Dissecting The Science Of BOOK DESIGN

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ABSTRACT

The purpose of this project was to become equipped with the knowledge necessary for producing a successful book design. That knowledge was put into effect by designing an eight-page workbook for Dr. Aubrey H. Fine’s latest book *Give a Dog your Heart* and *Love Will Come your Way*.

The premise of the book involves aiding parents and children who have experienced the loss a pet, to deal with their grief and ideas about death. A workbook was designed serve as a healing, memorial piece that enables the child to express their feelings about their loss, and will ultimately be a memento for them to reflect on and celebrate the life of their pet. In addition to this design, marketing pieces were designed for Healing Paws Press, the publishing company for *Give a Dog your Heart*. This included stationery and business card design as well as a website what would promote the release of the book to veterinary organizations and readers alike.

In order to execute these designs, research was conducted that revealed all of the basics of book design. The research hovered around the primary question: “What research and what procedure must a book designer perform when attempting to design a book, and of those, which are the most important and should be done first? This project ultimately came full circle when the question was answered and applied it to the deliverable project.
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CHAPTER 1

Amidst a never ending race for technological advancement, the oldest and most primitive of communication still reigns supreme; the book. With Kindles, eBooks, and Ipads, devices that enable one to read books via electronic media, to compete with, the masses still have not abandoned books. Johann Gutenberg holds the distinction of being the inventor of the movable-type printing press. In 1455, Gutenberg produced what is considered to be the first book ever printed (Thrope, 1990). Since then there have been over two trillion books published with up to three hundred thousand more published every year in the United States alone (Bowker, 2007). There are several considerations that may encourage a consumer to turn to a book rather than to electronic alternatives; they may prefer its portability, they may prefer ink on paper because of eye fatigue, and they may prefer its durability and longevity.

Whatever the case, books are still relevant in graphic communication and communication in general. One of the most important aspects of books, only second to the content, is the design of the book. Book design applies to cover design and to the layout of the entire text and its overall functionality. Good design can help readers navigate through a book, it can complement and elaborate on the books subject matter and it may just be pleasing to the eye.

Book design is the art of incorporating the content, style, format, design, and sequence of the various components of a book into a coherent whole. It is more complex than many may think. Designers must take into account the needs of several clients; they must consider the author, the publisher and the readers, they must consider the budget of the project, page size, the substrate, margins, typography, typeface as well as many other variables (Hendel, 1998). The study asks the question: What research and what procedure must a book designer perform when attempting to design a book, and of those, which are the most important and should be done first?
The purpose of this study is to understand the book sector of the graphic communication industry and to be able to understand what preparation is necessary to undertake its design. With that knowledge, one can also begin understand the processes of a wider variety of graphic communication design disciplines. The study helps reinforce the idea that “one must know the rules before they can play a game.” Just as book designers, other designers must understand the necessity for a methodical and scientific process, which is only enhanced by creative and editorial design as a secondary priority (Hendel, 1998).

Many think that the title “designer”, gives boundless permission for creativity and input, but once learning a book designer’s process, it becomes evident that the designer is a servant of their client, carrying out their intent and not his or her own.

Book design is the action to produce the case, the cause being success of the book in the market. The purpose of book design and this study is to produce a successful book. A book’s success can be measured in a variety of ways, some more tangible than others; this can mean high sales and profit margins, the number of copies sold, a large reading audience or it can simply mean the seal of approval from the author and publishing company.
CHAPTER 2

Books are one of the most important forms of communication in human history. Books have helped masses of people communicate their ideas for hundreds of years; books have been the primary media helping cultures connect with their past, present and future generations, and still continue to do so today. Many people and processes are necessary to produce a single book. Book designers play one of the most vital roles book production. Book design is not only an art that takes talent and mastery of aesthetic principles, but it is also a science that involves meticulous calculation, research and planning, even before any work can be done. (Hendel, 1998) This study will reveal what components and processes are necessary for a successful book design plan.

Author Jacci Bear, is a freelance graphic designer, writer and artist who has been writing and teaching about desktop publishing for almost two decades. She reveals the complexity of book design by explaining to the reader that there are numerous components of books, each with a distinct purpose, all of which require a great deal of consideration.

Most books will have at least a front and back cover, title page, and body text but usually there will be many more parts of a book design. Explore the physical components of hardcover and soft cover books as well as the design elements that make up the text portion of most books. A basic knowledge of the parts of a book and how a book is put together can help the designer envision the finished product. The boards, spine, and cover material make up the case which is created separate from the text block and attached to it. These things are the book making materials that when combined make the outer shell of the book. (Bear, 2008)

Bear explains the different sections a book is broken into; each serves different purposes and creates different effects depending on the design. Book designers must plan and research the absolute best way to execute and display each of these sections, to do so, they must also be very familiar with a book’s anatomy. Similarly, it would be impossible to fix a car if the mechanic was not familiar with
all of the car parts and their function. In her article, Bear breaks a book anatomy into four general groups.

The Text Block or Book Block is everything between the covers of the book including the endpapers. It is composed of pages, leaves, sheets, and signatures. Several signatures are bound together with adhesive or stitching to form most books. Each printed page of the text block contains an area known as the type page - the area of a printed page excluding non-printing areas (margins, gutter) as well as some printed areas including headers, footers, and page numbers (Bear, 2008).

Front Matter is called such because it is all the material that appears at the front of the book, before you reach the actual body content, the front matter may be as simple as a single title page or table of contents or it could be comprised of multiple title pages, a detailed table of contents, and several pages for the preface and foreword (Bear, 2008).

The body of the book is where you'll find the story, the description, and the main text of the book. This is the main portion of the publication. In longer books and manuals the body is often sub-divided into chapters or sections (Bear, 2008).

First and foremost it is important to understand books, to understand their purpose and to understand how they are used; without this, nothing can be done. John D. Berry, a veteran book designer, helps further explain the vital basics of books that all designers must be aware of.

Books are still the most common way of communicating large amounts of information to a large number of people. Book design, like typography, is one of those things we take for granted unless we practice them professionally; as readers most of us don't consciously notice how a page is laid out unless it screams to be noticed. But our ability to enjoy and use books depends partly on the art and craft of the book designer (Berry, 2001).
The basic unit of book design is the double page spread. As Swiss book designer Jost Hochuli among others has pointed out, no matter how asymmetrical the layout of the pages may be, they always come in pairs: left and right of the same size and the same aspect ratio, centered on the gutter where they are bound together at the spine. So it makes sense to design with the two-page spread in mind, not just the single page (Berry, 2001).

Berry goes on to explain that there are three distinct ways of looking at a book and most books fall into one of these categories. The ways of looking at a book also describes the functionality and purpose of the book and thereby, the tone of design for the book. A designer’s main job is to understand the purpose of a book and lend their design to help the book carry out that very function.

Most books are used in one of three ways: browsing, continuous reading, or reference. (Of course, a single book may be used in all three ways, by different readers or at different times (Berry, 2001). A book designed for browsing can be much looser and more flamboyant in its typography and design than a book meant to be read from end to end. Varying sizes and styles of type may be appropriate, and there may be quite a few different kinds of visual and textual elements mixed up on the pages. (The most obvious are photographs and drawings, but they may include charts, graphs, tables, and lists, as well as completely gratuitous shapes or colors.) There’s a certain necessary hierarchy even in a book meant purely for browsing; elements that function in the same way ought to look recognizably related to each other, and the larger, more eye-catching elements should lead to finer, more detailed information in some clear way. Browsing doesn’t mean a complete lack of structure (Berry, 2001).

Books for continuous reading, such as novels, histories, or biographies, make up the hard core of book typography. This is the test: creating plain blocks of text, page after page of them, that look inviting and that a reader can plow through happily without strain and without giving a thought to how the page is designed or what the typeface looks like. Sometimes books for continuous reading have headings and subheads and other elements that stand out from the flow, but the heart of the matter is the text itself (Berry, 2001).
In a reference book, the reader’s paramount need is to be able to find the information, quickly and without running up blind alleys. The writer or editor is responsible for the actual quality of the information and its logical organization, but it’s up to the book designer to make that organization clear and obvious to the reader. As researchers, we may be willing to put up with ugly or cramped text in a reference book, as long as we can get to the right entry easily; after all, we’re not expecting to spend a lot of time pouring over the prose (Berry, 2001).

Just as understanding components of books are important, so is understanding the function of the book. The way a book is designed will consequently affect the experience of the reader. Now, a designer does not have complete control; usually, page size, page count, substrate and other similar variables are determined by the publisher or author. However, a designer must think about how to provide for the utmost convenience and functionality to the best of his or her ability (Hendel, 1998).

Even before determining the purpose of a book, a designer must know their role in the publishing process. Richard Hendel known as one of the foremost authorities in book design, explains in his book, *On Book Design*, that book design is a unique art, because the designer has very little room for editorial embellishments. Instead, they are employed as a minion, doing the work of the author, the publisher and the reader. It is their job to bring the author’s words to life. To help describe the vital role that designers play, imagine reading an essay with no punctuation and outrageous spacing, the writer’s thoughts would not be understood; yet after altered by the designer, the true intent of the other can be made clear and beautiful.

The design of books are different form all other kinds of graphic design. The real work of a book designer isn’t making things look nice, different, or pretty. It is finding how to put one letter next to another so that an author’s words can seem to lift off of the page. Book design doesn’t delight in its own cleverness; it is done in the service of words. Good book design can be done only by people who read—by those who take time to see what happen when words aren’t set into type. (Hendel, 1998)
What the author writes in a book is not all that tells what a book is about. The physical shape of the book, as well as the typography, also defines it. Every choice made by the designer has some effect on the reader. The effect may be radical or subtle, but it is usually outside the reader’s ability to describe. (Hendel, 1998)

Similar to Hendel, John Reinhardt, a fellow book designer notes the importance of catering to target markets for a particular book. There is always going to be a target group that will be interested in certain products, and there will always be those who just are not interested. It is the book designer’s job to make sure that their target audience take notice and pick up a book.

Reinhardt explains that designing for a target market is all about tweaking a design to suit a specific group of people. The designs created should have elements of interest that appeals to a specific group. If designing a book cover for a non-fiction book, consider using natural colors and avoid abstract design because non-fiction readers are interested in reality rather than imagination. They will appreciate the cover design if your theme portrays the core topic of the book. For example, if designing a cover for a book about hyenas and their habitat, include a hyena in your design and use a natural background with subtle colors. (Reinhardt, 2008)

Multi-published author and expert on book design, Jost Hochuli explains in his book Designing Books: Practice and Theory, a succinct description of the job of a book designer. He also explains the variation in typography and what each entail:

The book designer is concerned with the following matters: format, extent, typography (these three partly determine each other); materials (paper, binding materials); reproduction; printing; finishing. (Hochuli, 1996).

Macrotypography, also known as layout, means determining the page format and size of the text columns and illustrations, also their placing, the organization of the headings and captions, and of all the other typographic elements. Where in microtypography is detail-typogra-
phy that is concerned with letter forms; letters pace and the word; word spacing and the line, and space between the lines and the column. In microtypography, convention is left behind and the page is created to follow the spirit of the text (Hochuli, 1996).

Each of these authors have helped to illuminate the necessary basics of book design: the components to consider, the functionality and purpose of books, the role of the designer, and tools to be utilized by the designer. These are fundamentals and aspects that must be researched, planned and mastered before a successful book design can be created. When these rules and processes are executed with care and precision, the book design is successful and the book designer can say that their purpose has been fulfilled.
CHAPTER 3

My research involved studying book design essentials. I explored what considerations must be taken when designing a book. By accessing a variety of media and sources to gather adequate knowledge about these considerations. There are numerous criteria that aid in determining the success of a given book’s design; such as the projected sales of a book, whether or not a budget is met, and satisfaction of clients. These aspects will also be researched. Through three basic methods; elite and specialized interviewing, descriptive research and content analysis.

A group of people who know about book design are the clients, authors. Dr. Aubrey H. Fine, a developmental psychologist and author of nine books, including *Give a Dog Your Heart and Love Will Come Your Way*, was interviewed. Dr. Fine has had experience publishing several books and I asked him about his experiences. I asked questions such as: In what ways have you been pleased or displeased with the way your books have been designed in the past? How much input did you have on the design of the book? How much contact did you have with the book designer? What restrictions did you put on the designer? What influence do you think the design of the book had on the sales of the book? This interview was conversational and any further questions that arise was asked.

Another research method I used was historical research. This is an attempt to establish facts and arrive at conclusions concerning past events. This type of research is designed to determine the nature of a situation as it exists at the time of the study (Levenson, 2001). What exists was described with respect to variables or conditions within the book design industry. Some types of studies encompassed in descriptive research are case studies, surveys, developmental studies, follow-up studies, documentary analysis, trend analysis and correlational studies (Levenson, 24). Of these I primarily used correlational studies and trend for this segment of research. I compared and contrasted the in-
formation I found in various texts and analyzing them by looking for trends and correlations among repeating topics. The historical research was an important aspect of my research because good book design is a refined process; it has standards, qualifications and numerous constant variables (Hendel, 1998). There are certain procedures, considerations, pages, subjects and anatomies that are standard to all books and all types of book design. My descriptive research dealt with revealing these and describing them.

My main sources to conduct my historic research was Richard Hendel’s book, On Book Design and Jost Hochuli and Robert Kinross’ book, Designing Books: Practice and Theory. These books are very highly regarded in the book design industry, so they provided me with the same knowledge and principles that is widely used by book designers. These books provided a trend analysis as well as documentary analysis, that showed me a variety of book design considerations from which I conducted my content analysis.

After analyzing my research, I organized and presented my data chronologically. I presented each aspect of book design as part of one large process. The considerations of the design was presented in organized lists with cause and effect columns, almost like a process flow chart, but for book design. In documenting this research I was able to guide a reader, who may not be familiar with the topic, to design a book themselves (See Appendix A for Graphical Results).

Content analysis is a method for quantifying qualitative information gathered from elite and specialized interviewing and descriptive research. It is often used in combination with other research in developing and drawing conclusions (Levenson, 2001). My ultimate objective is that the categories used to analyze content must be defined so precisely that different people can analyze the same content using these definitions and get the same results.

In order to analyze the research I gathered, I ranked the order of importance of each book design
variable, done by comparing and contrasting the content. I did so by creating a relevance scale for the different aspects of book design. A list of the most important considerations for book design will be compiled from my historic research; the list contained 20 to 40 considerations. To help numerically organize the list in order of importance, a point scale was used. Each time a consideration is mentioned in a book, I assigned it two points.

All points were tallied, placed in ranking order from highest to lowest, and a graphical representation was made (See Appendix B). From there, I analyzed any possible trends, variations in research, and created statistical data. By analyzing the research in this manner, it ensures that I will not interpret the information with bias.
In discovering the essentials of book design and the process of a book designer, research from various sources revealed a fairly consistent theme of adhering the design to the book’s purpose and target market. As is the case in any type of design, the ultimate considerations are functionality and properly displaying the content, and second important consideration is the preference of the audience. Of course, those are not the only factors that must be carefully executed. Every single nuance in a book must be meticulously calculated and executed; things like the margins, leading, font-family, point size, trim size and many others are included. These things span throughout a book, the cover, the guts, front matter and back matter, all must be consistent and complementary to one another.

The books that were consulted to gather the historic research were On Book Design by Richard Hendel, Book Design by Andrew Haslam, Book Design: A Practical Introduction by Douglas Martin, Bookmaking: Editing, Design, Production by Marshall Lee, and Book Design, Production: A Guide for Authors and Publishers by Pete Masterson and Designing Books: Practice and Theory by Jost Hochulli. Articles by book designers John D. Berry and Jacci Howard Bear were also consulted. Each of these books had different techniques and ideas to explain similar concepts. In their own words, each author explained the importance of design that most accurately displayed and represented the content, and explained that doing so successfully could only be achieved by designing for a given book’s target market.

In his book, Book Design, Andrew Haslam explains that there are three distinct phases of book design, documentation, analysis and expression. Documentation involves the beginning ideas of design that are created from manuscripts, image maps and lists of figures, it is the book at its raw state from which the fundamental design of typography and illustrations can be laid out. Analysis portion sets out a structure for the content to be laid out in order to make the data intelligible and organized and
classified by priority. Lastly, expression is the visualization of the emotional position of the author and delivers it to the reader via symbolism and editorial design. In the execution of these three vital phases, of course, other essentials come into play, things like format, text area, grids, typographic arrangement and type setting and typeface.

Similarly, in the book *Bookmaking: Editing, Design, Production*, the author, Marshall Lee notes a chronological to-do list, from conception of the ideas, to production printing and binding; he of course also notes the importance of the designers role in this process. He states that the book designer’s primary function is to facilitate communication between the author and the reader and to make the book a successful commercial product.

Richard Hendel proposes similar ideas in his book, *On Book Design*, as well. He writes, the real work of a book designer isn't making things look nice, different or pretty. It is finding out how to put one letter next to another so that the author’s words can seem to lift off of the page. Hendel stresses the importance of the designers, and that every choice they make will have an effect on the reader, which is why the designer must make each choice with the target market in mind.

Of course, these authors address issues pertaining to book design other than catering to the content and readers. There are more tangible and visible elements that must be addressed; things such as trim size, margins, text typeface and all of the numerous details involved, display type, running heads and folios, half title and title pages, front matter layout, back matter. When making decisions about these variables, a designer must first remember the specification and design according to them as many of these variables may already be determined by the author or publishing company.

Every aspect of the design must also exemplify factors that affect sales of book. Consider the intrinsic quality or interest such as reviews, advertising, promotion and publicity, current events, efficiency of distribution, price, jacket design, local interest, competition, availability and size and weight (Masterson, 1995).
The designer's job requires keeping to schedule, budget, facility manufacturing standard and designer should be talented in disproportion of form, space color and texture and able to master important computer programs. Book design ultimately requires a seamless conjunction of science and art, which is a talent and methodology that requires much attention, skill, passion and talent.
with the information gathered from researching book design, a children’s book was designed. Dr. Aubrey H. Fine is a developmental child psychologist and author of nine books. I was a member of a three-student design team that designed his latest children’s book, *Give a Dog Your Heart And Love Will Come Your Way*. The process of design spanned from January to June in its entirety.

I began first by reading the book’s manuscript to familiarize myself with the specific subject matter, themes and tones of the story. From there, I looked into existing children’s workbook for inspiration for layouts, color schemes, typesetting and so on. Dr. Fine and his publishing company had already determined the trim size, which was eight inches by eight inches; I was free to determine the margins, grids, and all other variables associated with design.

As one of the designers for this book, I had direct communication with the author. I would come up with ideas and share them with Dr. Fine, he would consult some of his contacts, relate the input to me, and I would refine my design. I would also share my work with the other designers, and they tailored their designs to work cohesively with my templates.

The template was designed to be image driven with supplementary text so as to be alluring to a child. I realized that my design had to be gender neutral and could not be animal specific. The animated landscape of clouds, rainbows, grass and blue skies accomplished this. I also gave the book a peaceful, calm and spiritual tone. Because the workbook required little text, I was able to use a display typeface, which had a young and hand-written feel to it.

The workbook consisted of eight pages; each had activities for the child. Ultimately, the workbook was aimed to be a memorial book for the child’s pet; its purpose is to help the child explore their feeling and remember their pet.
In addition to the workbook, I also created the logo and marketing materials for the publishing company, Healing Paws Press. This included a business card, stationery and website. The creative process for these elements were very similar to that of the workbook. Elements of design from the book was incorporated into the marketing pieces; for example, the paw print with the heart is seen throughout the book as well as on the logo for the publishing company. The website very closely reflects the design of the book, while the publishing collateral has a more refined and mature feel.

The research conducted very much was relevant to this deliverable project. The process specified by these numerous authors almost became an inherent workflow and seemed to be second nature. Overall, our client was very pleased and very grateful for our work and our efforts, one of the most important measures of success for book design.
APPENDIX A

GRAPHICAL RESULTS
THE "HANDS" THAT TOUCH BOOKS

BOOK DESIGN IN THE SCOPE OF BOOK PRODUCTION

OTHER JOBS INVOLVED

- Writer
- Publisher
- Editor
- Designer
- Printer
- Production
- Distributor
- Retail
- Rights Manager
- Marketing Manager
- Production Manager
- Print Finisher
- Distributions Manager
- Sales Representative
- Permissions Manager
- Art Director
- Reader
- Consultant
- Proofreader
- Commissioning Editor
- Book packager

Agents (literary, illustration, design etc.)

(These are just the major production breakdowns. There are many other subcategories within each)
UNDERSTANDING AND FEATURING THE CONTENT AS ACCURATELY AS POSSIBLE

50%

MAKE THE BOOK A COMMERCIAL SUCCESS BY APPEALING TO YOUR TARGET MARKET

35%

EDITORIAL DESIGN

EDITORIAL DESIGN approaches to take:

neutral and subtle

FEATURED DESIGN

competition in market place

complementing cover design

color scheme

ISSUES TO CONSIDER

how book will be read

type of book

function of book

purpose of book

demographics of market

design according to

DESIGN FOR TARGET MARKET

headers and footers

leading

point size

typeface

margins

trim size

by choosing appropriately:

CONTENT AS ACCURATELY AS POSSIBLE

UNDESRstanding and Featuring The CONTENT

35%

PERSONAL FLAIR

EDITORIAL DESIGN AND
APPENDIX B

CONTENT ANALYSIS
POINTS TALLIED

Throughout the research, each time a variable or consideration was mentioned, a point was assigned. Variables were categorized and tallied for the following scores.

FEATURING THE CONTENT

10 trim size
10 margins
10 typeface
10 point size
10 leading
10 headers and folios
8 distinct parts of book (front matter, back matter, text block)

68

DESIGN FOR TARGET MARKET

6 demogaphics of market
4 purpose of book
8 function of book
4 type of book
4 how book will be read
2 color scheme
8 alluring cover design
2 competion in market place

48

EDITORIAL DESIGN

8 neutral and subtle
4 loud, but complements content
2 loud, but appeals to market

14
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