

# **Editing and Organizing Illustrated Books**

## The Quest for Usable Designs

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Michael Greer

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Background: I am a development editor with Pearson Higher Ed, developing textbooks for college courses in writing and technical communication. For about the last 5 years, I have been working in tandem with the design team at Dorling Kindersley on a college writing handbook designed to take advantage of DK's approach to the visual presentation of information.

DK was started back in the 1970s on the theory that books needed to be both visual and verbal, with the slogan "we show you what others only tell you." During the course of developing the handbook, we also conducted a series of usability tests with "real" students, to learn more about how students read and use their textbooks. What I have learned in this process has transformed my thinking about book design and the development process.

# Two major problems

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- **Disconnect with our readers**
- **Workflow and budget challenges**

The disconnect with our readers was obvious: only about 50 percent of students buy even required textbooks, and they complain that they are too hard to use and too dense. We were designing and writing books around a print culture model, and trying to sell them to students living in a multimedia/web world.

The workflow problems were also mounting: designs were taking multiple rounds of revision, paging was late, length problems--we found ourselves making changes in second and third pass proofs to get the images and text to line up. Nobody was happy with the costs for multiple design revises.

# Taking a new approach

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- **Learn more about our readers**
- **Re-design the workflow and process**

Two key pieces to the way we built our process:

1. User testing with real readers--based on usability studies done on websites, and informed by principles of user-centered design
2. Bring editorial and design into a closer collaboration, earlier in the process

# Readers don't read, they scan

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- **Students use their textbooks for about 15 minutes a week**
- **They like to flip and skim**
- **They look at pictures and examples first**
- **They almost never read the running text at all**
- **They are impatient and want answers fast**
- **They look for patterns and expect a web-like navigation experience**

To learn more about our readers, we conducted a series of usability studies at Clemson University, working with their usability testing center. What we discovered would probably shock most college English teachers:

Students use their textbooks for about 15 minutes a week

They like to flip and skim

They look at pictures and examples first

They almost never read the running text at all

They are impatient and want answers fast

They look for patterns and expect a web-like navigation experience

# Redesigning the process

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- **Design is a way of thinking about both *what* and *how* to present**
- **Content development and design begin to merge**
- **A new model: “information architecture”**
- **Design is not “interior design”**

In order to design books that were more usable for our audience, we found we also needed to redesign our workflow and process. In short, editorial and design merged into a single collaborative process. The linear process had to become more circular and dynamic. The biggest hurdle has been the legacy of the old ways of doing things--“turnover,” “editorial,” “production.”

# Design principles

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- **Chunking:** divide information into visually identifiable pieces; use the page space to control the flow of image and text
- **Layering:** use headings and summaries to provide information at a glance for “grazers” and offer detail in basal text for readers who want depth
- **Patterns:** establish visible, simple, repeatable patterns and stick with them

So, how do we do this? What does this look like in practice?

I can begin to address those questions in the remainder of my presentation by focusing on three core design principles: chunking, layering, and patterns.

These are three shorthand terms we ended up using in our work as we developed actual pages in the book. Their usefulness comes from the fact that they are broad enough to be applied to a wide range of types of educational texts--not just handbooks.

So what does this look like?

# EDITING & PROOFREADING

## EDITING

To edit your own writing, try reading it aloud to yourself (which will help you really hear how your words are working) or to someone else (which will really make you aware of how others respond).

Whether you read aloud or work with hardcopy, keep an ear and eye out for the following:

- Are your verbs active? Are your nouns concrete?  
→ See pages 000–000.
- Have you avoid jargon?  
→ See page 000.
- Will your readers know easily why one sentence or paragraph follow another?  
→ See pages 000–000 on transitions.
- Do your sentences have all the qualities that make them easy to read?  
→ See pages 000–000.
- Are your introductory and concluding paragraphs engaging and strong?  
→ See pages 000–000.
- Have you used inclusive language?  
→ See pages 000–000.

## PROOFREADING

For both editing and proofreading, keep the following in mind:

- If you have been writing exclusively on screen, **print a hardcopy** for editing and proofreading: Seeing the text differently will help you see changes you can and ought to make to help your audience read easily.
- Almost all word processing software comes with **grammar checkers**. Use them, but use them carefully: They simply are not as sophisticated as humans. They often miss or misidentify sentence fragments, recommend that you shorten sentences that are just fine, and suggest grammatical changes that are just plain wrong. At this time, there is no better grammar checker than another human.
- Like grammar checkers, **spellcheckers** are imperfect. They cannot tell whether you are using they're, there, or their correctly, and they will sometimes recommend replacement words for words they do not have in their reference lists; for example, one spellchecker has recommended salmon's to replace someone's. Spell checkers do not recognize many names. So use spellcheckers, but use them carefully: If you are unsure whether a change they recommend is correct, check a dictionary or ask someone whose knowledge you trust.

## IF ENGLISH IS NOT YOUR HOME LANGUAGE

- Proofread and edit little by little. Don't wait until the paper is finished to edit and proofread. Instead, once you have a thesis, statement of purpose, and have completed a draft, spend a little time editing. If you leave all the language work until the end of the process, you may not have enough time or you may find it too overwhelming and discouraging.
- Determine the aspects of style, punctuation, or grammar that give you trouble. Focus on those aspects when you proofread.
- Proofread your text more than once. Look for a different style, punctuation, or grammar point each time.
- Be an active proofreader. Use strategies that allow you to focus on the mechanics and language of what you have written. In addition to the strategies we have described to the left, try:
  - Underlining or highlighting the aspects of style, punctuation, or grammar on which you are focusing.
  - Moving a pencil along each sentence as you proofread to focus your attention on your words and punctuation.
  - Reading sentence by sentence, covering the rest of the text with a blank sheet of paper.
  - Putting slash marks (/) between each sentence. This will help you focus on the grammar, punctuation, and vocabulary choices you have made in each sentence.

## chunking

readers need to see where the information begins and ends

Here's an example of chunking. Chunking is important for readers because it helps them orient themselves by seeing where a topic begins and ends (as opposed to flipping around or feeling lost).

Chunking works on multiple levels: first, the two-page spread itself as a whole (imagine a spiral binding down the middle of this screen: all of my samples are in fact 2-page spreads). Topics begin top left and end bottom right. The information is contained in a spread that can be seen and read as a whole at one time.

The columns also serve as a secondary chunking level. Each column is a discrete unit of text with a heading at the top. The design is flexible enough to accommodate columns of differing length.

# COMMAS

have four main uses.

# 1

## USING COMMAS TO MAKE NUMBERS, PLACE-NAMES, AND DATES CLEAR

To learn how and when to use commas in sentences like the following—

Virginia's population was 1,000,000 in 1830. It took eighty more years for it to reach its second million (2,061,612 in 1910).

If you visit Emily Dickinson's house in Amherst, Massachusetts, you won't see anything that truly belonged to Emily Dickinson.

Abraham Lincoln was shot the night of April 14, 1865, and died the following morning.

→ GO TO PAGE 000.

# 2

## USING COMMAS TO HELP INDICATE WHEN YOU ARE QUOTING (EXACTLY) THE WORDS OF SOMEONE ELSE

To learn how and when to use commas in sentences like the following—

"Hello," she said, "can I help you with that?"

"The real problem with having a robot to dinner," argues Ellen Ullman, "is pleasure."

—or to learn about the following kinds of sentences (in which you aren't quoting someone else's words directly)—

She asked if she could help me.

Ellen Ullman has argued that pleasure (or the lack of it) is why people don't have robots to dinner.

→ GO TO PAGE 000.

# 3

## USING COMMAS TO SEPARATE WORDS THAT ARE PARTS OF LISTS IN SENTENCES

To learn how and when to use commas in sentences like the following—

At lunch I ate potato chips, a peanut butter and jelly sandwich, a banana, two cupcakes, and some barbecued eel.

The stinking, reeking water roiled down the street.

She caught a cab, her breath, and then the flu.

He was livid, he was angry, and he was mad.

→ GO TO PAGE 000.

# 4

## USING COMMAS TO BUILD SENTENCES THAT CONTAIN MULTIPLE PARTS

To learn how and when to use commas in sentences like the following—

To hear him tell it, the bananas were not exactly conducive to a happy stomach.

Her father, who was born in Saudi Arabia, always longed for the hottest days in August.

Can you bring me the ladder, which is in the backyard?

You'd think it would be enough that she earned A's in all her classes, but my roommate, a biomechanical engineering major, also wanted to have the highest GPA on campus.

He looked up at me, and he burst into tears.

→ GO TO PAGE 000.



WHEN SHOULDN'T YOU USE COMMAS? → GO TO PAGE 000.

# layering 1

overview or fast-track pages support readers who are "grazing"

Layering is a way of separating out overview content from in-depth content. Readers have been taught by the Web to move between overview pages like this spread on four main uses of commas, and then to "drill down" for more details as needed. Instead of clicking, in our case, readers turn the page, to find...

# COMMA USE 1

USING COMMAS TO MAKE NUMBERS, PLACE-NAMES, AND DATES CLEAR

## NUMBERS

When you are writing numbers, use commas to separate the digits with numbers higher than 999.

**1,000 (but 999)**

**2,304,504**

**\$87,000,000,000**

Note that the commas separate the long numbers into groups of three, moving from the right to the left.

Here are examples of commas in numbers in sentences:

**How had 9,125 relatively uneventful days passed so quickly, and how might I slow the days ahead?**

**In 1889 more than 3,000,000 acres in the Indian Territory, now Oklahoma, were opened to non-Indian homesteaders, so that a territory that had held virtually no non-Indians in 1880 had 730,000 in 1900.**

Here is comma use with large numbers when money is at issue:

**On the \$65,000,000 bond sale, Morgan and Belmont made a perfectly legal profit somewhere between \$1,500,000 and \$16,000,000; no one outside the banks knew exactly how much.**

**BUT!**

In the examples above, notice that there are no commas in numbers that represent years. It is also conventional not to use commas in street addresses:

**20419 West Second Street**

## PLACE-NAMES

When you mention a location and the larger place of which it is a part—such as a neighborhood in a city, a city in a state, a state or province in a country—separate the two place-names with commas:

*Neighborhood, city:* **Algiers, New Orleans**

*City, state:* **Houghton, Michigan**

*State, country:* **Oregon, United States**

*Province, country:* **Tangier, Morocco**

In sentences:

**In 1948, Adrian Piper, an artist and philosopher, was born in Harlem, New York City.**

**Fela Kuti was born in Abeokuta, Nigeria, to a middle-class family.**

**To finish his PhD at the University of California, Davis, he had to figure out how to put a rattlesnake on a leash.**



To put a multiline address—

**Habitat for Humanity/Metro Jackson  
P.O. Box 55634  
Jackson, MS 39296-5634**

—onto one line in your writing, put commas between the sections:

**Please send your donations to Habitat for Humanity/Metro Jackson, P.O. Box 55634, Jackson, MS 39296-5634.**

Note that there is no comma between the state and the zip code.

## DATES

There are three common formats for written dates in the United States, only one of which requires a comma:

**1**

**February 17, 1951**

When you include a full date—month, day, year—put a comma after the day:

**On January 26, 1950, the Constitution of India was adopted and gave many powers to the individual states.**

**2**

**17 Feb. 1951**

This format is for citing webpages in the MLA style:

**Hayden, Teresa Nielsen. "Yo, Wocky Jivvy, Wergle Flomp." Weblog entry. Making Light. 29 June 2005. 18 Feb. 2006 <<http://nielsenhayden.com/makinglight/archives/006498.html>>.**

→ See pages 000–000 for more information on this use of dates.

**3**

**February 1951**

If you are writing only the month and year, you do not need a comma between them:

**In February 1912 La Follette delivered an angry, rambling, and—according to some—drunken speech at an important dinner for newspaper publishers, extinguishing whatever slender chances he had had for gaining the Republican nomination.**

## layering 2

more depth and detail for readers who want more than the basics

...more detail on the first use of commas. Layering content supports two kinds of readers: "grazers" who want only the basics, in a hurry, and "slow trackers" who like to read everything and absorb as much as they can. (Many students are grazers, while English teachers often lean toward the detail side!)

Traditional linear text design (heading/overview/depth, heading/overview/depth) generally rewards only readers with the patience to live on the slow track. Students who may be visual learners or nonlinear thinkers often tend to feel intimidated by long pages of running text.

A combination of chunking and layering helps open up a text to multiple readers.

## QUOTATION MARK USE 1

USING QUOTATION MARKS FOR TITLES OF SHORT WORKS

Use quotation marks to indicate the name of a show or exhibition—

**“Goya’s Last Works,” at the Frick, isn’t large, but neither are grenades.**

—the titles of poems and musical pieces—

**I had to study why Van Halen moved (certain) people as much as the Beatles, but, folks, they did, in the same way Whitman did. “Hot For Teacher” is “Song of Myself” with crappier words but much better lead guitar.**

—the titles of essays—

**“The Making of Americans” was a work that Stein evidently had to get out of her system—almost like a person having to vomit—before she could become Gertrude Stein as we know her.**

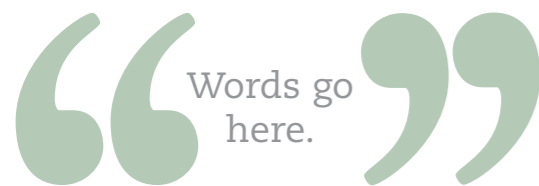
—the titles of movies—

**As a union rep, Frances McDormand (who still has her Minnesota vowels in place from “Fargo”) periodically helps relieve the righteousness, although this is the kind of movie where the character with the funniest lines is obliged to acquire a terminal illness.**

—or the titles of almost any work that is not book length.

→ Information on how to indicate the titles of book-length works is on pages 000–000.

→ See pages 000–000 on using italics for this function of quotation marks.



## QUOTATION MARK USE 2

USING QUOTATION MARKS TO INDICATE YOU ARE USING A WORD AS A WORD

Sometimes, writers need to refer to a word as a word:

**“Doctor” comes from the Latin word, docere, “to teach.”**

If ever you need to do this, put quotation marks around the word:

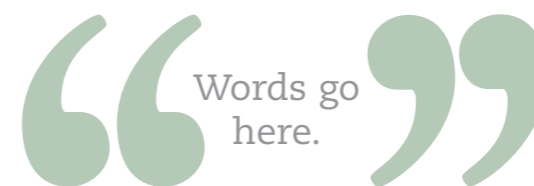
**The term “preservation” usually comes up in reference to buildings, not to the graffiti that covers them.**

**His student asked him how to use “until” according to English conventions.**

**Franziska often spews repetitive insults using the word “fool.”**

→ The use of quotation marks for this function goes back to the days of typewriters. With computers, italics can replace quotation marks for this function; see pages 000–000 on using italics.

→ Because quotation marks are almost always woven in with other punctuation, it is tricky to use them as academic readers and readers of published work expect. On pages 000–000 we go over the little but important details of using quotation marks in expected ways.



pattern 1

users aggressively search for patterns that match problems they wish to solve

## QUOTATION MARK USE 3

USING QUOTATION MARKS TO INDICATE TECHNICAL TERMS AND WORDS FROM OTHER LANGUAGES

An explanation goes here to introduce te examples:

Ringed seals, ivory gulls, and other birds and mammals whose lives are ice-oriented are called “pagophylic.”

During the thirteenth century, the Dutch instituted a “wind brief,” a tax paid to the lord or king over whose fields the wind blew before reaching a mill.

Consider, for example, a form of creativity that seems strange to many Americans but that is inescapable within Japanese culture: “manga,” or comics.

As I explain in the pages that follow, we come from a tradition of “free culture”—not “free” as in “free beer” (to borrow a phrase from the founder of the freesoftware movement), but “free” as in “free speech,” “free markets,” “free trade,” “free enterprise,” “free will,” and “free elections.”

- The use of quotation marks for this function goes back to the days of typewriters. With computers, italics can replace quotation marks for this function; see pages 000–000 on using italics.
- Because quotation marks are almost always woven in with other punctuation, it is tricky to use them as academic readers and readers of published work expect. On pages 000–000 we go over the little but important details of using quotation marks in expected ways.

“ Words go here.”

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## QUOTATION MARK USE 4

USING QUOTATION MARKS TO SHOW IRONY

Writers sometimes want to distance themselves from words: they need to use particular words, as in the examples below, but they want to show that they don’t agree with the word choice. In such cases, writers can put quotation marks around the words.

Look for example, at how novelist Janet Frame, in her autobiography, uses quotation marks to let readers know how she feels about the sincerity of the women who visited her mother after her sister’s death:

**They sat patting and arranging their “permanent” waves.**

Here are sentences from scientists, commenting on how others have characterized scientific practice:

**How can an experiment be “wrong”?**

**The problem I am posing here is not one of individual morality, of individual scientists doing “dirty” work or “clean” work; rather, the problem is institutional.**

In each case, the quotation marks let readers know that the writers question the characterizations of experiments and other scientific work contained in the punctuated words.

- Because quotation marks are almost always woven in with other punctuation, it is tricky to use them as academic readers and readers of published work expect. On pages 000–000 we go over the little but important details of using quotation marks in expected ways.

“ Words go here.”

QUOTATION MARKS 9.133

pattern 2

repeating a pattern establishes habituation and leads readers to feel a design is “intuitive”

## QUOTATION MARK USE 5

USING QUOTATION MARKS TO INDICATE DIRECT QUOTATION

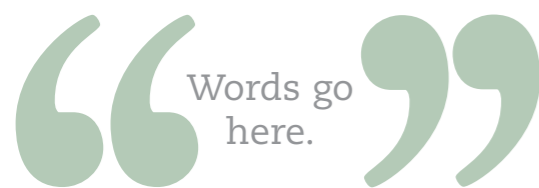
Over centuries, conventions have developed in different languages for how to indicate to readers that writers are quoting the words of others. In English, quotation marks—placed on either side of the words being quoted—have become the expected way of doing this, even if a writer is quoting only one word from someone else:

**Fukasawa's approach to designing electronic gadgets, based on over 25 years' experience, has been called "anti-technical" because it dispenses with unnecessary buttons, displays, and other high-tech signifiers.**

**A comparison to make a point is Sarah Vowell's claim that "Going to Ford's Theatre to watch the play is like going to Hooter's for the food."**

**At the time the Wright brothers invented the airplane, American law held that a property owner owned not just the surface of his land, but all the land below, down to the center of the earth, and all the space above, to "an indefinite extent, upwards."**

- Because quotation marks are almost always woven in with other punctuation, it is tricky to use them as academic readers expect. On pages 000–000 we go over the details of using quotation marks in expected ways.
- There are two kinds of quotation marks: straight quotes ("...") and "curly quotes" ("..."). The latter are considered more professional. To learn how to make them, see pages 000–000.



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## QUOTATION MARK USE 6

USING QUOTATION MARKS TO INDICATE SPEECH

When you wish to suggest to your readers that the words you are writing were spoken out loud by someone else, quotation marks are the customary strategy in English:

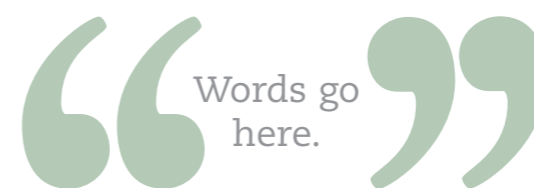
**"He was going to write the definitive book on leeches," she says. "It was his primary ambition in life."**

**"Reading ability is a proxy for intelligence in American culture," said Dr. Sally E. Shaywitz of Yale University School of Medicine, a pediatrician who is an expert on dyslexia.**

**"You have to listen to music before you go out on a mission and get real hyped," says Sgt. Junelle Daniels, a twenty-five-year-old generator mechanic from Miami who is gearing up for a second deployment. "If not, you start thinking, 'What if? What if this happens? What if that happens?' You start to get the fear."**

Note that indicating speech is sometime the same as indicating a direct quotation.

- Because quotation marks are almost always woven in with other punctuation, it is tricky to use them as academic readers and readers of published work expect. On pages 000–000 we go over the little but important details of using quotation marks in expected ways.
- In academic writing, any time you quote someone else, the expectation is that you will give a source of the quotation; see pages 000–000 for how to do this.



QUOTATION MARKS 9.135

pattern 3

consistency reinforces spatial memory  
(readers remember where things are,  
not what they're called)

# Concluding thoughts

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- Simple design concepts can be powerful
- Simplicity and clarity are not easy to achieve in practice
- It does not require a huge budget to achieve a usable design
- Be prepared to throw established workflow out the window
- A design is successful when its users can achieve their purposes