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The image of the book:

What Cognitive Psychology Tells Us About the Interplay of the Visual and Aural When Experiencing a Printed Book

Pino Trogu[1], Jim Faris[2], Jack Stauffacher[3]

Resurrecting the book – Birmingham, UK
Saturday, 16 November 2013

Link to presentation slides and handout:
`http://www.trogu.com/Documents/conference/2013_RTB_birmingham_UK`

printed book, working memory, image, imageability, visual, aural

Abstract

This paper aims to show that the physical properties of a printed book are intrinsic elements that aid the verbal content in communicating to the reader. This may sound obvious to the book designer, of indifference to the writer, or unimportant to the reader, but there was a time when the physical and verbal elements combined in the single personage of the author, publisher, designer and printer. Paraphrasing the title of a book by urban planner Kevin Lynch and borrowing on his concept of a city's "imageability", we aim to show that the construction of the "mental image" of a text can be enhanced by the visual and physical context in which the text is presented, and that the printed page can retain its privileged status between the author and the reader in part because of this physical character.

Cognitive psychology points to the verbal-visual interaction in perceiving and remembering things, and that the atemporal visual and the temporal verbal are each both temporal and verbal. Through the example of books designed and printed by co-author Jack Stauffacher, we aim to present the printed book as an object lesson in the integration between the visual and the verbal in Alan Baddeley's model of working memory, which postulates an interaction between the "phonological loop" and the "visuo-spatial sketch pad".

Subvocalisation occurs when reading, and also when viewing and "naming" images, thus helping visual organization. Similarly, images are invoked in metaphors, and used as mnemonic devices for easier storage and retrieval. These strategies are crucial if a reader's "working memory" is going to successfully retain meaningful information that will be available for later retrieval from long-term memory. While in principle there should be no difference between the hypertext properties of the physical book (footnotes, cross-references, bibliographies, etc.) and those of the digital book or digital text in general (hyperlinks, word definitions, etc.) the act of turning the pages or opening another book involve a physical, spatial activity that complements the aural, phonological process of reading the text. This activity punctuates the temporal process of reading with the spatial equivalent of landmarks and monuments. They are markers that stake out and record a path for a new reader, or confirm and validate the reader's path through the text.

1 Pino Trogu is a graphic designer and teacher. Trained at the Rhode Island School of Design in Providence, R.I., he is currently Assistant Professor of Information Design at San Francisco State University, teaching data visualization, exhibit design and drawing, with occasional workshops on letterpress and bookbinding.

2 Jim Faris is an interaction designer who trained at the Basel School of Design. He was Director of Graphic Design for The Museum of Modern Art, New York. Recently he was Visual Interface Consultant for Motorola and Lead Visual Designer for Google. He is currently Lead Visual Designer at Skype.
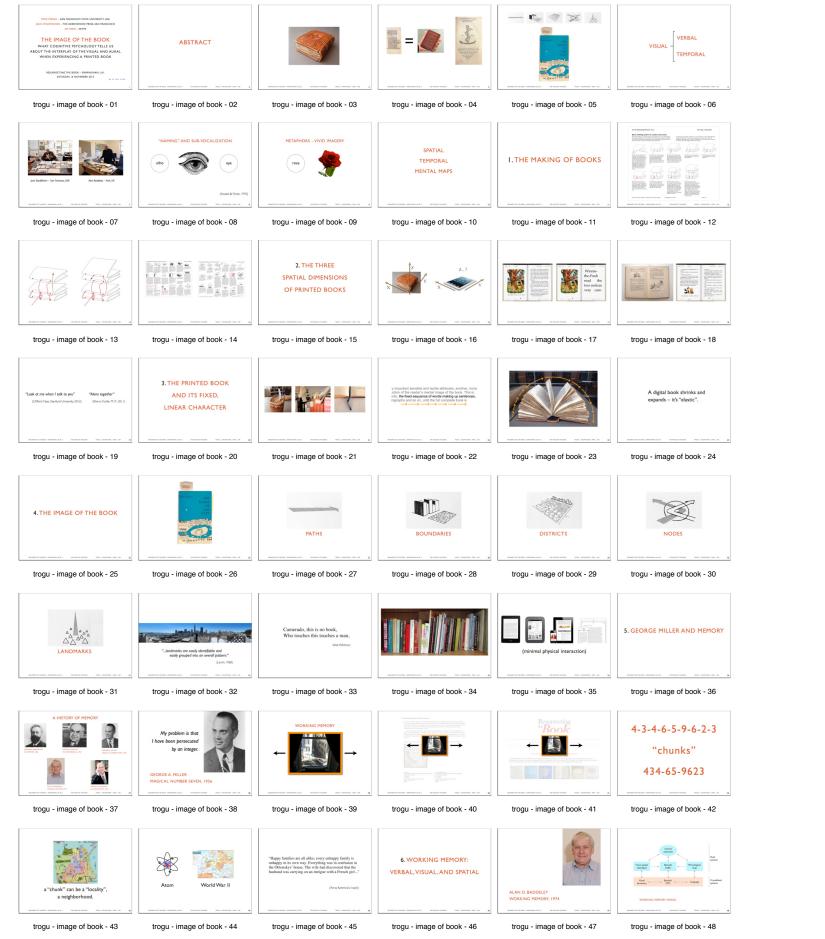
3 Jack Stauffacher describes himself as a printer, in the tradition of the entrepreneur-publisher-designer-typographer-printer. Works from his Greenwood Press 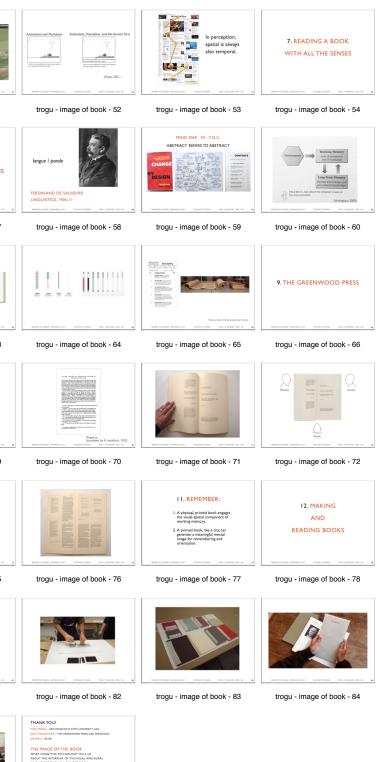are in the collections of the San Francisco Museum of Modern Art and the Los Angeles County Museum of Art. In 2004, he was awarded the Gold Medal from the American Institute of Graphic Arts.

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