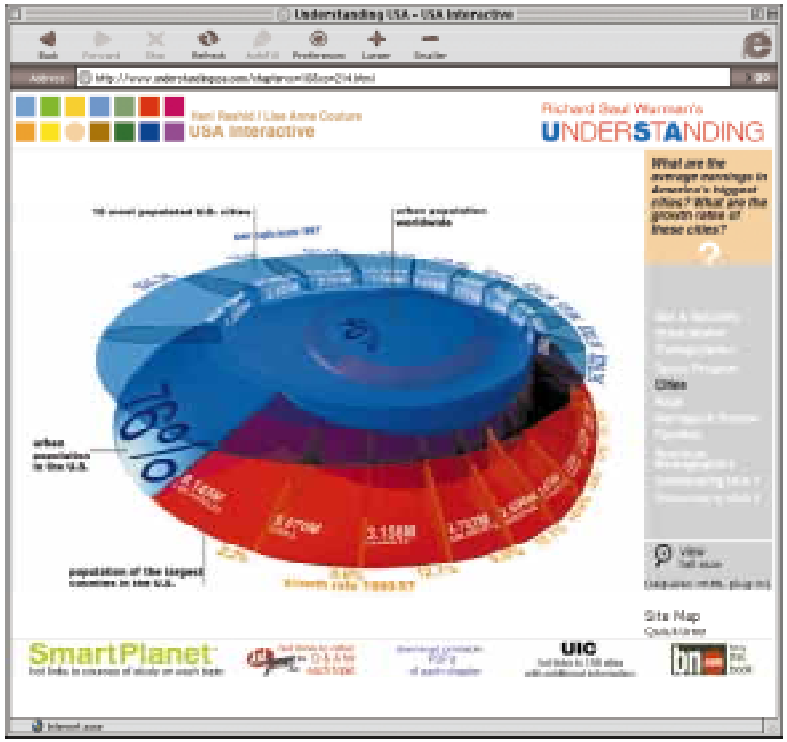




Boo.com's optimistic use of developing technology was ultimately an unpragmatic one, and it floundered: information design is about good business decisions too

"The information design *movement*…has been concerned about what is effective graphic… communication. It has been concerned with the needs of users rather than with the expressive possibilities present in design tasks"

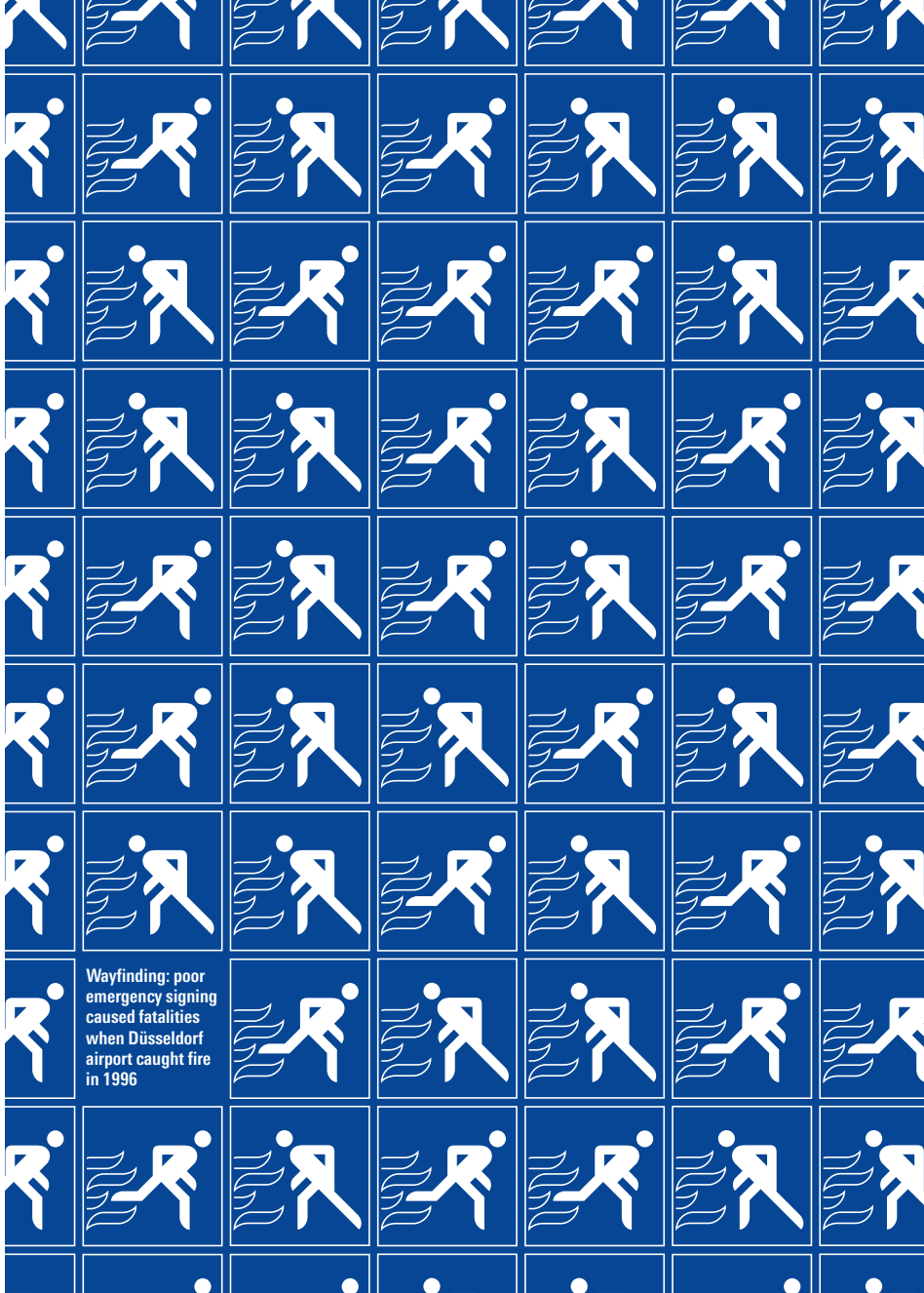
Robin Kinross, designer & publisher



Looks good, but... Lavish production and novel graphics do not necessarily help one's understanding of the information if the underlying structure isn't clear

We don't advocate this approach, but, under certain sorts of circumstances one could imagine that it might work. But why risk it?

- The approach assumes a user with time, inclination, and appropriate intelligence – but what about the user in a hurry, or the stressed user trying to find their way in an airport or hospital, or the web surfer who wants to minimize their call charges, or the user who has heard a fire alarm and just needs a clear indication of where the nearest exit is? These are real day-to-day user experiences.
- Also, it assumes a level of interest in the presentation of information that is beyond the levels of most human beings.
- Forcing users to struggle to understand can be demanding: why should they have to exert so much effort just to find their way?
- Users may, or may not, ultimately obtain the information they require – but either way, they may well be irritated or angry (i.e. stressed) as a consequence.
- Demanding design solutions will result in at least some users misunderstanding, obtaining incorrect information, and basically getting it wrong: this in turn results in more calls to helpline numbers, for example, and raised costs for the client.
- What sense is there in risking putting users off in this way? It alienates them, it can frighten them, and the consequence of this is that the client's image, and ultimately their brand image, is damaged.



Wayfinding: poor emergency signing caused fatalities when Düsseldorf airport caught fire in 1996

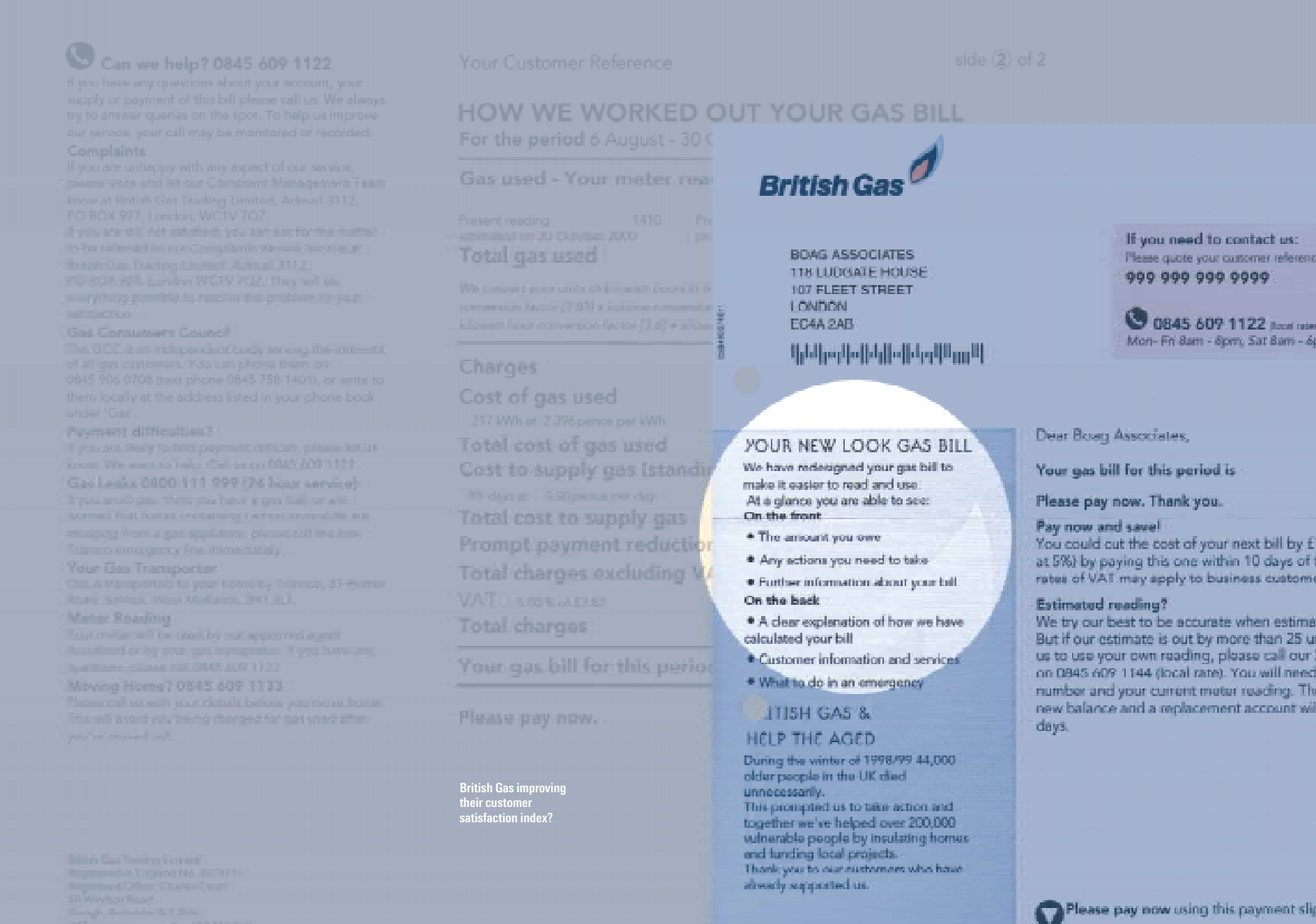
"Every little facet of a company's appearance adds to the image formed in the minds of employees, suppliers and competitors. While expensive advertising campaigns can make promises, these have to be substantiated on a practical level by well-designed forms, comprehensible printed instructions and convincing product literature"

Professor Erik Spiekermann, designer & commentator

→ An award-winning example of expressive design may result in some kind of increase in public awareness for a company (though perhaps more so for the design company that created it), but this pales when compared to the customer satisfaction to be gained from the publication of documentation which users can quickly comprehend and use to efficiently access the correct information.

So, good information design is tailored to its audience. This in turn means understanding the nature and needs of that particular audience. It aims to get the *right* information across *efficiently*. It aims therefore to satisfy user's needs. When this is done well, the originator of the information can increase user satisfaction and consequently improve their image. It therefore needs to be central to an organization's branding strategy.

More and more businesses are realizing that publishing clear communications is important. So far we have stressed the benefits to users, but in today's rational and efficient business environments, rational and efficient communications are increasingly necessary for our clients too. Clear communication improves cashflow, for example, by ensuring that users pay their bills more efficiently, it helps retain customers, it helps attract new customers, it helps improve customer satisfaction indices, and this impresses the shareholders. Ultimately, therefore, good information design means everyone wins.


Can we help? 0845 609 1122
Your Customer Reference
side 2 of 2
HOW WE WORKED OUT YOUR GAS BILL
For the period 6 August - 30
Gas used - Your meter rea
Total gas used
Charges
Cost of gas used
217 kWh at 2.396 pence per kWh
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Your gas bill for this perio
Please pay now.
British Gas improving their customer satisfaction index?
British Gas
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107 FLEET STREET
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YOUR NEW LOOK GAS BILL
We have redesigned your gas bill to make it easier to read and use.
At a glance you are able to see:
On the front
• The amount you owe
• Any actions you need to take
• Further information about your bill
On the back
• A clear explanation of how we have calculated your bill
• Customer information and services
• What to do in an emergency
ITISH GAS &
HELP THE AGED
During the winter of 1998/99 44,000 older people in the UK died unnecessarily.
This prompted us to take action and together we've helped over 200,000 vulnerable people by insulating homes and funding local projects.
Thank you to our customers who have already supported us.
Dear Boag Associates,
Your gas bill for this period is
Please pay now. Thank you.
Pay now and save!
Estimated reading?
Please pay now using this payment sli

"IN·FOR·MA·TION AR·CHI·TECT [L *info-tectus*] *n.* **1** the individual who organizes the patterns inherent in data, making the complex clear. **2** the person who creates the structure or map of information which allows others to find their personal paths to knowledge. **3** the emerging 21st century professional occupation addressing the needs of the age focused upon clarity, human understanding, and the science of the organization of information"

Richard Saul Wurman, information designer, publisher, and commentator

Information design is more about appropriate process than anything else

Wide range of skills

Making information work for users often demands contributions from skilled writers, editors, graphic designers, and illustrators: and proving that it is successful requires people with knowledge of user testing. Not surprisingly then, the range of skills required for any particular information design exercise are rarely found in one individual: information design therefore needs to be able to call on expertise from a range of disciplines.

We can identify three broad areas of expertise required by information design teams: skills in the client arena; content, appearance, and structuring skills; and skills in the user arena.

Skills in the client arena

Some organizations find it hard to face up to their responsibilities. We can all think of good examples of organizations who may not be keen on making certain sorts of information clear: financial companies' wording of legal contracts or terms and conditions for example. Just getting such organizations used to thinking about taking the needs of customers seriously requires political and legal negotiation skills.

Getting organizations to understand the value of well designed information in their overall business strategy requires business and consulting skills. Similarly, encouraging them to adopt a user-centered approach in their technology strategy requires an understanding of available and future technologies.

First round

Group A

	W	L	T	GF	GA	Pts
Brazil	0	0	0	0	0	0
Morocco	0	0	0	0	0	0
Norway	0	0	0	0	0	0
Scotland	0	0	0	0	0	0

Wednesday, June 10

▶ **SAINT-DENIS:** Brazil vs. Scotland, 11:30 a.m.

▶ **MONTPELLIER:** Morocco vs. Norway, 3 p.m.

Tuesday, June 16

▶ **BORDEAUX:** Scotland vs. Norway, 11:30 a.m.

▶ **NANTES:** Brazil vs. Morocco, 3 p.m.

Tuesday, June 23

▶ **MARSEILLE:** Brazil vs. Norway, 3 p.m.

▶ **SAINT-ETIENNE:** Scotland vs. Morocco, 3 p.m.

Group B

	W	L	T	GF	GA	Pts
Austria	0	0	0	0	0	0
Cameroon	0	0	0	0	0	0
Chile	0	0	0	0	0	0
Italy	0	0	0	0	0	0

Thursday, June 11

▶ **BORDEAUX:** Italy vs. Chile, 11:30 a.m.

Group E

	W	L	T	GF	GA	Pts
Belgium	0	0	0	0	0	0
Mexico	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0
South Korea	0	0	0	0	0	0

Saturday, June 13

▶ **LYON:** South Korea vs. Mexico, 11:30 a.m.

▶ **SAINT-DENIS:** Netherlands vs. Belgium, 3 p.m.

Saturday, June 20

▶ **BORDEAUX:** Belgium vs. Mexico. 11:30 a.m.

▶ **MARSEILLE:** Netherlands vs. South Korea, 3 p.m.

Thursday, June 25

▶ **SAINT-ETIENNE:** Netherlands vs. Mexico, 10 a.m.

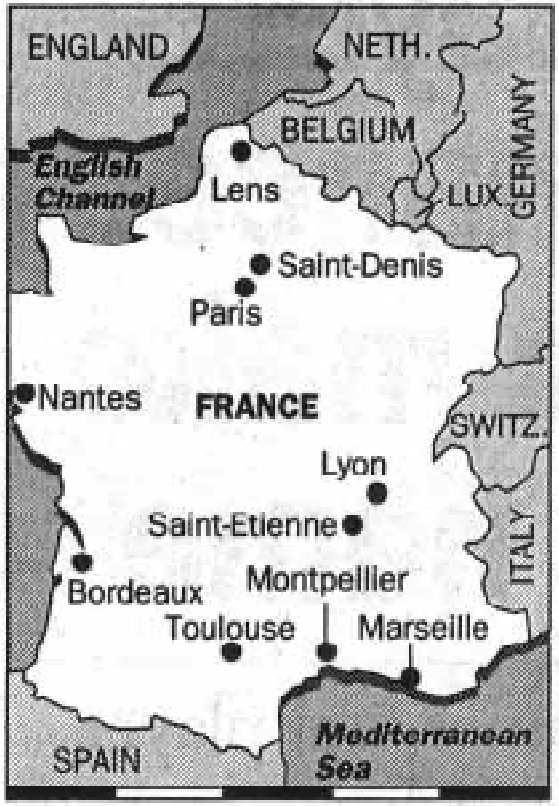
▶ **PARIS:** Belgium vs. South Korea, 10 a.m.

Group F

	W	L	T	GF	GA	Pts
Germany	0	0	0	0	0	0
Iran	0	0	0	0	0	0
United States	0	0	0	0	0	0
Yugoslavia	0	0	0	0	0	0

Sunday, June 14

▶ **SAINT-ETIENNE:** Yugoslavia vs. Iran,



Why does this US newspaper list 1998 World Cup matches by venue – wouldn't country or date be more useful? And what's the purpose of results tables before the competition has even started?

Second Round

Saturday, June 27

Game 2

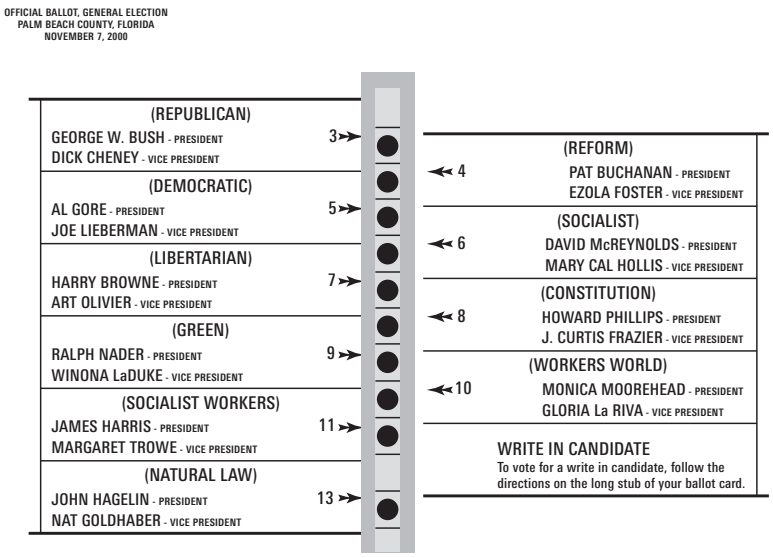
▶ **MARSEILLE:** Group B winner vs. Group A second place, 10:30 a.m.

Game 1

▶ **PARIS:** Group A winner vs. Group B second place, 3 p.m.

Sunday, June 28

Game 3



Well designed information can bring cost benefits to an organization – clear user manuals, for example, reduce the calls to the helpline. Well designed information in forms, bills, manuals, software, web and wap sites, for example, can directly affect sales or reduce an organization's costs, or can have an indirect effect by, for example, helping an organization to meet other objectives (e.g. regulatory requirements). Organizations need help in understanding and measuring this success.

Content, appearance, and structuring skills

Making information clear through words requires writing and editing skills. It may involve translating the information from another language, or from official or technical language into clear language. Specialized authoring skills are required, for example, for information aimed at technicians. Information written as continuous prose might be easier for users to understand if presented in lists or flow-diagrams. And copy-editing experts ensure that consistent styles of spelling and punctuation are applied throughout.

Making information work does not prohibit high-quality visual appearance

Some information is best communicated with images, or with the support of illustrations, so design teams might need illustrators, technical illustrators, or people with good information graphics skills.

Making the content clear through overall document organization demands graphic and typographic design skills, skills in understanding the underlying structure of the information, and the ability to make this structure clear visually.

Understanding the message and ensuring that it is communicated as effectively as possible requires overarching skills in problem solving and practical reasoning. Ultimately, it is the ability to think systematically.

Skills in the user arena

In order to design effectively for a range of users, the design team will need to develop a good understanding of who those users are: what their reading skill level is; what cultural factors are involved; how they are likely to react; and what technology they have available, for example. And in order to assess how well the information design performs the design team will need to test out prototypes on users in a realistic way.

We are all used to the feeling of drowning in a sea of information

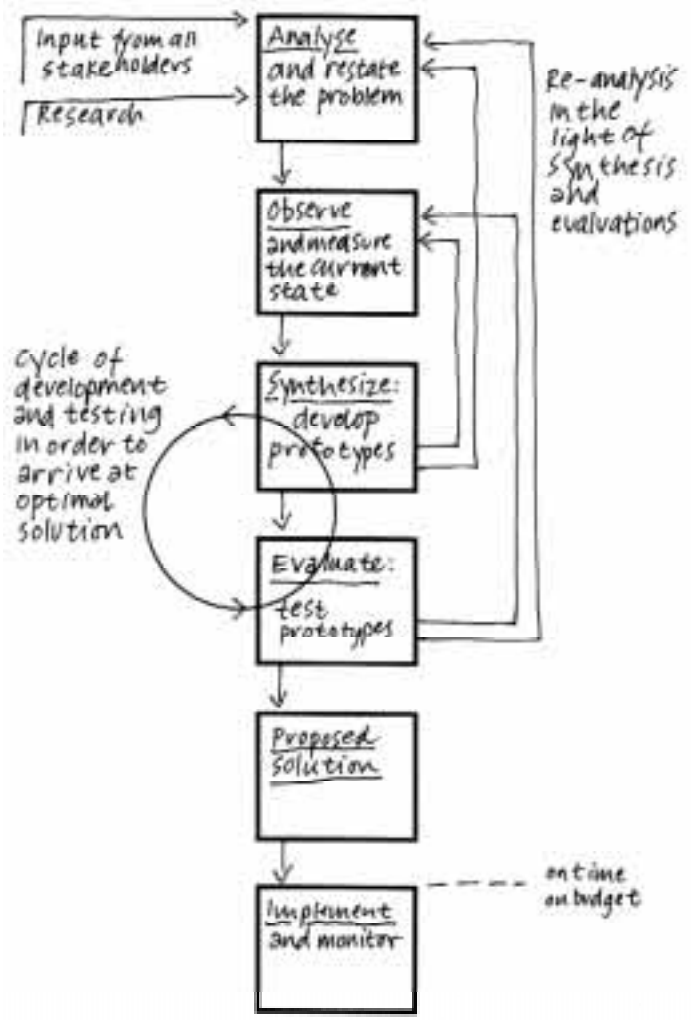
The make-up of expert teams will vary according to the nature of each particular information design exercise, but two key points are significant in all this:

1 the aim is to achieve an end result which is greater than the mere sum of all the separate parts

2 information design is ultimately more about appropriate process than anything else.

The information design process

The information design process will be determined by the specific demands of each project, the budgets negotiated, and timescales. Our own process has been developed from well accepted and proven procedures within the design professions and we believe that it offers the prospect of achieving the required results in the most



efficient and cost effective way. It is essentially a simple breaking down of the task into a sequence of rational operations which allows continuous monitoring, checking, and testing of the design solution and its costings from start to completion.

A final note

Making information work does not prohibit high-quality visual appearance. Indeed, as noted above, good visual design attracts users and draws them in. Our graphic and typographic design team members have good intuitive design sensitivity, and we know that well-crafted information design will, because of its underlying logic to structure and sequence, result in good looking products. It is a Modernist viewpoint perhaps, but utilizing the most suitable elements effetively and efficiently will ideally result in natural appeal.

It is also important not to lose sight of the individual, and the human element, in all this. Information design teams would not be doing their job well if the proposed solution leaves users unaffected: customers should end their internet shopping experiences with a smile on their face, not breathing a huge sigh of relief! Communications from the bank should encourage customers to sit down with a cup of tea whilst they explore their investment options. Go on: entertain your users whilst keeping them informed.



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