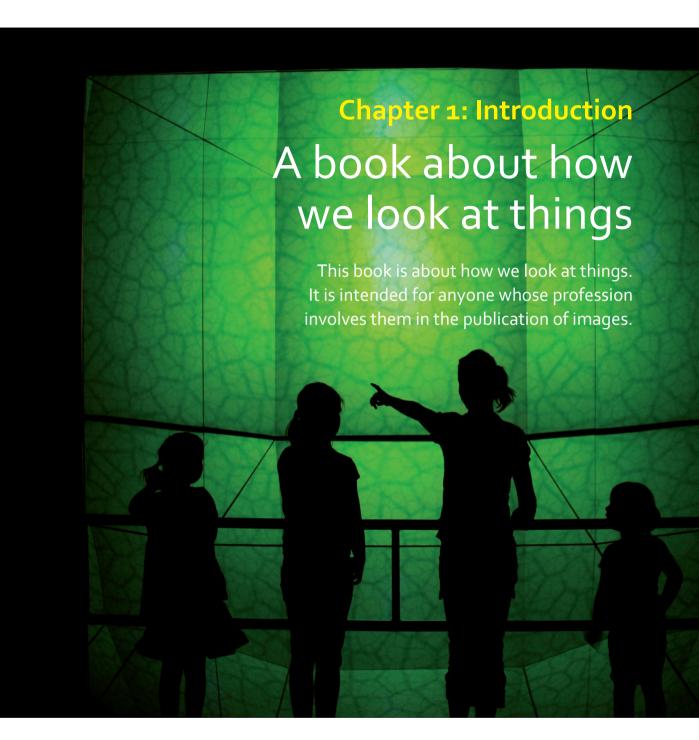
	PREFACE. BECAUSE IT WASN'TTHERE YET 8	PART 2	THEORY. THREE PERSPECTIVES ON VISUAL LITERACY	44
				, ,
PART 1	STOP!	Сн. 4	GESTALT.	
	FIRST LOOK! THEN READ! THEN INTERPRET! 10		GESTALT 2.0: AN AID TO BOTH MAKER AND	
			USER 46	
CH. 1	INTRODUCTION.			
	A BOOK ABOUT HOW WE LOOK AT THINGS 12	CONTEXT	Prägnanz or the Gestalt of the Martian	
	Add the last of the last		face 48	
1.1	What this book is 13	4.1	Gestalt = simplicity 49	
1.2	What this book is not 14	CONTEXT	Gestalt Laws as sorting rules 50	
1.3	What do we mean by images? 14 Not primarily images 14	4.2	The Law of Figure-Ground 53 The Law of Simplicity 53	
1.4	Making shapes: 2D and 3D 15	4.3	The Law of Proximity 55	
1.5 1.6	The power of an image with text 17	4.4 CONTEXT	Wrestling with the Law of Proximity 56	
1.7	Communicative-rhetorical 18	4.5	The Law of Similarity 58	
1.8	Three theoretical schools 19	CONTEXT	Gestalt and semiotics in Rotterdam 59	
2.0		4.6	The Law of Symmetry 60	
CH. 2	VISUAL LITERACY.	4.7	The Law of Similar Background 61	
	KNOWING ABOUT IMAGES MAKES YOU	4.8	The Law of Common Fate 61	
	IMAGE-WISE 20	4.9	The Law of Closure 62	
		4.10	The Law of Enclosure 62	
2.1	Definitions enough 22	4.11	The Law of Gap-filling 63	
2.2	Two perspectives 22	4.12	The Law of Continuity 64	
2.3	Skills and knowledge 23	4.13	The Law of Experience 65	
CONTEXT	A checklist for visual literacy 24	CONTEXT	Knowledge of Gestalt ensures focus 66	
2.4	Gestalt, semiotics and rhetoric 25	4.14	Gestalt as 'an overall experience' 66	
2.5	Interpretation is an iterative process 26	Снеск	Gestalt checklist 67	
CONTEXT	Making the most of visual clichés 28	C	6	
CONTEXT	Magritte and the dinosaurs of Burian 30	Сн. 5	SEMIOTICS.	
Cu a	WHY IMAGES?		THE MEANING OF WHAT WE SEE 70	
Сн. 3	THE FUNCTIONS OF VISUAL LANGUAGE 32	5.1	Surrounded by signs 71	
	THE FONCTIONS OF VISUAL LANGUAGE 32	5.2	Three types of signs, according to	
3.1	Doing justice to complexity 34	3.2	Peirce 75	
3.2	Conveying a universal message 34	5.3	Layers of meaning: Barthes' theory 76	
3.3	Telling, proving, persuading 35	CONTEXT		
3.4	Making it possible to compare things 36	5.4	Who is right: Barthes or Peirce? 80	
3.5	Stimulating, arousing emotions,	CONTEXT		
	entertaining 38	5.5	What use is this knowledge? 83	
CONTEXT	Pictures possess great captive power 40	Снеск	Recipe for a semiotic analysis 85	
		CONTEXT	Der Spiegel with a hint of red 86	

Сн. 6	VISUAL RHETORIC.	8.7	Typography and semiotics 152
	IMAGES THAT PERSUADE 88	8.8	Justification and white spaces 154
		8.9	Examples of letter types 155
6.1	Classical rhetoric: the art of persuasion 91	Снеск	Tips for typography 159
6.2	Modern rhetoric 93		
6.3	Rhetoric and images 93	Сн. 9	THE THIRD DIMENSION.
6.4	Ethos, pathos and logos 95		LIGHT ON PERSPECTIVE 160
CONTEXT	Is Osama dead? Logos versus pathos 99		
6.5	Kairos: the right moment 102	9.1	The power of light 161
6.6	Classical figures of speech 103	9.2	From flat to perspective 161
CONTEXT	Kairos and Iwo Jima 104	9.3	Devices for perspective/depth 164
6.7	Schemes: regularities 106	9.4	Faces in the clouds 165
6.8	Tropes: irrregularities 107	9.5	Linear perspective 166
6.9	Rhetorical model 110	9.6	Viewpoint as a rhetorical tool 167
CHECK	Model for rhetorical image analysis 111	CONTEXT	It's all a matter of how you look at Darwin 170
CONTEXT	Metaphors: unexpected elements 112	CONTEXT	Light on damaged arteries 172
CONTEXT	Framing: selection, salience and spin 114		
CONTEXT	The combined effect of our three theories 116	CH. 10	COLOR.
CONTEXT	Gorilla and stylistic devices 118		No color, no taste 174
PART 3	PUTTING THEORY INTO PRACTICE.	10.1	Color theory 175
	THE BASIC ELEMENTS OF VISUAL LANGUAGE 118	10.2	Color systems 176
		10.3	Perception of color 179
Сн. 7	COMPOSITION.	10.4	Which color do we choose? 180
	COMPOSITION IS ABOUT ORDER AND	CONTEXT	Queen Beatrix in twenty different colors 182
	HIERARCHY 120	CONTEXT	Focus and the power of white 184
		10.5	Sometimes black and white is better 186
7.1	Composition 123	10.6	Semioticians on color 186
7.2	Frames and borders 129	10.7	Color and meaning 187
7.3	Movement 130	Снеск	Tips for using color 190
7.4	Composition and Gestalt 132	10.8	Color as a rhetorical device 190
7.5	Semiotics on forms of composition 133		
CONTEXT	Family trees growing in all directions 136	PART 4	IN PRACTICE.
7.6	Images as meeting places 139		USING VISUAL LANGUAGE 192
CONTEXT	Vectors point the way 140		
7.7	Composition as a rhetorical tool 142	CH. 11	PHOTOGRAPHY.
CONTEXT	Arrows don't always point the way 144		FOCUSING ON PHOTOS 194
Сн. 8	TYPOGRAPHY.	11.1	Photojournalism 198
	EVERY LETTER HAS ITS OWN CHARACTER 146	11.2	The ethics of Photoshop 199
		CONTEXT	Famous examples of manipulated images 200
8.1	Choosing a letter 148	11.3	Informative or illustrative? 202
8.2	Letter types and copyright 148	CONTEXT	Do your own Photoshopping 202
8.3	Typewriter letters en character spacing 148	CONTEXT	Content Aware Scaling 203
8.4	Capitals and lower case 150	11.4	Photographs, captions and cutlines 204
8.5	The rhetoric of typography 151	CHECK	Making a rhetorical portrait 206
8.6	Typography and Gestalt: types and	CHECK	Start your own image bank 207
	families 152	11.5	The rhetorical effects of cropping 208
		1	

CLIECK	Tripopolina and recolutions		I Man na care
CHECK	Trimming and resolutions 213	CH. 14	WEB PAGES.
CONTEXT	, ,		WEBSITES THAT WORK 268
11.6	Where can you find images? 216		Designs and states as Co
CONTEXT	,	14.1	Design principles 269
11.7	The stock photo industry 218	14.2	Gestalt and web design 271
CONTEXT	, ,	14.3	Web design and semiotics 272
CHECK	Briefing the photographer 220	14.4	Web ethos in images and words 273
Снеск	How to credit the photographer 220	14.5	Something new? Make a mood board? 276
		CONTEXT	A wilderness in web icons 278
CH. 12	CHARTS AND TABLES.	CONTEXT	Screen ratios 279
	BRINGING FIGURES INTO FOCUS 222	Снеск	Make it visitor-friendly 280
12.1	Chart or no chart? 223	Сн. 15	MAGAZINE PAGES.
CONTEXT			PICK ME! READ ME! SEE YOU SOON! 282
12.2	Line graph 225		
12.3	Bar chart 226	15.1	Semiotics: magazines with a 'face' 283
CONTEXT		15.2	Gestalt and format: the baseline grid 285
12.4	Pie chart 230	CHECK	Ten tips for uniformity on the page 286
12.5	Map diagram 231	15.3	Magazine pages and composition 288
12.6	Multidimensional diagram 231	CONTEXT	Scatter does matter 289
12.7	Scatter graph (scatter plot) 232	CHECK	Tips for magazine layout 291
12.7	Radar chart 232	CHECK	rips for magazine tayoot 291
12.9	Rhetorical manipulation using charts 233	Сн. 16	COPYRIGHTS.
12.10	The simplicity principle 235	CII. 10	WHO OWNS THE IMAGE? 292
CONTEXT	. , ,		WHO OWNS THE IMAGE: 292
CONTEXT	I	16.1	Images, portraits and copyrights 293
CONTEXT		16.1	Your own work and someone else's work 295
CONTEXT		16.2	The right to copy images 295
		CONTEXT	An image in an image in an image 297
12.11	Tables 244 Designing a table 246		Image banks and photo sites 298
12.12		16.4	
12.13	Tables without figures 247	16.5	Editing images 300
Снеск	Tips for designing charts and tables 248	CONTEXT	PixID traces 'borrowed' images 301
C.,	In the second se	CONTEXT	,
CH. 13	INFOGRAPHICS.	CONTEXT	Taking photographs in semi-public places 304
	ILLUSTRATIONS THAT INTEGRATE TEXT AND	A	
	IMAGES 250	APPENDIX	File formats for photos 306
13.1	Mature medium, deeper meaning 252		
CONTEXT	_ · · · · · · · · · · · · · · · · · · ·		INDEX 308
13.2	Clarification, not simplification 256		The second secon
13.3	More than just a chart 256		ABOUT THE AUTHORS
13.4	Gestalt: doing better with what you have 256		(AND THEIR SOURCES OF INSPIRATION) 318
13.5	Semiotics: can all details be understood? 259		(AND THEIR SOURCES OF INSTINATION) 320
CONTEXT	33		ACKNOWLEDGEMENTS 320
CONTEXT			320
CHECK	Questions about the content 264		
CHECK	Questions about the process 265		
CITLUR	2003110113 40001 tille process 205		



nyone who creates a page for a magazine, makes a Power-Point presentation, writes a brochure, designs a poster for a presentation or has to dream up an idea for an infographic comes up against the same questions:

- Why should I position this photo here rather than there?
- Maybe I should use a completely different photo?
- Which background color should I use for my presentation?
- What is the difference between laying out a magazine page and designing an Internet page?
- Which photo would best illustrate this article?
- Which is clearer: a serif letter or a sans serif one?
- Does it matter how I crop the photo?
- What would be a good color for this graph?
- Is it better to use a table for these figures or a graph?
- Is it more effective to visualize this information as an infographic?
- How far should I go with editing photos, and how can I justify it?

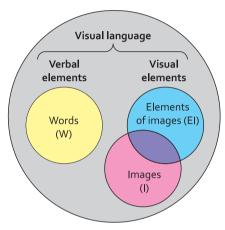
This book aims to provide answers to these kinds of questions – and much more. At the same time the book is intended not only for those who make images, but also for those who use them. Our society is inundated with images, as an effect partly of computers and partly digital cameras. This book aims to give the user a helping hand with interpreting images: do you really understand what the maker of the images is trying to say?

1.1 What this book is

The prime aim of *Visual Language – Perspectives for both makers and users* is to teach the reader how to look: to make him or her aware of differences in images, colors and shapes. In the first place, any reader who works his way through the book will – we hope – look differently at images in publications and will be able to make more reasoned choices in favor of one photo or one layout above another.

In the second place, this is a practical book about the use of images in different media, both old and new. It provides the reader with ideas and practical tips interwoven with handy facts and tips. For the reader who wants to take the study of visual language further, the first three chapters are devoted to explaining the underlying theory and compiling a bibliography that can help you on your way.

Part of the exhibition on Conversations in Natural History Museum Naturalis in Leiden. Images are projected onto mirrors to create an ingenious effect of depth. (Fig. 1.1)



↑Visual language refers to the integration of images and elements of images (visual elements) and words (verbal elements) into a single unit of communication. (Fig. 1.2)

→ With visual communication you naturally think first of images (I). Without the integration of elements of images (EI) and words (W), what you have is visual art or just a picture, and there is often no question of visual communication. Words shape communication in terms of conceptual messages. They provide the possibility of naming, defining and classifying visual elements and abstractions. 'Elements of images' (points, lines including arrows, regular or irregular shapes and all negative space in between) differ from images; they are more abstract. They have been used for centuries, combined with words to form diagrams. The verbo-pictorial elements of section 6.7 are

exciting intermediate forms between words and

images. (Fig. 1.3)

1.2 What this book is not

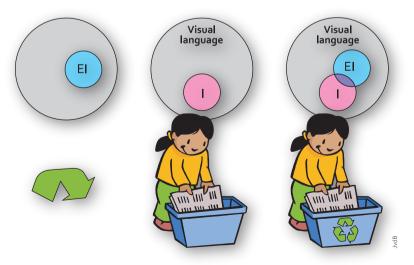
It is not a technical manual for designers or photographers, nor is it a set of instructions for Adobe Photoshop, InDesign or Illustrator. It is not a technical book about printing processes and resolutions (although we may indirectly refer to these issues). Neither is it a theoretical treatise on visual language, nor a study of the current state of affairs in scientific research on the field, even though we do discuss the underlying theory.

1.3 What do we mean by images?

A book about visual language cannot avoid giving a definition of what is meant by the term 'image'. In this book we use 'image' to refer to all communication instruments that are not primarily text, that reach us by means of a two-dimensional medium (including, for example, film but excluding architecture or sculpture), and that have a primarily communicative-rhetorical function.

1.4 Not primarily text

By now it will be clear that this book is not about verbal (spoken or written) language, but visual language, although there are, of course, countless phenomena, such as pictograms or symbols, that occupy a position somewhere between text and image. Graphs and tables (chapter 12) and infographics (chapter 13) make use of both text and images.



The emphasis on images does not mean that text plays no part in this book. It does, but always in conjunction with images, For example, how does the image relate to the text (section 1.6)? And what is the visual effect of the text as it is laid out on the page as a whole?

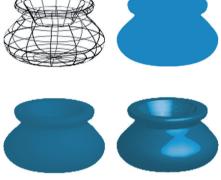
When we talk about images, we mean images in the media: photos and other pictures on web pages, in newspapers and magazines, on advertising billboards, in museums and exhibitions, on TV, in PowerPoint presentations, etc.

What all these images have in common is that they reach us via a two-dimensional medium: paper, computer screen, beamer, billboard, etc. By 'image' we are not referring to spatial images, but three-dimensional representations that reach us by means of a flat plane.

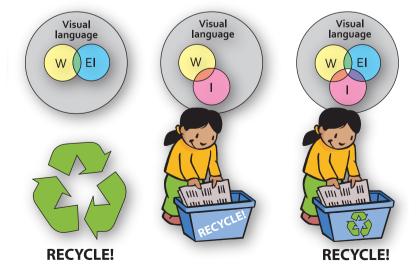
1.5 Making shapes: 2D and 3D

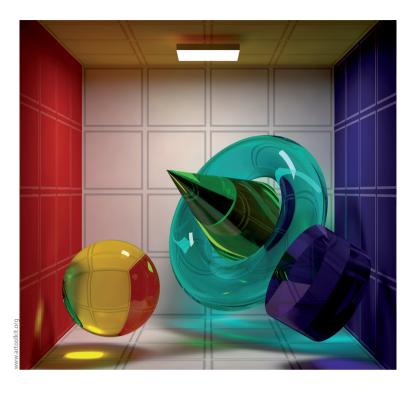
Visual communication is, as we say, constructed through shapes. This concept of 'shape' is something we have to be rather careful about. The individual elements of an image are shapes but a whole image (a whole composition of visual elements) can also have a shape (see chapter 7). Text can even be laid out in a particular shape.

In the two-dimensional media addressed in this book, shapes can acquire the suggestion of a third dimension. They gain a virtual volume through the addition of shadows and highlights (see the images on these pages and chapter 9).



An example of rendering in Adobe Illustrator. The suggestion of volume is generated by light and shadow and by shortening the shapes. (Fig. 1.4)





→Geon rendering: ball, cone, cylinder, toroid (like a rubber ring for swimming) and a flat box. (Fig. 1.5)

You should also be wary of underestimating the effect of shapes that seem to be a perspectivist variation on other shapes. Take the blue pot in Fig. 1.4, for example. The opening is oval-shaped, but you think you are looking at a circle that has been drawn in perspective: you are looking at it from a side view, which has the effect of 'shortening' the circle (see chapter 4).

Irving Biederman (1987) describes the different three-dimensional shapes that people are able to distinguish. He mentions as many as 36 different so-called geons: for example, cube, bar, column, rod, pyramid, sphere, cone. Every conceivable more complex structure can be made from these geons. These geons are often used by makers of computer games and virtual-reality environments. They construct figures out of different elements, like puppets, with the geons as parts that can be moved by computer.

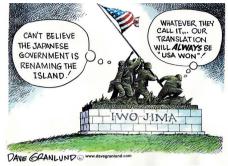
This is known as geon rendering: digitally ascribing visual characteristics (color, structure, texture, luster, tint) to geons. This page shows a rendered image (Fig. 1.5). Design software like Adobe Illustrator makes use of rendering, as can be seen in the illustrations on the preceding page (Fig. 1.4).

1.6 The power of an image with text

It is a misunderstanding to assume that visual language is only about images. A graph with no explanatory text and figures along the axes is incomprehensible. Just about every infographic needs explanatory text, words and sentences to point the reader in the right direction. Without a caption, a photo is nothing more than simply a picture. Visual communication can therefore be said to be the integration of images and elements of images (visual elements) and words (verbal elements) to make up a unit of communication (Horn 1999).

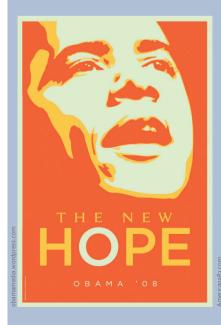
Text can alter the meaning of images. This fact is deliberately applied in pastiches and parodies (section 6.8). Take, for example, this cartoon about Iwo Jima (Fig. 1.6).

Good examples of texts that influence images – also types of pastiche – are something you come across during the period leading up to national elections. Presidential candidate Barack Obama appeared on a series of brilliant posters bearing the words 'HOPE' or 'CHANGE' (Fig. 1.7). Variations on the message were not slow in appearing. On a similar poster Obama was presented as a communist. On yet another variant the word 'HOPE' was transformed into 'NOPE'. It can also work the other way around: images can give text a

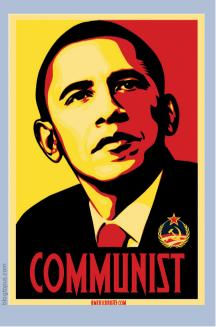


↑ For patriotic Americans the conquest of Iwo Jima on 23 February 1945 was a heroic moment. So much so, that in Washington, capital of the US, a statue has been dedicated to this historic event. This cartoon text gives a good insight into the chauvinism of the average 'Yankee'. (Fig. 1.6)

↓ 'HOPE', 'NOPE' or 'COMMUNIST' American presidential election posters from 2008, where the text makes all the difference. (Fig. 1.7)









↑ The photo of Russia's most powerful man, Vladimir Putin, baring his muscular torso gives a different complexion to an article on the foreign policy of the world's largest country: this Russian he-man won't be pushed around. (Fig. 1.8)

completely different meaning. A photo of a laughing councillor in an article in the local newspaper, when the article contains strong criticism of the councillor in question, has a completely different effect than an image where the councillor is sitting at his desk with a serious expression on his face. The ethos (see section 6.4) of the former French President Sarkozy with his second wife, Carla Bruni, at his side is different from a photo where the attractive singer is not present. Or take this photo of Vladimir Putin (Fig. 1.8).

1.7 Communicative-rhetorical

Obviously, aesthetic images – images that are about beauty, about art – are subject to very different requirements than images that are intended to communicate or persuade. For this reason, we will leave to one side Henry Moore's sculptures or Rembrandt's paintings and the decorative work of Moorish temples, although we will show a number of works of art as interesting examples of rhetoric and semiotics, such as the painting below,

The communicative-rhetorical function gives us a normative framework. For each image you can ask yourself: is it clear and con-



 → An image can appeal to your emotions, in order to persuade you of a particular message. For example, this painting by Matthias Grünewald
 – the central element of the Isenheimer altar. Its aim is to show the observer how Jesus died for mankind. More information about images that persuade in Chapter 2. (Fig. 1.9)

vincing? The first of these seems to be a condition for the second: what you don't understand can hardly convince you. If your objective is to inform, you can sometimes be convincing without being absolutely clear.

1.8 Three theoretical schools

In the course of the years, through our teaching we have gathered many examples of images and visual language. We looked for a theory that could bring together all these examples and insights. With a book like this one you always want to give answers to such questions as:

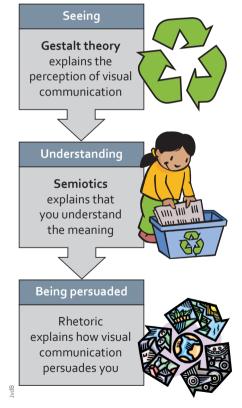
- 'Why is this clearer than that?';
- 'Why is this image more appealing than that one?';
- 'Why do most people find this more beautiful/more pleasant than that?'; and
- 'What do I want my illustration to achieve?'.

You would like to find one theory that firstly underpins the choices that you make, secondly offers a normative framework for what may or may not work, and thirdly also provides a conceptual apparatus for talking meaningfully about images.

We have not managed to identify a single theory that unites all of this. Every theory we have come across addresses specific, often rather limited, aspects of visual language. This book aims to give a broader and more general set of quidelines.

What we did establish was that in the separate parts of this book we have looked at our material from the viewpoint of three different theoretical 'schools'. Not all three at the same time: in one instance, one particular approach was appropriate, and in another chapter a different approach applied. But we did come across three key groups of ideas that could theoretically underpin the content of this book.

The three 'schools' that we touch on here are *Gestalt theory*, *semi-otics* and *modern rhetoric*; dissimilar and incomparable concepts, the one more theoretical than the other, but all three valuable for our purpose. They offer a range of insights that can provide an explanatory and normative framework with the necessary depth for the content of this book.



↑ Applying these three theories ensures that the message will be properly interpreted (Gestalt theory), and understood (semiotics) and that it will persuade the reader (rhetoric). (Fig. 1.10)