

# the Power of Infographics

Using pictures to  
communicate and  
connect with  
your audiences

Foreword by Guy Kawasaki, author of *Enchantment*  
and former chief evangelist of Apple

que

Mark Smiciklas



---

# the **Power** of **Infographics**

Using Pictures to Communicate  
and Connect with Your Audiences

Mark Smiciklas

**que**<sup>®</sup>

800 East 96th Street, Indianapolis, Indiana 46240 USA



## THE POWER OF INFOGRAPHICS

COPYRIGHT © 2012 BY PEARSON EDUCATION, INC.

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

ISBN-13: 978-0-7897-4949-9

ISBN-10: 0-7897-4949-1

Library of Congress Cataloging-in-Publication Data is on file and available upon request.

Printed in the United States of America

First Printing: July 2012

### TRADEMARKS

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Que Publishing cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

### WARNING AND DISCLAIMER

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an "as is" basis. The author and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book.

### BULK SALES

Que Publishing offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact

**U.S. Corporate and Government Sales**  
**1-800-382-3419**  
**corpsales@pearsontechgroup.com**

For sales outside of the U.S., please contact

**International Sales**  
**international@pearsoned.com**

#### EDITOR-IN-CHIEF

Greg Wiegand

#### SENIOR ACQUISITIONS EDITOR

Katherine Bull

#### DEVELOPMENT EDITOR

Karen Kline

#### MANAGING EDITOR

Kristy Hart

#### SENIOR PROJECT EDITOR

Lori Lyons

#### COPY EDITOR

Gayle Johnson

#### SENIOR INDEXER

Cheryl Lenser

#### PROOFREADER

Kathy Ruiz

#### EDITORIAL ASSISTANT

Cindy Teeters

#### MEDIA PRODUCER

#### COVER DESIGNER

Anne Jones

#### COMPOSITOR

Kim Scott, Bumpy Design

#### QUE BIZ-TECH EDITORIAL BOARD

Michael Brito

Jason Falls

Rebecca Lieb

Simon Salt

Peter Shankman

# CONTENTS AT A GLANCE

Foreword by Guy Kawasaki .....xiii

## SECTION I: VISUAL COMMUNICATION

**1** Infographics 101 .....3

## SECTION II: BUSINESS INFORMATION NEEDS

**2** Visualizing Numbers and Concepts ..... 21

**3** Visualizing How Things Work and Are Connected ..... 35

**4** Visualizing Who, When, and Where ..... 57

## SECTION III: CREATING INFOGRAPHICS

**5** Infographic Prep Work ..... 75

**6** Processing Your Ideas ..... 87

**7** Designing Your Infographics ..... 99

**8** Publishing Your Infographics ..... 119

## SECTION IV: BUSINESS VALUE

**9** Infographics as an Internal and External Communication Tool ..... 137

**10** Infographic ROI ..... 157

**11** Infographic Resources ..... 165

Index ..... 189

# TABLE OF CONTENTS

## SECTION I: VISUAL COMMUNICATION

<b>1</b>	INFOGRAPHICS 101 .....	3
	What Are Infographics? .....	3
	Infographics Defined .....	3
	Infographic History .....	6
	The Science of Visualization .....	7
	Hardwiring .....	7
	Easy on the Mind .....	7
	Visual Learning .....	11
	Why Infographics Work for Business .....	12
	Easy to Digest .....	12
	Shareability .....	15
	The “Cool” Factor .....	16
	Endnotes .....	16

## SECTION II: BUSINESS INFORMATION NEEDS

<b>2</b>	VISUALIZING NUMBERS AND CONCEPTS .....	21
	Statistics .....	21
	Using Data to Tell a Story .....	22
	The Benefits of Visualizing Research .....	24
	Understanding the Risks .....	25
	Ideas and Concepts .....	26
	Using Visual Metaphors .....	27
	Using Cartoons to Communicate Your Ideas .....	30
	Case Study: The Kronos “Time Well Spent” Cartoon Series .....	33
	Endnotes .....	34
<b>3</b>	VISUALIZING HOW THINGS WORK AND ARE CONNECTED .....	35
	Process .....	35
	The Jargon Dilemma .....	37
	Infographics Help Explain What You Do .....	38
	Hierarchy .....	42
	Business Hierarchies .....	42

Relationships .....	47
Simplified Systems Thinking .....	49
Business Models .....	49
Endnotes .....	55
<b>4</b> VISUALIZING WHO, WHEN, AND WHERE .....	57
Personality .....	57
Brand Humanization .....	58
Infographic Resumes .....	60
Chronology .....	65
Business Timelines .....	65
Geography .....	69
Business Maps .....	69
Endnotes .....	72

### SECTION III: CREATING INFOGRAPHICS

<b>5</b> INFOGRAPHIC PREP WORK .....	75
Purpose .....	77
Understanding Your Audiences' Information Needs .....	77
Audience Analysis .....	77
Setting Infographic Objectives .....	79
The Art of Observation .....	82
Seeing .....	82
Listening .....	83
Endnotes .....	86
<b>6</b> PROCESSING YOUR IDEAS .....	87
Recording Your Thoughts .....	87
I'm Not an Artist .....	87
Different Ways to Document .....	88
Info-Synthesis .....	90
The Five W's (and One H) of Infographics .....	94
Endnotes .....	98
<b>7</b> DESIGNING YOUR INFOGRAPHICS .....	99
The Critics .....	99
Infographic DIY .....	100
An Infographic Rant .....	100
The DIY Infographic Formula .....	103

Outsourcing .....	108
Going Pro .....	109
Working with Students .....	114
Endnotes .....	118
<b>8</b> PUBLISHING YOUR INFOGRAPHICS .....	119
Audience Research .....	119
Online Publishing Channels .....	120
Infographic Home Base .....	122
Infographic Outposts .....	126
Offline Publishing Opportunities .....	133
Endnotes .....	133

## SECTION IV: BUSINESS VALUE

<b>9</b> INFOGRAPHICS AS AN INTERNAL AND EXTERNAL COMMUNICATION TOOL .....	137
Using Infographics to Build Your Brand .....	137
The Business of Infographics .....	138
Content Marketing .....	139
Promoting Your Infographics .....	148
Infographics Inside the Organization .....	153
Internal Adoption of Infographics .....	153
Internal Communication Opportunities .....	154
Endnotes .....	155
<b>10</b> INFOGRAPHIC ROI .....	157
Measuring the VOI (Value of Infographics) .....	159
Tangible Metrics .....	160
Intangible Benefits .....	163
<b>11</b> INFOGRAPHIC RESOURCES .....	165
Guide to Visual Elements .....	165
Infographic Tools .....	175
Visualization Tools .....	175
Design Elements .....	178
Further Reading .....	179
<i>The Back of the Napkin: Solving Problems and Selling Ideas with Pictures</i> .....	179
<i>Creating More Effective Graphs</i> .....	179
<i>Envisioning Information</i> .....	180

<i>Graph Design for the Eye and Mind</i> .....	180
<i>Information Graphics: A Comprehensive Illustrated Reference</i> .....	180
<i>Information Visualization: Perception for Design</i> .....	180
<i>Marks and Meaning, version zero</i> .....	180
<i>Now You See It: Simple Visualization Techniques for Quantitative Analysis</i> .....	181
<i>Slide:ology: The Art and Science of Creating Great Presentations</i> .....	181
<i>Visual Language: Global Communication for the 21st Century</i> .....	181
<i>The Wall Street Journal Guide to Information Graphics: The Dos and Don'ts of Presenting Data, Facts, and Figures</i> .....	181
Information Designers, Consultants, and Agencies .....	181
Agencies .....	182
Freelance Designers .....	184
Consultants .....	187
INDEX .....	189



---

*This page intentionally left blank*

## ABOUT THE AUTHOR

**Mark Smiciklas** is the president of Intersection Consulting, a Vancouver-based digital marketing and communications agency that teaches organizations how to leverage the dynamics of web 2.0 to achieve business goals. He is an established digital marketing and social media practitioner recognized for his visual thinking and strategic, no-nonsense approach. His service offering is framed by core beliefs in listening, stakeholder engagement, trust creation, and employee empowerment. An interest in the evolution of social business continues to motivate him, as does a passion for teaching. Smiciklas has developed and taught social media strategy classes for undergraduates and adult learners at a number of Canadian universities. He also has spoken about a wide variety of digital marketing topics at corporate and public events and workshops. His genuine love of technology and people continues to ignite ongoing learning and new thinking that aim to help individuals and organizations connect with their audiences. Smiciklas hangs out full time at [intersectionconsulting.com/blog](http://intersectionconsulting.com/blog). He can be found on Twitter at [@Intersection1](https://twitter.com/Intersection1). He is also a regular contributor to [socialmediaexplorer.com](http://socialmediaexplorer.com), the popular digital and social media marketing and online communications blog. He lives in North Vancouver, BC, Canada with his lovely wife, three kids, and Max the dog.

## DEDICATION

*For Jean, Alexander, Madeleine, and Emily. Your love and support make anything possible.*

## ACKNOWLEDGMENTS

Writing a book has been an aspiration of mine for a while. This project could not have come to fruition without the help, support, and encouragement of my family, friends, and colleagues.

Thanks to Tammy Dewar at Calliope Learning for her insight and coaching, which helped ignite a latent passion in me for visual thinking. Her encouragement gave me the confidence to start creating and sharing my infographics. Thanks to David Armano at Edelman and darmano.typepad.com, whose idea art and thought leadership around visual literacy have inspired my work.

Thanks to Jason Falls at Social Media Explorer for giving me a platform to share my ideas and helping get this project off the ground.

A huge thank-you to the team at Pearson: Katherine Bull, Romny French, Lori Lyons, and Cindy Teeters. Their patience and support kept me on track and mitigated the stress associated with being a first-time author. Also, thanks to Michael Brito from Edelman and britopian.com for his insight and advice during the editing process.

Also, a monumental shout-out to Guy Kawasaki for writing the foreword.

Thanks to the designers, agencies, and organizations that agreed to share their information designs: Michael Anderson, David Armano, Boost Labs, Calliope Learning, Column Five, Course Hero, DIG360, Eloqua, Tom Fishburne, Dan Gustafson, Kronos, Miovision, MySpace, Shortstack, and TurboTax. Your infographics helped illustrate many of the ideas in the book and really brought the final product to life.

A special thank-you to all the smart folks who invested the time to participate in interviews: Ali Allage, David Armano, Jay Baer, Joe Chernov, Tammy Dewar, Jason Falls, Stephen Few, Tom Fishburne, Mike Harding, Andrew Harnden, Jason Lankow, Joe Pulizzi, Mark Schaefer, Brian Singh, Laura Shea Souza, Tyler Weaver, and Tom Webster. Your ideas, insights, and experiences were invaluable and added important depth and breadth to the book.

Also, thank you to my clients at Intersection Consulting and my colleagues in the Vancouver social media community for their support and kind words.

Last, but certainly not least, thanks to my wife and kids. Your unwavering support, understanding, and encouragement helped make this book possible. Remember, “center of focus.”

I hope you enjoy *The Power of Infographics* and that it helps you learn more about how information design can help you communicate and connect with your audiences. I’d love to hear from you. If you’re interested in chatting about the ideas in this book, please join the conversation at [facebook.com/powerofinfographics](https://facebook.com/powerofinfographics), or feel free to connect on Twitter at [@Intersection1](https://twitter.com/Intersection1).

## WE WANT TO HEAR FROM YOU!

As the reader of this book, *you* are our most important critic and commentator. We value your opinion and want to know what we're doing right, what we could do better, what areas you'd like to see us publish in, and any other words of wisdom you're willing to pass our way.

We welcome your comments. You can email or write to let us know what you did or didn't like about this book—as well as what we can do to make our books better.

*Please note that we cannot help you with technical problems related to the topic of this book.*

When you write, please be sure to include this book's title and author as well as your name and email address. We will carefully review your comments and share them with the author and editors who worked on the book.

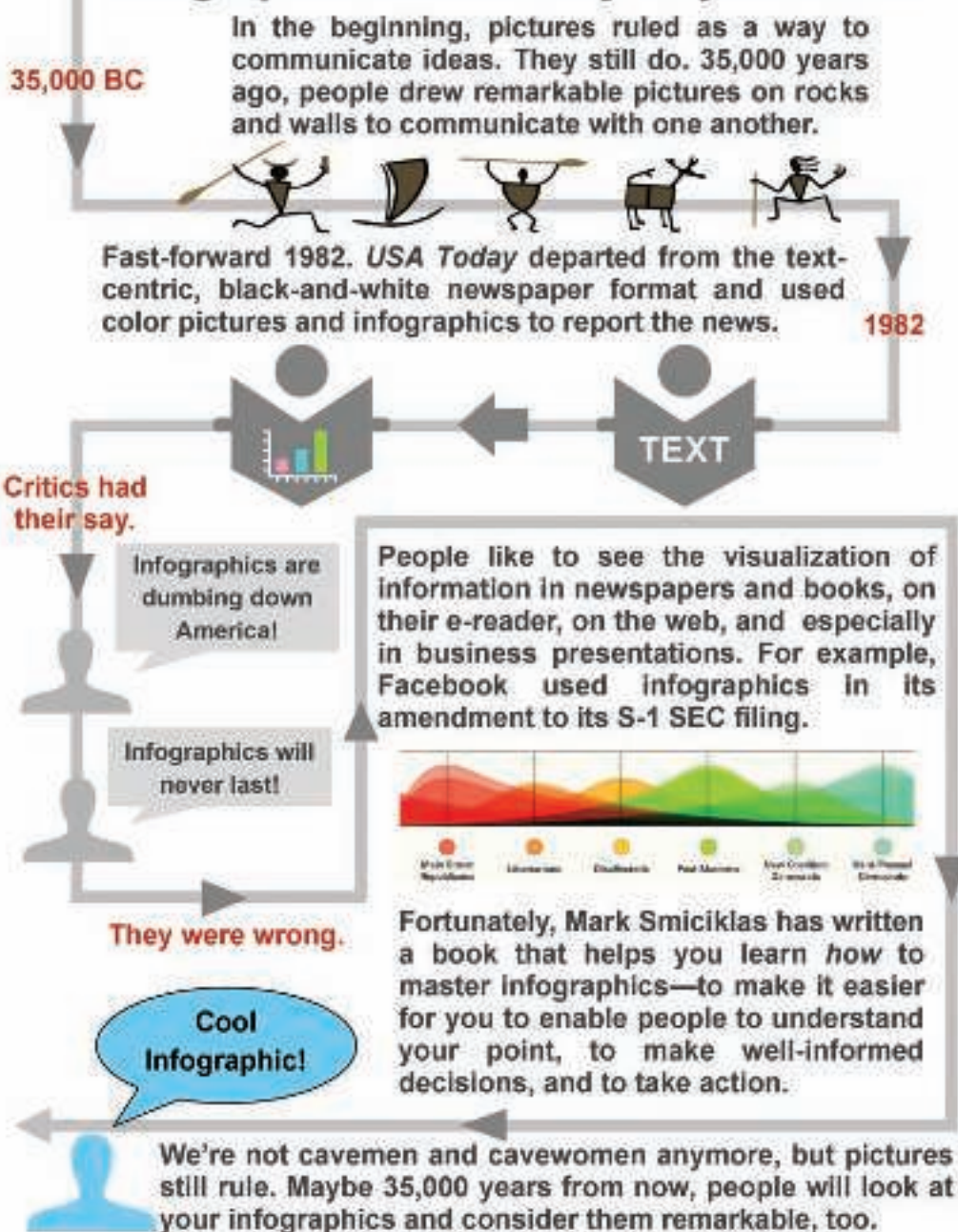
**Email:** [feedback@quepublishing.com](mailto:feedback@quepublishing.com)

**Mail:** Que Publishing  
ATTN: Reader Feedback  
800 East 96th Street  
Indianapolis, IN 46240 USA

## READER SERVICES

Visit our website and register this book at [quepublishing.com/register](http://quepublishing.com/register) for convenient access to any updates, downloads, or errata that might be available for this book.

## Infographic Foreword by Guy Kawasaki



"Newspaper", "Bar Graph" by Scott Lewis, from TheNounProject.com

---

*This page intentionally left blank*

---

## SECTION I

---

# VISUAL COMMUNICATION

**1** Infographics 101



---

*This page intentionally left blank*

---

# Infographics 101



If you've read a newspaper or blog, flipped through a magazine, or used social media recently, you've likely come across infographics—those self-contained pictorials that tell you the gist of a story or concept at a glance.

But what is their purpose? Are infographics simply eye candy that publishers and brand journalists use to gloss up their content, or do they aim to fulfill a greater business communication objective?

## WHAT ARE INFOGRAPHICS?

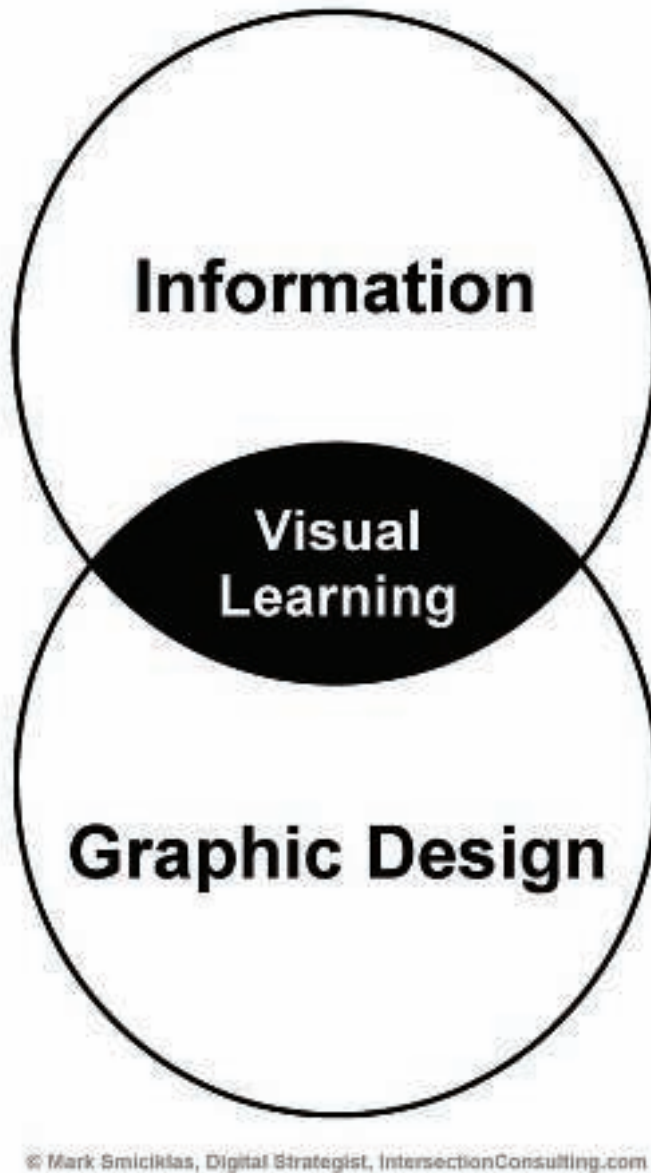
You've probably heard the phrase "A picture is worth a thousand words," a manifesto that speaks to the value and efficiency of visual communication.

An infographic (short for information graphic) is a type of picture that blends data with design, helping individuals and organizations concisely communicate messages to their audience (see Figure 1.1).

## INFOGRAPHICS DEFINED

More formally, an infographic is defined as *a visualization of data or ideas that tries to convey complex information to an audience in a manner that can be quickly consumed and easily understood.*

The process of developing and publishing infographics is called data visualization, information design, or information architecture.



**FIGURE 1.1** Anatomy of an infographic.

*Infographics combine data with design to enable visual learning. This communication process helps deliver complex information in a way that is more quickly and easily understood.*

From a business perspective, one definition of infographics resonates above the rest. British graphic designer, author, and information design theorist Nigel Holmes simply refers to them as “explanation graphics.”

As a marketer, business owner, or manager, you can boil down your communication goals to explaining things to your audience. Infographics can help you communicate the following:

- Thought leadership and product features and benefits to your prospects
- Business process and service options to your customers
- Ideas and policies to your staff
- Corporate philosophy and strategy to your investors

Infographics can help your organization more effectively explain important information to your internal and external stakeholders.

## Business Uses

Now that you have a basic understanding of what infographics are, what are some ways you can implement them into your business communication mix?

First, it’s important to understand that infographics are not used solely for external communication. They are a great medium for delivering marketing messages or insights to consumers and prospects, but they are equally effective when used to enhance internal communication.

Before you figure out how you can start using infographics, it helps to understand the nature of the information you are trying to communicate.

Business information can be divided into the following groups:

- **Statistics**—metrics such as sales, revenue, market research, surveys
- **Process**—manufacturing, customer service, sales funnel, lead generation, supply chain
- **Ideas**—concepts, theories, thought leadership, ideology
- **Chronology**—history, order of events, timelines, schedules
- **Geography**—locations, metrics by region
- **Anatomy**—ingredients, components, lists
- **Hierarchy**—organizational structure, needs assessment
- **Relationships**—internal, external, people, products/services
- **Personality**—brand humanization, organizational culture

Many people are familiar with statistics being represented as infographics because of the popularity of data visualization and its use in traditional media. However, business owners, marketers, and managers tend to overlook the use of infographics to communicate other types of information.

The next section delves into information categories in more detail. You will begin to see how infographics can effectively represent different types of business data and how they can become a powerful part of your organization's communication strategy.

## INFOGRAPHIC HISTORY

Today, infographics can be used by a wide variety of individuals and organizations to enhance their communication. "Solopreneurs," small businesses, nonprofits, and large corporations can all find ways to use infographics to make their information more interesting and accessible to their target audiences.

You can find infographics published in traditional media such as newspapers and magazines and across digital channels, where social media has helped fuel an explosion in their popularity.

To the casual observer, it would appear that infographics are a recent phenomenon that has been growing in conjunction with the growth of the Internet. The reality is that we have been using icons, graphics, and pictures throughout history to tell stories, share information, and build knowledge, as shown in Figure 1.2.

As we entered the new millennium the publishing of infographics became more democratized, and their use began to extend beyond academia and traditional media channels.

Today, in an era of information overload and shortened attention spans, organizations of all sizes are using infographics to quickly deliver information and understanding to internal and external audiences. Add the fact that social media fuels "shareability," and everything points to infographics becoming one of the most effective forms of content for communicating information in the digital age. (Shareability is explained in greater detail later in this chapter.)

## THE SCIENCE OF VISUALIZATION

Brain research related to the physiology of sight and the ways in which we process information using our eyes presents compelling rationale for considering the use of infographics in your business communication mix.

### HARDWIRING

Vision is a huge part of the physical brain. Approximately 50% of the brain is dedicated (directly or indirectly) to visual functions.<sup>1</sup>

The network of cells, neurons, and fibers that hosts all this activity is truly expansive. Within the eye, the retina alone is made up of more than 150 million cells and is actually a physical extension of the brain. In addition, neurons that are responsible for visual activity take up a large portion of the brain's real estate, representing approximately 30% of our total gray matter. To put this in perspective, neurons for touch and hearing make up only 8% and 3%, respectively.<sup>2</sup>

### EASY ON THE MIND

With all this visual “hardwiring” in place, it makes sense that it would be less complicated for the brain to process infographics than pure text.

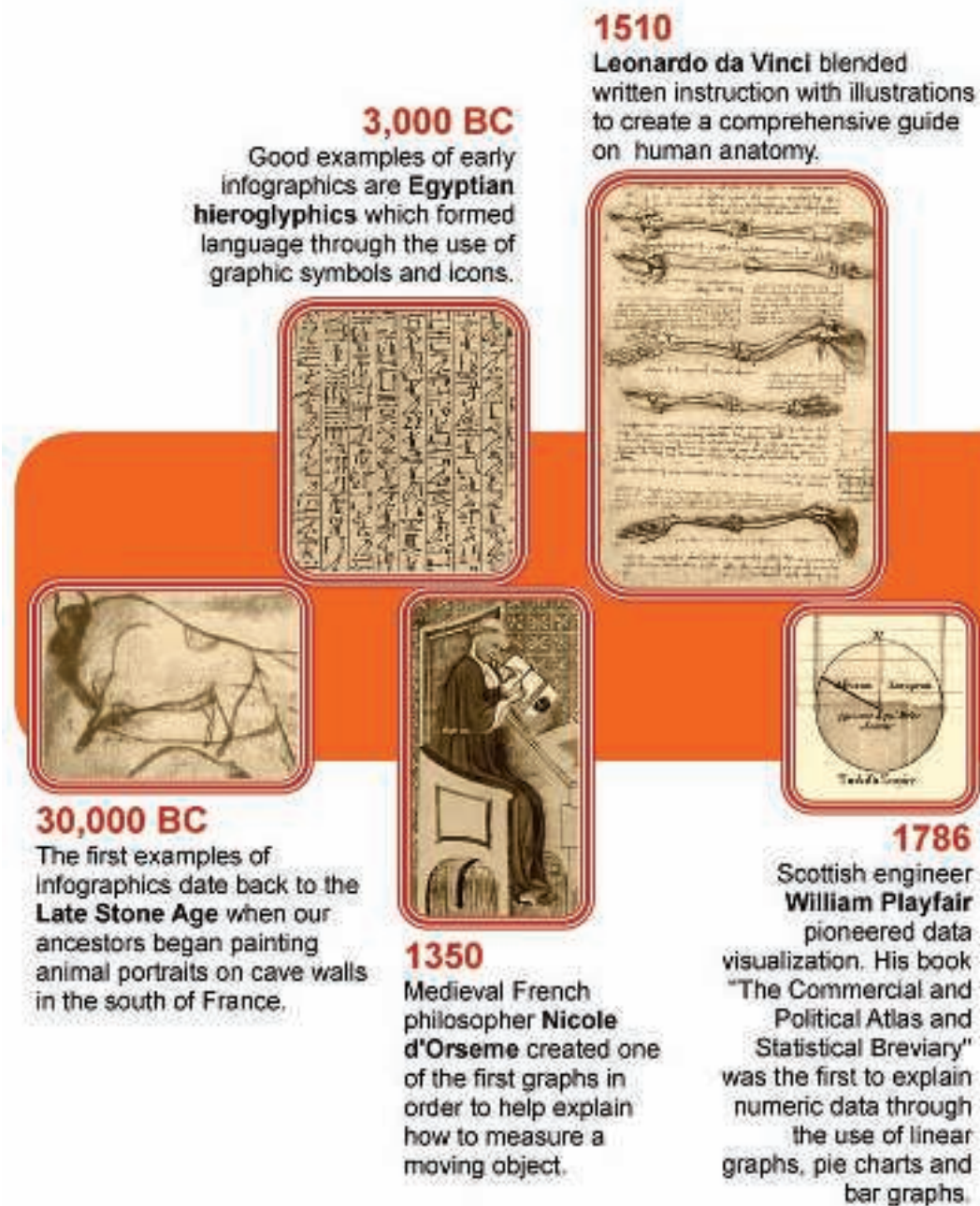
Each letter in a word is essentially a symbol. To read text, the brain needs to act as a decoder first, matching those letters with shapes stored in memory. From there the brain must figure out how all the letters fit together to form words, how words form sentences, and how sentences form paragraphs. Although all this comprehension takes place in only a split second, relatively speaking, when compared to how the brain deals with images, the process requires considerably more mental effort.<sup>3</sup>

One of the reasons we can process images faster than text is because of how the brain handles information. It processes data from pictures all at once but processes text in a linear manner, as shown in Figure 1.3.

So, in a way, by using infographics to communicate, you make it physically easier for your audience to relate and connect to your information.

In a TED talk about the beauty of data visualization, writer and designer David McCandless expands on the idea that infographics provide a sense of relief in a landscape filled with a mind-numbing amount of information:

“There’s something almost quite magical about visual information. It’s effortless. It literally pours in. If you’re navigating a dense information jungle, coming across a beautiful graphic or lovely data visualization is a relief. It’s like coming across a clearing in the jungle.”<sup>4</sup>



Source: Wikipedia.com

FIGURE 1.2

*A brief history of infographics.*

**1857**

English nurse **Florence Nightingale** combined stacked bar/ pie charts (Coxcomb chart) to illustrate the monthly number of casualties and causes of death explain during the Crimean War. She used these infographics to help convince Queen Victoria to improve conditions in military hospitals.

**1970-1990**

Infographics became more popular as **mainstream news publications** like The Sunday Times (UK), Time Magazine and USA Today began using them to simplify information and enhance comprehension of complicated issues and news stories.

**1850-1870**

**Charles Joseph Minard**, a Civil Engineer from France, began combining maps with flow charts in order to explain geographical statistics. One of his most famous data visualizations illustrated the causes of Napoleon's failed attempt to invade Russia. He captured a complex data set for the period (map location, direction travelled, decline in troops and temperature) in a single infographic.

**1930-1940**

The modern era ushered in Isotype, a visual communication model developed by **Otto Neurath** to teach ideas and concepts through the use of icons and pictures.



---

sample content of The Power of Infographics: Using Pictures to Communicate and Connect With Your Audiences (Que Biz-Tech)

- [read The Pirate Prince \(Ascension Trilogy, Book 1\)](#)
- [Monster: The Autobiography of an L.A. Gang Member here](#)
- [read Simply Unforgettable book](#)
- [read online Entertaining for a Veggie Planet: 250 Down-to-Earth Recipes](#)
- [The Brothers \(Small Epic\) pdf, azw \(kindle\), epub](#)
- [read online A Voice Still Heard: Selected Essays of Irving Howe](#)
  
- <http://conexdx.com/library/A-Wealth-of-Common-Sense--Why-Simplicity-Trumps-Complexity-in-Any-Investment-Plan-.pdf>
- <http://conexdx.com/library/Monster--The-Autobiography-of-an-L-A--Gang-Member.pdf>
- <http://dadhoc.com/lib/Ficciones.pdf>
- <http://xn--d1aboelcb1f.xn--p1ai/lib/The-Game-Jam-Survival-Guide.pdf>
- <http://www.experienceolvera.co.uk/library/The-Brothers--Small-Epic-.pdf>
- <http://www.celebritychat.in/?ebooks/Custom-PC--UK---Issue-152--May-2016-.pdf>