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Illustrating With Type:

A Typographic Exploration of Nursery Rhymes
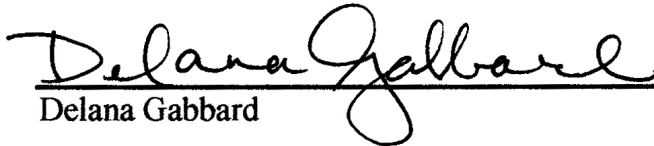
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Abstract

Developments in visual communication are progressively affecting the way audiences receive and process information. In today's image-dominated environment we seek quick references to aid our interpretation of information presented. Despite technological advancements, literary content meant for adult readers has suffered from a lack of adequate attention devoted to the layout. This lack of attention can be traced back to two factors, the reduction of visual teaching as a learning tool as a child ages and the limitations of the early printing presses. This study hypothesizes that the communicative potential of literary texts produced for adults can be enhanced using innovative typographic treatments that are now achieved more easily due to technological advancements and developments in graphic design, allowing an engaging experience that attracts immediate attention and can easily be understood. To test the hypothesis, five books were designed by typographically exploring the capacity of text to appear as images. These books explain nursery rhyme narratives, establishing the relationship between the familiar content and unfamiliar origins of the chosen nursery rhymes.

Contents

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Definition of terms

1. *Asymmetrical:* characterized by a dynamic relationship where one side of the layout is

visually heavier than the other, which is meant to imply a visual balance with the other

side (Landa, 2006)

2. *Audience*: the person or people viewing or receiving the information; the 'who' for

whom the information is intended and usually intentionally targeted (Baldwin & Roberts,

2006, p. 21)

3. *Communication:* the exchange of messages between a sender and a receiver in which

the message is effective (Lester, 2006, p. 422)

4. *Concept:* an abstract idea; a thematic presentation of a design (Landa, 2006)

5. *Font:* a set of type of one particular typeface and size (example: italic) (Lupton, 2004)

6. *Graphic design:* a discipline within visual communication that focuses on the use and

manipulation of typography and imagery (Millman, 2008, p. 9)

7. *Hierarchy:* an organized system of arranging content that emphasizes specific

information and de-emphasizes other information (Lupton, 2004, p. 94)

8. *Ideograph:* symbol to represent ideas or concepts (Meggs, 1998, p. 5)

9. *Kinetic typography:* animated text; the study of how time effects the expression of text

10. *Learn:* gain or acquire knowledge of or skill in (a specific area) by study, experience,

or being taught (*Oxford American Dictionary*, 2005)

11. *Linguistic:* of or relating to language or linguistics (*Oxford American Dictionary*,

2005)

12. *Media:* plural form of medium; the main means of mass communication (especially

television, radio, newspapers, and the Internet) regarded collectively (*Oxford American*

Dictionary, 2005)

13. *Message:* the information that is being communicated (Bergstrom, 2008)

14. *Narrative:* a spoken or written account of connected events; a story (*Oxford American*

Dictionary, 2005)

15. *Pictograph:* recognizable illustration of an object; elementary pictures or sketches to

represent the things depicted (Meggs, 1998, p. 6)

16. *Postmodern:* in terms of art and visual style: a set of trends in the art world in the late

twentieth century that question, among other concepts, authenticity, authorship, and the

idea of style progression (Sturken & Cartwright, 2009, p. 454)

17. *Readability:* refers to how easily the text can be read based on factors that include

typeface, type size and line length (Bergstrom, 2008, p. 111)

18. *Rebus:* pictures and/or pictographs representing words and syllables with the same or

similar sound as the name of the object depicted (Meggs, 1998, p. 6)

19. *Receiver:* the person or people who receive or consume the information (Bergstrom,

2008)

20. *Sans serif:* type characterized by having no feet and being more uniform than serif

fonts in stroke weight (Meggs, 1998)

21. *Semantography:* the image and symbol-based language developed by Charles Bliss

(Crow, 2006, p. 84)

22. *Semiotics:* the study of the meanings of signs in verbal or visual presentation (Lester,

2006, p. 423)

23. *Serif:* type characterized by feet and thick and thin strokes (Lupton, 2004)

24. *Symmetrical:* made up of exactly similar parts facing each other or around an axis; an obvious visual balance (Landa, 2006)

25. *Type as image:* using individual characters to create imagery by manipulating size and orientation to illustrate or represent objects; typopictoriality (Stockl, 2005)

26. *Typeface:* an entire alphabet including numbers and characters (Lupton, 2004)

27. *Typogram:* a brief, visual typographic poem (Meggs, 1998, p. 356)

28. *Typography:* the study and manipulation of letters as shapes and as alphabetical characters, as well as of the way letters are treated in a layout and of the contexts in which they are placed (Bergstrom, 2008)

29. *Typopictoriality:* using individual characters to create imagery by manipulating size and orientation to illustrate or represent objects; type as image (Stockl, 2005)

30. *Visual communication:* any optically stimulating message that is interpreted by the viewer (Lester, 2006, p. 424)

31. *Visual culture:* the ways in which social life is constructed as a function of the ideas that people have about that life and the practices that flow from those ideas, as they pertain to visual phenomena; the plethora of ways in which the visual is part of social life (Rose, 2007, p. 1, 4); the dominance of visual forms of media, communication and information in the postmodern world (Sturken & Cartwright, 2009)

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Introduction

We are an image-dominated society, but visual imagery does not occur in every format or medium, including literary texts produced for adult audiences. Advances in technology have overlooked the possibilities of printed material by rushing information to the newest outlet without consideration of the way this outlet affects the content or its appeal. Literary texts produced for adult audiences have suffered by not taking advantage of technological advancements and developments in explorative techniques. Technology has made visual communication a dominant part of our world today through the internet, cell phones and various devices. Developments in the printing process have also made it easier and quicker to make printed material more accessible. This has made visual communication an essential factor in how we communicate with each other and function in society because according to Lasn (as cited in Cranmer & Zappaterra, 2004, p. 7) "Graphic design is to the information age what engineers were to the steam age."

As a result of the printing press and widespread literacy, visual imagery has been rendered an almost non-existent role within literary texts geared toward adults such as poetry, biographies and historical narratives. Adult educational texts lack an element of visual appeal and often fail to provide an experience of enjoyment that coincides with learning. An enjoyable learning experience has the potential to increase the desire to learn, building upon the engaging learning process that is utilized for children. The

content of literary texts produced for adults has been reduced to mere words with little to no visual appeal to reinforce the written content, resulting in a mundane and potentially unengaging display of words.

Not only has technology made visual communication more accessible, but it has also predisposed us to be more receptive to visual communication. Crow (2006) states, "there is a shift toward the image from the written word" (p. 17). The tendency to favor visual means of communication, as well as technological advances, continues to push us in a more visually focused direction through developments in photography, television, computers, and electronic devices. This development reflects our conditioning to expect immediate results in understanding the information presented to us. Therefore, this study asks the question, "How can the communicative capacity of literary texts benefit from explorative typographic treatments considering developments in graphic design techniques and technological advances?" In order to answer this question the literature review will discuss the learning process, technology and visual communication to determine why the book has remained in its typical format and how innovative typographic treatments can enhance the communicative ability of literary texts produced for adults.

Literature Review

Learning

The act of learning is a self-motivated process in which one makes a connection between one's background experiences, materials suitable to one's needs and welfare, and reality (Soifer, R., Irwin, M. E., Crumrine, B. M., Honzaki, E., Simmons, B. K., & Young, D. L., 1990). Technology forces us to realize that we must continue to learn and makes new instructional formats available. Through technology we have moved forward into new ways of presenting and processing information. Typically the evolution from an image-dominated layout to a purely textual layout occurs as we grow from children to adults, signifying that imagery lacks the serious quality necessary for that medium to be incorporated into literary texts meant for adult viewers. The format in which we experience literary texts becomes increasingly visually bland and lacks overall unity between content and layout. This suggests that the format our society deems appropriate for adults is extremely textually based, reflecting the widely accepted belief that as adults our attention and focus are more developed, and therefore we no longer require imagery to be incorporated into literary texts in order to sustain our interest. However, despite this commonly accepted belief, viewers continue throughout their lives to learn through imagery, and a consideration of new textual materials and formats may lead to significant enhancement of lifelong learning.

Childhood format: image dominant with text.

Although imagery is used in children's books to attract their attention, the image is not merely a decorative effect intended to gain the child's interest. The images may also convey what the text is about. Imagery in children's books is used to entice the child

into reading; depending on the reading level, the image may be the only "opportunity for visual exploration, interpretation, and reflection" (Lacy, 1986, p. 2). Space, image and text are considered carefully in determining layouts intended for children, as these elements must be optically pleasing.

Learning how to develop visual literacy depends on one's ability to adapt and change as technology does (Soifer et al., 1990). Lacy (1986) explains that the skills necessary to interpret visual communication are "to distinguish between reality and unreality, to appreciate use of details that contribute to the whole, to identify unique properties of the medium used, and to understand the main idea intended by the visual message" (p. 1-2). In today's visual culture, children may be more capable of understanding and interpreting visual communication, having been exposed to it throughout their brief lives.

Adult format: text dominant with few to no images.

Adult education has been treated as more of an indulgence or, at least, as less important an activity than the education of children. This may be why educational material for adults can seem unappealing or unengaging, since acquiring knowledge is the learner's responsibility, and an adult learner's motivation should be enough to compensate for the absence of an engaging experience within literary texts. Today adults may find it more difficult to decode visual communication, since it has developed through the latter part of their lives and they have not grown up surrounded by mass visual communication, although they are now learning to interpret and engage in it. Adult educational tools provide a source of knowledge that is presented typically only through words, which our culture associates with serious and important information. According to

research by Soifer et al. (1990), "Adult literacy encompasses much more than basic reading and writing skills…to read and write is inadequate in that it does not give a sense of the content or purposes of the reading and writing, nor does it indicate how these purposes and goals vary in relation to the individuals within unique societal groups" (p. 2). Achievements in visual literacy depend on fulfillment of the learners' needs and desires. We live in a time when the image is no longer considered juvenile and can be incorporated into literary texts for adults without detracting from the content's importance (Kidd, 1973).

Graphic design and Technology

Graphic design, which communicates a message by combining typography and imagery, will always be affected by new technology, such as developments in printing techniques, photography, and the personal computer. Heller and Chwast (2000) maintain that design is about "organizing and communicating messages in the most effective way" (p. 9), and through technology designers have become able to do this more effectively and efficiently. The digital age has developed graphic design's ability to present messages through different media with control and ease, due to the computer, which provides an efficient means of creating visual material with which to communicate.

We are able to express ourselves freely through visual imagery largely due to the technical advancements in photography, television and printing (Rosenberg & White, eds., 1957). Photography was a new addition to design during the early part of the twentieth century and changed the way images were made and seen (Hollis, 2001), giving them a more realistic quality that previous illustrations may not have achieved. Television has greatly affected communication with respect to the way we receive and

have become accustomed to relay information. New techniques are being utilized in the film industry for TV and movies in the form of motion graphics, which includes animated text, or kinetic typography. Motion graphics is a complex discipline combining graphic design and animation. This new area of significant focus is exploring a range of possibilities to include in designs arsenal. These new interactive techniques present ordinary information in a way that allows the viewer to remain engaged in potentially boring content, such as the credits at the beginning of a film. Kinetic typography controls speed and order for the viewer, while emphasizing certain elements through the use of scale creating an interactive experience for more impact. The use of typography in this way is another method in which it has surpassed its regular form and the way it is typically presented in literary texts, overlooking significant possibilities of how movement and control can effect a two-dimensional plane and moving straight into the newest medium (Eskilson, 2007).

Printing was one of the first major technological advancements for graphic design, and the development of paper was instrumental in the progress of this technology, replacing parchment due to its manageability and more economical production (Dodd, 2006). The ease and speed with which paper could be made supported the mass production of texts. Paper has evolved to be an extraordinary medium with nearly limitless varieties at hand, supporting any inclination or need. The color and finish of paper has evolved to include unimaginable visual and tactile qualities, including paper that feels like a soft peach and others that look as though an explosion of glitter has been trapped beneath the surface.

Technological developments in printing have made possible a variety of new experiments in production, while also making it much more efficient to mass-produce printed materials. Technology has replaced moveable type with digital capabilities to print in a non-linear fashion, allowing for a more dynamic use of space in which to communicate a message in an interesting and different way than before (Lester, 2006). According to Crow (2006):

> Image-makers of all kinds have grasped the possibilities being offered by new technologies. The range of media used in communication design has broadened to include video, digital installation, the worldwide web, mobile telephones and software programming. In a post-modern landscape where the world of commerce and the world of design borrow and exchange ideas from each other, there is a compelling argument that all of this is pushing our visual culture increasingly towards the image (p. 21).

The digital age has made it easier to design and produce communication media, and the use of images has become a very popular, quick and easy way of communicating (Crow, 2006; Newark, 2007).

As we move forward in the information age, new formats of communication continue to be introduced. "We are living in a period when the introduction of new technologies is occurring so rapidly that new ways of applying graphic design are arising over increasingly shorter periods" (Cramsie, 2010, p. 326). These new developments threaten the older techniques that have been a part of our daily lives. The Ipad and the Kindle are among the latest technological developments that present information through a new medium. Vorhaus (2010) categorizes the kindle as "somewhere between a phone

and a computer" (p. 15). The Ipad and the Kindle offer a new approach to receiving information, one that is convenient due to size and multi-tasking options. The Kindle's capacity to hold multiple books, newspapers and magazines offers an advantageous all-in-one medium. The Ipad allows the same kind of convenience by allowing the user to play music and videos, surf the Internet, and store pictures. These two devices have taken us farther into the information age by delivering information to us in a medium through which we have not yet experienced them.

Although these devices offer several advantages due to their size and ability to allow multi-tasking, they may not be the most appropriate medium to deliver specific information. The Kindle suggests that it is a travel-friendly device due to its compact size and storage capabilities, however it takes the essence out of an enjoyable reading experience. The tactile quality of holding the book, feeling and turning the pages, while occasionally sneaking a peak back to cover to accrue some additional reinforcement of mental imagery all contribute to the experience of reading a book. The Kindle reduces the experience of engaging with the content of a book to viewing words on a screen, eliminating the actions that have constituted the act of reading a book for centuries. There is no tactile engagement or involvement in this process, which ultimately could prevent a thorough comprehension because the lack of connection to the sterile presentation of the words that make up the text. These digital devices remove the traditional, recognizable experience of the book as a tangible paper medium held together by a substantial cover; instead, books have been reduced to an illusionary page displaying a set of words that appear when a button is hit.

Visual Communication

Visual communication is an experience centered on visual content, dominated by imagery, and interpreted by processing small blocks of information in order to understand the whole, much as we process verbal texts and perceive the various phenomena that constitute our world. Visual communication encompasses a variety of disciplines, such as photography, illustration, graphic design, typography and multi-media: web, television, interactive graphics (Lester, 2006; Sturken & Cartwright, 2009). Baldwin and Roberts (2006) explain:

> design is a form of communication and communication is the basis of our relationships and our understanding of the world. It affects and is used by the world of politics; it contributes to environmental issues, but also promises to educate people on them as well; it forms part of the social glue that keeps us together or drives us apart; and as well as being greatly affected by technology it also helps people access it (p. 12).

Visual culture is an essential component of the way we communicate with each other and function as a society (Sturken & Cartwright, 2009). Visual communication is significant in everyone's life, as we are living in the information age and much of the information that we process is visual. Berger (1989) states, "Visual communication is a central aspect of our lives, and much of this communication is done indirectly, through symbolic means: by words and signs and symbols of all kinds" (p. 1). It is important that society understand the role images play in our culture and the way we interpret them (Berger, 1989).

The lack of knowledge and interpretive capabilities regarding visual communication is largely due to the invention of the printing press and the way it pushed the written word into a dominant role at the expense of visual imagery, with images relegated to the role of mere decoration. Images lost their power to communicate through lack of use, not because of their inefficiency in delivering a message. Lester's research (2006) indicates:

> Reading and writing became curriculum requirements, but visual literacy wasn't considered a necessary component of an individual's education. However, the invention of television and the computer–and the recent spread of desktop publishing and the World Wide Web–dramatically changed the role of visual messages in communication (p. vii).

Technology has provided us with both visual and verbal texts to interpret. According to Sturken and Cartwright (2009), "We live in cultures that are increasingly permeated by visual images with a variety of purposes and intended effects. These images can produce in us a wide array of emotions and responses" (p. 9). Mass media have monopolized our time and interpretive energy, so that although we are aware of information, we may only consume a fraction of it, especially the parts that keep our attention. Were more people to become visually literate, we would move toward a more sophisticated understanding of images and would appreciate their potential value as means of communication. Sturken and Cartwright (2009) note, "Every day, we engage in practices of looking to make sense of the world. Looking is a social practice" (p. 9). The norm is to sit in front of a television or computer, not to read a book in the corner; daily we experience our visual culture

together (Crow, 2006). We engage in this practice throughout our lives, as we choose what to look at, when to look at it, and why we want to look at it.

On a daily basis, whether we want them to or not, visual media overwhelm us, and when we experience too much information at one time we shut down and stop paying attention. Something new and unique quickly gains our attention, assuming a high level of importance. We choose among these competing claims on our attention based on an immediate intuition. We accept or deny information by scanning, seeing large blocks of information that create the whole message and not individual letters, words or lines, and this is why visual imagery is an effective medium for rapid communication. We have learned to read from top to bottom, and from left to right. However, the order and process of interpreting visual data may differ from the more linear, prescriptively sequential process of interpreting linguistic data.

Communication is successful when the intended audience receives and interprets an unambiguous message. In order to deliver a clear message, the communicator must plainly define his or her goals and articulate them, verbally or visually, so that the audience will grasp the meaning. These goals must be defined clearly in order for effective communication to take place.
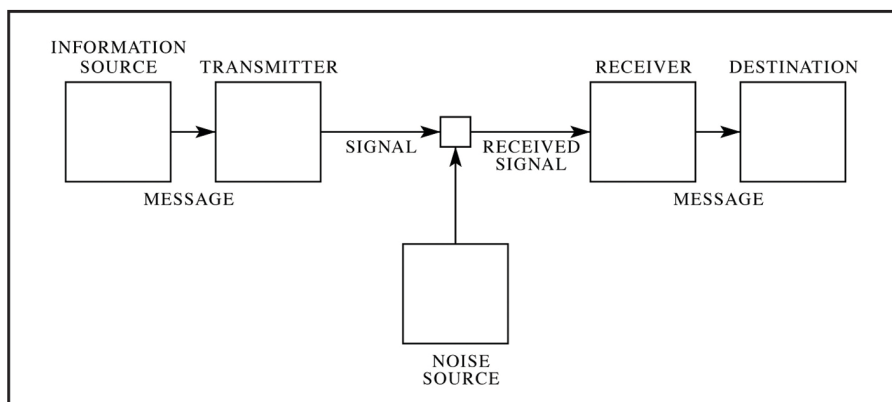
Figure 1. Shannon-Weaver model of communication.

The commonly accepted communication model proposed by Claude Shannon and Warren Weaver (figure 1) illustrates how communication is achieved, from the conception of a message to the channels it goes through until it reaches its final destination, the audience. In the first stage the sender, or information source, selects the desired message to send to the audience. Next, the transmitter prepares the message to travel through a specific channel so it will be available to the audience. The channel, or desired medium, is determined by the transmitter and is used to send the message. The transmitter is the designer, or facilitator, who is responsible for determining the context of the message. Next, the receiver interprets the information, eliminating unnecessary noise that has entered the message; noise is nearly inevitable in the communicative process, as illustrated in figure 1. The last stage, the destination, is the audience for whom the message is intended (Shannon, 1948). The receiver is an individual who actually views the message and is a part of the audience, which is the group that the message is meant to reach.

The participants in the Shannon-Weaver model approach the process of communication from different angles. The sender's goal is intent; the purpose and message are the most vital elements. The transmitter puts the message into context and determines the relationship that is created through specific elements of design that are necessary for each message to be delivered successfully. According to Paul Rand:

> graphic design, in the end, deals with the spectator, and because it is the goal of the designer to be persuasive or at least informative, it follows that the designer's problems are twofold: to anticipate the spectator's reactions and to meet his own aesthetic needs (as cited in Newark, 2007, p. 13).

The transmitter's goal is to utilize three main areas, typography, graphics and design, to create unity within the message for a successful execution. All three of these areas must come together, interacting with each other in order to achieve the desired goal of captivating and informing the receiver. The receiver's function is to comprehend the message clearly, as made possible by the sender and transmitter (Bergstrom, 2008; Shannon, 1948).

As a subsidiary of visual communication, graphic design combines a concept with manipulation of image and text, utilizing these two main aspects of visual communication in order to communicate a message. In graphic design, style is one way of reaching the desired target audience. The 'look,' or style, of a specific design is the way it appears in its finished version, the surface value that it presents in order to attract and reach its audience. Hollis (2001) explains that graphic design has three main roles, all of which are used to communicate a message: to facilitate identification of a location or object, to inform or instruct, and to present or promote. Lester (2006) argues that the intention of any visual communication is to achieve powerful and memorable images. If the message does not have a strong and clear purpose, the audience cannot establish a connection to the message and all the author's work in deciding, preparing and executing the message will be meaningless. Josef Muller-Brockmann states, "Whatever the information transmitted, it must, ethically and culturally, reflect its responsibility to society" (as cited in Newark, 2007, p.13). The communicator is responsible for presenting to an audience information that is clear and correct. Preparation and execution are important in creating and communicating a strong message with a clear voice that reaches the intended audience.

The audience also must be clearly defined so that information can be geared toward a specific demographic. Gender, age, race, professional status and education are among the factors to consider when defining a specific demographic toward which to guide your message. Baldwin and Roberts (2006) state, "A design aimed at a specific audience will have more effect than when aimed at a wide one" (p. 28). If the audience is imprecisely defined, then the message may be vague or inaccessible. The content must sufficiently answer the recipient's question, "Is this important to me and if so, why?" (Bergstrom, 2008). The audience must perceive a level of benefit, whether educational or recreational, in order to care about the message's purpose, or they will move on. Whatever the message is, it must be communicated to a specific, precisely defined audience.

The strategy for delivering the message is just as important as the content of that message. A credible underlying idea or concept must give the message validity in order for the audience to accept it. According to Lupton (2004), "The idea is the machine that makes the art. A powerful concept can drive decisions about color, layout, type choice, format, and so on, preventing senseless acts of whimsy" (p. 173). A powerful concept not only aids in design decisions, but affects the audience's decision as to whether to pay attention and how to interpret the message.

Perception changes what we cognitively digest into important knowledge. Experience also plays a role in these situations by giving us a foundation on which to base our decision as to whether and how we will accept or reject the information, and as to what we will do with the information if we accept it. Interpretation is based on a combination of perceptions and prior experiences. Visual and verbal communications

have symbolic and literal elements, and we choose how to interpret each such message

(Lester, 2006). Consumers have become so used to visual materials such as ads,

commercials and websites that marketers, advertisers and designers experience increasing

pressure to create new visual messages that hold the audience's attention, lest they

change the channel, turn the page, or go to a new website (Sturken & Cartwright, 2009).

This demonstrates the importance of creating something new, to set the message apart so

that the intended audience with attention and enthusiasm will receive it.

History of Visual Communication

Visual communication has a long and rich history. This study will show how

writing, books and the technology that has forced graphic design forward have all

contributed to visual communication. Within the history of language, both visual and

spoken, advances in technology and trends in society have affected communication.

According to the time period, different styles and trends have dictated the most popular

means of presenting information visually. Newark (2007) states that, "Since all design is

produced by technology, its development is inseparable from technological development"

(p. 34). Communication is about spreading information, creating a link between two

people or between two cultures, and advances in technology and developments in graphic

design have brought us to the point at which communication is created and received

quickly and understood globally.

Writing.

Writing has long held an important place in society as "the visual counterpart to

speech" (Meggs, 1998, p.4). It is an exceptionally thorough and accurate means of

explaining ideas. Meggs (1998) explains, "The invention of writing brought people the

luster of civilization and made it possible to preserve hard-won knowledge, experiences, and thoughts" (p. 4). At the same time, however, the ability of images to extend globally and effectively to communicate among speakers of different languages is unparalleled, although not unlimited as different cultures have different codes of visual representation (Crow, 2006).

The development of writing began with visually recognizable illustrations of animals and objects, pictographs, as seen in cave drawings, which are the earliest surviving means of visual communication. There have been debates about the purpose of the markings. Some historians say the pictographs recorded trading, while others claim they were for ceremonial acts or teaching guides for hunting. Later, ideas were integrated with pictographs, producing ideographs. As writing evolved, there was a need to express sounds and ideas in communication. The introduction of the rebus solved this problem. The rebus allowed for sound to be represented by using an object to signify the sound that is made when verbalized, instead of only using the image to identify the object visually. The goal of the rebus is to combine the use of sound with a visual representation of an object. This led to a higher level of precision to signify abstract thought, and integrating sound with pictures allowed a change in writing, which led to the greatest breakthrough in writing, the transition from ideographic to phonetic writing. The development of the alphabet offered a more sophisticated writing system and allowed communication to rise to another level through multi-page documents and books. Gutenberg's invention of the printing press and moveable type catapulted textual production into the future with an easier way of reproducing large quantities of text and design (Lupton, 2004). The written

word allowed the messenger to communicate with an audience that was not present and

enabled the message to transcend time and place (Crow, 2006, Meggs, 1998).

Pictorial writing systems.

Numerous renowned designers support the idea of communicating with pictorial

representations that accompany words but may communicate by themselves. Otto

Neurath, a philosopher, curator, and sociologist, developed the ISOTYPE (International

System of Typographic Picture Education) in Vienna in 1936 and is recognized as the

forefather of the modern pictogram (Vossoughian, 2008). Charles Bliss developed

Blissymbolics, also known as Semantography, to fill a need to communicate among

different nationalities, due to increasing tourism. Semantography can be described as a

non-alphabetical symbol writing system that translates through all languages. These

forms of visual narrative appeared outrageous to contemporary commentators, because

they were a departure from the way that writing had developed and was used (Crow,

2006; Heller & Fili, 2006; Patton, 2009).

Although pictographs were no longer sufficient as a means of communication,

Neurath pushed the limits of their functionality and meaning with his pictorial language,

ISOTYPE. He understood image-based writing from a young age and was thoroughly

intrigued by ancient styles. He applied this knowledge to the development of a system

that would include minimal detail within the imagery and would utilize as few words as

possible (figure 2). Neurath wanted those who viewed his material to attain some

knowledge regardless of what they were doing, whether having coffee or walking down

the street. His intention for ISOTYPE was to deliver scientific facts to the masses,

regardless of their economic or educational status in society (Vossoughian, 2008).

Neurath and his wife founded the Isotype

Institute in Oxford, to promote the

research and development of a pictorial

language. They created a set of icons for

a variety of objects, and these icons were

published in educational formats to aid in

the learning processes of children and of

adults in underdeveloped countries.
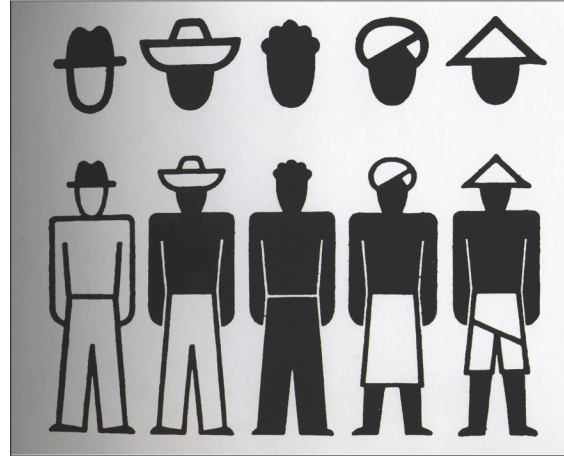
Figure 2. Example of Otto Neurath's symbols for ISOTYPE.

Neurath saw this image-based language as a basic social necessity and strove for a

universal pictorial language, responding to the desire for international communication.

Politics and economics were driving forces behind his quest to educate the world using a

new method of communication accessible to all levels of society, one that would be

immediately accessible throughout the world (Crow, 2006).

Patton (2009) argues that Neurath was trying to escape the limitations of written

language by rooting his system in pictures, although his system has a strong foundation in

linguistics. His symbols follow typographic practice and tradition in the simple technical

treatment of their forms. The images were "elementary pictographs" meant to convey

complex information, but they were effective for his intentions and easily reproduced

(Heller & Fili, 2006; Meggs & Purvis, 2006, p. 326). One of his projects was the

inspiration for letterpress blocks. This technology made the mock-up process more

efficient and allowed for more creativity in size and color (Crow, 2006).

The goal of Neurath's pictorial language was to accompany or enhance the

written language and to explain visually what words could not, either because of
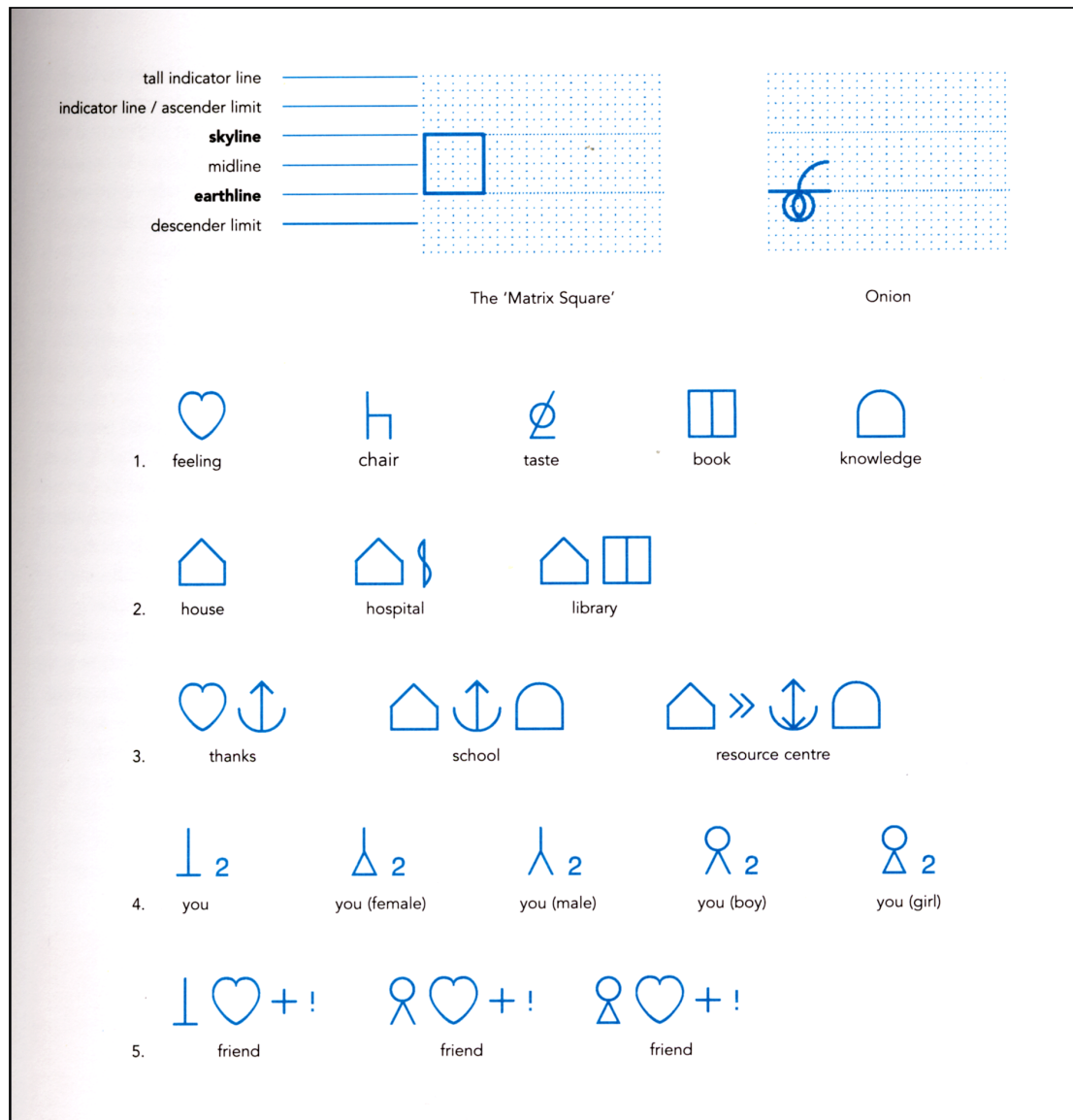
Figure 3. Example of Charles Bliss' Semantography.

language barriers or because of the ways in which individuals differ in processing

information. Neurath knew that his symbols could not convey emotions or feelings

because they represented objects not ideas and therefore could not replace the written

word (Crow, 2006; Vossoughian, 2008).

Charles Bliss, on the other hand, sought to develop a second language,

Semantography, that would compete with the alphabetical system. Bliss was inspired by

personal, political and economical experiences much as Neurath was. Bliss's purpose was

to create a second language that would surpass the linguistic limits of spoken languages, limits that can isolate cultures from one another.

Semantography is made up of over 3,000 symbols and comprised primarily of geometric shapes. There is a kind of grammar to Semantography, because Bliss added inflection marks so sentences could be constructed with these basic symbols. The symbols and marks were organized in a very specific way on a grid to communicate the desired message and are explained in an instructional manual on how to use Semantography effectively (figure 3). Although he did not realize his goal that Semantography become a language used throughout the world, Bliss did achieve a degree of success by having his language used to educate children with learning disabilities (Crow, 2006).

An image-based language never became a primary form of communication, because new terminology derived from advancements in technology provides information meant to be understood globally, but there are still places where they do function effectively. Neurath and Bliss both intended to make the world a better place, and their passion and their dedication to creating international wordless languages show the appeal and the perceived benefits of communicating without words. Their efforts were not in vain, as Neurath's language development was the inspiration for modern information graphics, while Bliss' Semantography became important in the education of handicapped children (Crow, 2006). Their theories validate visual presentations of narrative content by showing its legitimate applications and the ways it can be useful in education.

Books.

Technology has taken the printed book to a digital format. While technological advances are influencing our perception of books, the style of the content is not being affected by the developments in graphic design. Osnos (2009) explains:

> Books contain stories, research, journalism, poetry, images; their function dates at least back to the cave paintings. What has evolved over time is the means of delivery. In the twentieth century, the advent of digital composition eliminated some of the machinery of bookmaking, but not the essential relationship between writer and text. In the twenty-first, the impact of technology on the content has mainly to do with the new ways readers can use books as research tools (p. 39).

Books and computers are both products of human creativity and means of communication, and one cannot exist without the other today. The computer is responsible for the contemporary printed and digital book (Dodd, 2006), however contemporary critics have initiated debates about whether the book is dying out due to the technology established by the computer. Heller (2010) observes, "During the late 19th century, when book publishing was spurred on by increased literacy in the world's industrialized nations, artists and designers used the book to influence popular opinion and taste. The book was an unparalleled tool" (para. 3) and provided a significant opportunity not only to writers and readers but to artists and designers as well. According to Newark (2007), the book is where graphic design originated. The format of this medium has had long-term appeal that persists today, because the book is one of the few lasting products that designers achieve (Newark, 2007).

The predecessor to the modern printed book was the illuminated manuscript. These books were made by hand, usually by monks. Manuscripts were the only written method of documenting and expressing ideas for many centuries. These texts were painstakingly handwritten on parchment or vellum, and illuminated or illustrated by hand. Illuminated manuscripts were very expensive and only a limited number were produced due to the time and effort it took to create these works of art (Dodd, 2006).

The layout of medieval texts was fairly simple and usually involved one or two columns of text with space, and sometimes entire pages were left for illustrations that helped to narrate the text. Imagery was very important during the medieval era, as very few individuals were literate at this time, and the images were thoughtfully designed to educate those who could not read. Literacy was commonly reserved for the clergy, which is why most writers of early manuscripts were monks (Meggs, 1998).

The invention of the printing press allowed for a greater number of texts to be produced more quickly at a lower cost and "made possible the spreading of knowledge, debate, thoughts and ideas," contributing to the spread of literacy in the West (Dodd, 2006, p. 6). However, Johannes Gutenberg, inventor of the original printing press, did not stray from the accepted format at the time and instead tried to make printed books look as similar as possible to illuminated manuscripts. As more people became literate, the need for imagery to help narrate the text became unnecessary, and as a result, the elaborate illustrations of the illuminated manuscripts fell out of favor as a means visually to narrate the content. This also occurred because, as more books were being produced more rapidly, the complexity and time-consuming nature of manual illustration did not allow for an efficient delivery schedule (Meggs, 1998).

The use of imagery, usually only illustration until advanced methods of printing were developed, was considered the visual gateway, introducing the reader to the books' content. The title page was special and held value among readers, as it was the book cover before there were covers. Title pages played an advertising role to entice the reader to read the story (Patton, 2010).

Today most books are designed according to a specific system or template. Template-styled books consist of a generic layout that will accommodate most information, however they lack originality and creativity, and although sufficiently readable, they are less engaging than individually designed pages and therefore do not create a unique experience for the reader. Modern standard layouts in literature have not deviated from the common, one-column layout that earlier printed texts used.

Heller (2010) relates the book to the human body, comparing the idea to the heart, the words to the blood, and the design to the circulatory system. He argues, "While a great text will conjure mental pictures, a great design–the marriage of type, typography and image–will give the reader added levels of perception that encourage cognition and appreciation" (Heller, 2010, para. 6). Along with the aesthetics of the page layout, the communicator must consider the overall look and feel of the book, including the paper and printing, because they also contribute to the reader's overall experience.

Effects on Our Culture

We are taught very early to express ourselves verbally in order to achieve a mature conversational experience with adults. From a young age, we are taught to focus on verbal expression as opposed to visual expression. This conditioning against visual

expression influences the way we understand or fail to understand visual communication (Bergstrom, 2008).

In childhood we are exposed to letters and pictures so that we will learn how to read and communicate. This style of teaching is used partially because of the short attention span of children, and it also involves having fun, which increases the child's desire to continue learning, because learning becomes an enjoyable experience and not something the child must endure. One is more open to learning when one is having fun, because the learning process seems almost secondary to the fun. Soon, learning becomes geared toward a world dominated by letters and words, and the pictorial representations are eliminated. This may account for the difficult time we often have in understanding everything in this "demanding visual environment we live in" (Bergstrom, 2008). Visual communication is not always straightforward and is often demanding, but our education does little to prepare us for the challenges of this sort of interpretation.

Interpreting a picture without information to read can be confusing, and often it turns into a reflection of who we are, since our own feelings and experiences help us through the interpretative process. Obviously, this does not apply in the same degree to professionals who work in the visual communication industry, but it does apply to the majority of the population. The difference between these two groups is their knowledge base. The more competent communicators are, the clearer and more accessible their work is (Berger, 1989; Bergstrom, 2008).

In a lecture that Bergstrom (2008) presented to blind students, he concludes that blind and sighted are essentially alike in our demanding visual culture in that both groups share a sense of being left out. While the blind cannot see visual content, the sighted do

not always understand the visual images that are so prominent in our everyday world. In a

sense, we are sitting in darkness in our visual world, and it is the job of the communicator

to lead us to the light through his or her work. This light or understanding is what both

groups, communicators and audience, ultimately want. Different ways of communicating,

such as storytelling, news-casting, photography and the production of print materials, are

all important instruments in leading the audience to enlightenment (Bergstrom, 2008).

Visual communication is a powerful method of sending information and, as

Berger's research (1989) indicates, "we allocate much of our energy to processing visual

communication" (p. 18). Learning how to interpret and understand visual

communication will help us to appreciate the informative and enjoyable experience visual

content has to offer. Understanding how this mode of communication works through

signs, symbols, and semiotics will help us to appreciate the value that is overlooked by

most audiences through the specific use of type as image to convey information.

Importance and Power as an Engaging Experience

A designer plays many roles from project to project and, through research,

becomes a semi-expert on a variety of topics. The process of communicating a message

starts with the organization of researched information, and it also involves critical

thinking as well as a well-developed aesthetic sense (Collins, 2010). These three elements

are crucial to the effective communication of the message. Caplan (2009) notes,

"Aesthetic enhancement and increased functionality are where designers will look first"

(para. 2). The value that we place on design in communication affects the way we express

interest in that content. According to Sturken and Cartwright. (2009), "Some of the

information we bring to reading images has to do with what we perceive their value to be

in a culture at large" (p. 34). Designers want to make a particular message more compelling, and in doing so, create desire for the improved object.

Attention to detail and to the predetermined objectives of the message, as well relevance and context, work together to create change, and that change is achieved through the message's impact on the audience. If these goals are not achieved and the message is not communicated powerfully, then the text will not make an impact. Several elements must align in order to achieve this goal, including the receiver's willingness to feel and to allow his or her thoughts and emotions to affect the interpretation. Next comes the thinking stage, which forces the receiver to consider and judge whether or not the message is valid or important. Action, whether it involves changing one's mind or doing something because of the message presented, is the last stage and is the goal of any good message. Validity, value, feeling and thinking all sway the receiver into taking action (Bergstrom, 2008).

Variation is important to keep the audience moving, and it directs the audience's reaction to the content. A rhythm that flows through the text inspires interest on the part of the audience. When telling a story, the content needs development to capture attention. While meaning is inherent within the text, that text must do something more in the overall shape and layout. Creating a visual change in the way the text appears implies meaningful change to the eye and mind and lets the audience experience the meaning through the layout before arriving at an understanding of the words (Crow, 2006). Again, the most important goal is to capture the audience's attention. This can happen in several ways; within text, the most crucial information must be presented in such a way that its importance is emphasized and the audience will see it first.

The value that we place on design and communication relates to the way we create desire for that content. The designer's goal is to make the message more compelling and engaging, in order to improve the message's ability to effect its objective. When this is achieved, a design is truly successful.

Visual narrative/imagery.

A revolution in image-making is taking place in the form of amateurism, as the public is supplying an overwhelming amount of imagery, mainly by means of photography. (Bergstrom, 2008). Marshall McLuhan, an educator, communication theorist and author of numerous texts in the area of visual communication, theorizes that we have moved into a more social way of receiving information and of communicating, where viewing imagery becomes a shared experience for many, and away from one that is more isolated, such as the solitude of reading text. Words invite conscious interpretation, while imagery offers a visual and mental experience while opening up simultaneously several different ways to decipher and associate meanings (Rosenberg & White, 1957; Sturken & Cartwright, 2009). According to Sturken and Cartwright (2009), "The image culture in which we live is an arena of diverse and often conflicting ideologies" (p. 23). Ideologies are set ways of thinking based on principles explaining information, including visual imagery.

The most common form of imagery used today is the photograph. Photography was introduced in 1839, creating a special way of capturing time. A photo is a memory or a concept that has been transformed from a mental state into a visual representation that lets others see the photographer's intention, and it is usually considered a realistic interpretation (Sturken & Cartwright, 2009). The camera accurately depicts the way our

brain interprets visual stimuli, by using imagery as opposed to words, because even in reading, our brain recognizes groups of words, making them appear as images rather than individual letters. The strength of imagery depends upon the way people process information. Lester (2006) explains, "All messages, whether verbal or visual, have literal and symbolic components" (p. 5). The literal message is what we see, and the symbolic message is what we understand on an emotional level. We lock visual messages into our minds because an emotional connection has occurred based on either the literal or the symbolic part of the message: "A single image can serve a multitude of purposes, appear in a range of settings, and mean different things to different people" (Sturken & Cartwright, 2009, p. 9). Society has become used to pictures, making them less special, however this familiarity does not necessarily imply understanding or knowledge.

Imagery has three main objectives in communicating: the goal, the message and the context. The goals give meaning and purpose to the image. It is difficult to categorize the types of imagery that are available; the categories that critics propose are often not broad enough or are extremely vague. However Bergstrom (2008) offers the following categories as effective descriptions: informative, explicative, directive, and expressive.

Informative images include product shots and images of events that give basic information without partiality so that the audience may arrive at its own interpretation of whether the product or situation is a good or bad one. Explicative images explain specific actions or situations. To sway the audience, either directive or expressive imagery would be appropriate. Both strongly communicate an opinion; while directive imagery seeks to persuade the viewer by opinion, and the expressive approach is more personal in nature, showing the author's point of view (Bergstrom, 2008).

Today, our visual culture encourages us to rely on photography as the prevailing

form of a permanent image because it delivers an immediate visual representation of

message and with the advance of technology, we desire immediate results and seek

instant gratification. (Berger, 1989). Exploring other means of visual representation to

ensure interest while still communicating the desired message, however, would benefit

audiences who have become so used to photographic imagery that they are seemingly

unaffected by it (Lester, 2006; Rosenberg & White, 1957).

Storytelling.

We are a social people and constantly seek to make connections through a story's

characters and plot. Stories have always been a part of human culture and are a critical

part of every culture's communicative process. We find contentment in stories and

constantly listen to them and search for more stories that touch us with content that we

can relate to and can understand based on our experiences. In this fast-paced world a

variety of influential media compete for our attention and we are searching for something

meaningful to which we can connect. This search for meaning and contentment gives us

comfort or enjoyment and allows us to connect to society through shared interpretations

of common narratives. Narratives allow us to commit to the content more easily, offering

more focus through the presentation of information that focuses on the main points of a

story. Visual communication offers a way of telling a short story, giving us sufficient

information to which we can relate, so that we can process the message rapidly with little

or no verbal text.

Our minds readily accept a well-told story that is organized and skillfully

executed, and we keep reading until the end, much like the way in which we accept visual

messages. Well-designed visual communication will keep the audience looking and processing all of the information. The introduction to a story invites a transformation in the minds of the audience, leading them from what they initially expected to what they now suspect will happen. A great story is not stagnant; a force of energy or action must push it forward, keeping the attention of the audience. An evolution in the story causes the audience to adapt, changing the audience with new knowledge and connecting them to the story and the characters, exactly as happens in visual communication. A good story centers around conflict, creating opposition by allowing the audience easily to identify with one side or the other, which automatically increases the investment in what is going on (Bergstrom, 2008). A setting to which the viewer can relate and engaging characters are essential to gaining and keeping the audience's attention, and just as in visual communication, information must be relevant to the audience's lived experience (Berger, 1989).

Three specific techniques are used in telling a story. The first is the dramatic technique, which is a closed system that forces an understanding based specifically on the vision of the director. The second technique is the non-dramatic, or open method. This technique allows the audience to interpret the narrative. This method often twists and turns the content and may involve the introduction of different viewpoints and contradictions. The final technique is the interactive technique, which occupies a middle ground between the open and closed systems of telling a story. This approach, used in games and within the format of the Internet, allows the audience to dictate what it sees and hears, and thereby to choose what it learns (Bergstrom, 2008). The two techniques that are most relevant to this study are the dramatic and the non-dramatic, which apply to

design in the same way as to narrative storytelling. In comparing design and storytelling

techniques, a graphic illustration for a new typeface could be considered a non-dramatic

method, in that it would be up to the audience to spend time looking and understanding

the content and design. A dramatic method would use a design in the style of

Tschichold's New Typography, which communicates very clearly without distracting

elements that might interfere with the intended purpose of the message (Meggs, 1998).

To tell a story well or to communicate effectively in any format, one must capture

and sustain the audience's attention. There are several ways to accomplish this, including

using the element of surprise or misdirecting the audience's expectations, giving the

audience something to look forward. The way the audience receives information is

influenced by the point of view from which the story is told. This elicits interaction and

interest, and this is the most important objective in storytelling. Engaging the reader or

viewer is every communicator's desire (Bergstrom, 2008).

Uses as a Learning Tool

If verbal and artistic expression were given equal priority in our early education

our society would be more well rounded, since individuals would learn to understand

both visual and verbal texts. Creating a balanced relationship between images and words

would open the door for visual as well as verbal imagination, giving us a more complete

experience of our world (Bergstrom, 2008). Since the development of the alphabet,

writing has been the dominant method of explaining, defining and learning, usually

taking precedence over the use of images. Although the letters of the alphabet play an

essential role in today's visual culture they are, according to some theorists, becoming

subordinated to images, mainly photography. If the letters of the alphabet were pushed

past the stage of readability and were used to create imagery, the alphabet would reach another level of communication. Using typography as image offers a means to support readable and legible text, not to replace it. Forcing typography to act in an atypical way can provide an effective alternative method of communicating. Typography can offer a connection between letters and images, creating a literary educational tool that exposes type in a different light, as a visual narrative that aids in communicating the textual content.

Typography

Typography is all about letters, the manipulation of letters as shapes and as alphabetic characters, as well as about the way letters are treated in a layout and the contexts in which they are placed. Typography has enjoyed a long history, starting in 1440 and evolving into what critics describe as an upside down version of itself within the last fifty years. As individuals have acquired the software necessary to design typefaces and access to the Internet, they have begun dispersing new typefaces throughout the world that are "scratched, bent, bruised, and polluted" (Lupton, 2004, p. 29). Due to technological advances, Tschichold (1928/1998) argues, typography is on a new course characterized by typefaces that lack the same craftsmanship and style as the ones that came before and that often resist legibility in support of current trends in society that are visually appealing, as opposed to structurally sound (Jubert, 2006).

Characteristics of typography.

Most typefaces can be categorized into two main groups, serif (roman) and sans serif, and from there they can be broken further into families. When choosing a typeface for a project, designers follow a process known as type marking to help choose the most

appropriate typeface (Bergstrom, 2008). Stockl (2005) indicates that typefaces should

inherently relate to the nature of the content and function as emotional signifiers.

There are two kinds of typography, visible and invisible. Visible typography

(figure 4), also referred to as narrative typography, exposes the sender's and messenger's
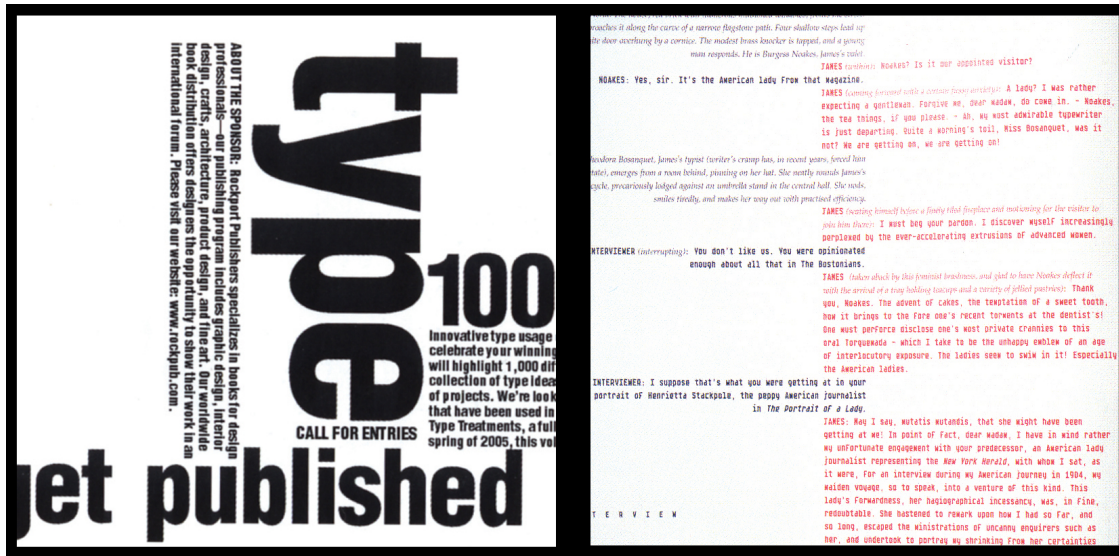
Figure 4. The use of visible typography illustrates influential treatment through color, size, placement and design.

intentions through the presentation or display of the characters. This is typically what

graphic designers are trained to do, and much of their professional design work will

involve this type of design. Invisible typography (figure 5) is void of any visible

personality, allowing the message to be interpreted wholly by the audience. Although

both can be employed within the same project (figure 6), visible type is typically reserved

for capturing the audience's attention quickly through expressive elements, whereas

invisible type has been utilized in areas such as literature or for educational purposes,

where textual content takes precedence over visual considerations, and the goal is for the

audience to use its imagination and to learn by determining for itself what in the text is

the most important and to develop its own mental images (Bergstrom, 2008).
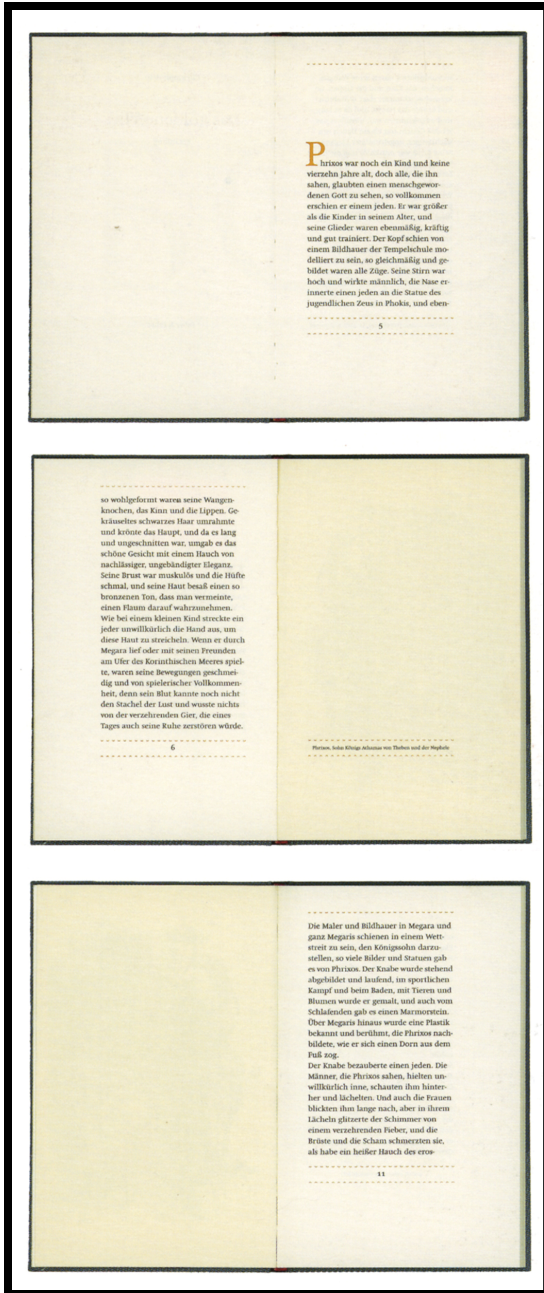
Figure 5. Invisible typography treatments provide a quiet interpretation of the content.

Organization of content aids in the structural development of the information, while creating a balance between the information and typography, because the selected typeface must be appropriate to the context in which it is placed. Collins (2010) notes, "Being able to see when proportions and individual pieces work together, and when they need improvement, is a gift–this acuity is engineering in consort with aesthetics" (para. 6). Determining how the information is organized gives the designer an indication of how the text can be broken up and aids in establishing an interpretive hierarchy through order, placement and typographic treatment. A visual or implied sense of balance, through weight and space, must be achieved between the content and the typeface chosen to achieve a successful solution.

Typographic styles and movements.

The styles discussed in this section, New Typography and Deconstruction, are well-known styles of graphic design and will give points of reference with respect to the

Figure 6. An example of using both visible and invisible typography within the same project.

ways typography has been and is being used to present information. Tschichold's New Typography philosophy is relevant to this study because, while the main objective is to produce a clear message using only type, this project does not follow his theories exactly, but seeks instead to push the boundaries of what typography does while illustrating the content, but not in a typical readable format. The Deconstruction style is relevant to this study because it offers a more visually stimulating experience in interpreting the message through its use of layering image, text, color and texture, to present an interesting and complex visual message. These experimental typographic styles are opposites in terms of visual appeal, but they relate through their extreme visual philosophies of less and more.

The most important attribute of the New Typography style is clarity emphasized by its characteristic asymmetrical layout. Tschichold (1928/1998) states, "Asymmetry is the rhythmic expression of functional design. In addition to being more logical, asymmetry has the advantage that its complete appearance is far more optically effective than symmetry" (p. 68). Asymmetry, while providing an interesting visual effect, also

allows for variety in the design process, although functionality is the primary reason that the New Typography theory subordinates design to content. The content must have a solid relationship to the overall shape created by the text to achieve clarity, because our highly visual culture engulfs us with competing new information all the time. This theory maximizes clarity and function while omitting unnecessary extras such as graphics that do not obviously serve a specific point, and it is thought more clearly to communicate the message. Focus is pushed by means of contrast to create visual interest. Dramatic size, weight and color differences are the most obvious means of successful execution within this theory, but should of course be handled thoughtfully (Meggs & Purvis, 2006).

The Deconstruction style relies on multiple layers of image and text working together. While seemingly chaotic, this graphic style represents the way we actually comprehend information: we take in bits and pieces to create a whole instead of following a straight line (Heller & Fili, 2006). We experience the world, both media and real-life, by processing chunks of information, and we create connections that lead us to the whole and within seconds have a complete picture.

Readability and legibility.

Readability refers to the degree of ease with which the text is read and is of the greatest concern, especially when dealing with large bodies of text. The designer must pay attention to several elements in order to deliver a clear, readable message. Lupton (2004) asserts, "Designers provide ways into–and out of–the flood of words by breaking up text into pieces and offering shortcuts and alternate routes through masses of information" (p. 63). The designer must skillfully execute the text with the appropriate

typeface and must address every aspect of its treatment, including size, leading, column size and justification, and contrast with background.

The typeface chosen greatly affects readability as well as serving as a signifier of the kind of content that is presented. For instance, an upper and lower-case treatment of a serif font has been proven to increase readability, as has the size of the typeface. Typography aids in communicating textual meaning through its treatment and placement, and in a semiotic way as well. Stockl (2005) concludes that typography is a part of the linguistic system in which we participate, while being independent from it at the same time. If the line spacing and line length are too great, this creates a disconnection between the information and the audience, who will lose the rhythm needed to carry the eye from start to finish. The width of columns can also affect understanding and may slow the reading process. Justified text is the most common because aesthetically it creates tidy and uniform shapes and promotes a sense of order, and it is considered economic because all the space is utilized, whereas flush left and right can create a distracting trail on one side or the other. Centered text should only be used for short pieces of text such as a title, because the eye has to keep readjusting the starting point on every line, and this slows the reading process considerably. Word and character spacing need attention as well because of the way we have been conditioned to read. If the words and characters are too close or too far apart, our eyes cannot quickly register the intended meaning, because the spacing affects the way the eyes recognize groupings of letters. Contrast is also important to readability in regard to what type is placed on, because color and texture affect our perception of the letters. The medium of production is also a key factor. The paper choice and the kind of ink used all contribute to readability (Bergstrom, 2008; Lupton, 2004).

Type as visual data.

Typography's relationship to a body of text can be established on many levels, related to the nature of the words as well as to the layout. In the complete layout, typography illustrates the construction of the content while creating a hierarchy that allows the viewer to process the information easily. Communication can be achieved in a variety of ways through different typographic procedures, including the way the content is written and the way it is formatted (Lupton, 2004; Stockl, 2005).

Writing is a sign system that uses groupings of letters to create content that becomes relevant in another system, typography. This exemplifies the interrelationship of design and language. According to Stockl's (2005) research,

> typographic elements are complex signs which comprise various semiotic layers, each capable of independently conveying meaning. First, typography, of course, serves to encode language. Whether writing substitutes for speech – as traditional linguists would have it – or whether graphic signs form an autonomous sign system that takes elements of reality or mental concepts as its signifieds (p.206).

Each layout demands thought and attention to the ideas and images displayed (Staniszewski, 1995), and knowledgeable viewers of typography will see, in the way the content looks, graphic detail implying subtle meanings directly related to what the text means. Another level of versatility of typography involves the pictorial nature of letters. Their ability to illustrate shapes that may represent a range of objects and imply emotional characteristics is known as 'typopictoriality' and contributes to their power and versatility (Stockl, 2005). Another version of typopictoriality occurs when images resembling letters replace actual letters. This is commonly referred to as 'image as type.'

Stockl (2005) attributes to typography a three-fold skill set that encompasses text, letters and imagery, allowing for an unexpected communicative power. This chameleon-like versatility lets the viewer toggle between the different linguistic and semiotic levels. The semiotic nature of letters has forced letters into new territory where they are recognized no longer only as parts of the alphabet but also for their individual shapes and qualities.

The viewer tends to recognize the pictorial nature within a layout before processing information by reading because the imagery created from typography gives a gestalt impression that is seen first and is processed much more quickly, allowing the viewer to see a designed layout, not just a body of text on a page. Typography intended for reading purposes presents combinations of letters that function as words and are processed through reading. 'Typography for special occasions' is an alternative method of pushing typography past the boundaries of reading and into a more image-based interpretation, exposing the illustrative qualities that type can achieve. According to research by Stockl (2005), "Meanings constructed from typopictoriality may support, reinforce, reinterpret or contradict verbally construed messages; at any rate, these formal and semantic interrelations are intended and aim to create a holistic entity" (p. 208). As a whole body, the text can have pictorial characteristics that aid in the understanding of the content, as well as manipulating individual letters to represent specific objects (Stockl, 2005).

Typographic reinforcement is a silent control that tells the eye where to go and when. Developing a hierarchal structure lets the designer dictate the order in which the audience views the content. Emphasizing a certain word or section is a good strategy to draw in the audience. This is known as strong typography and gives the eye a starting

point, a place at which to enter into the piece. This treatment must be limited, however, because over-emphasizing everything results in nothing appearing special or having a degree of visual importance.

There are a number of ways that a designer can draw attention to a body of text or distinguish specific words. Headlines, sub-heads and indentions clearly indicate where to go and in what order to go. We usually read top-left to bottom-right, following the cues given by headlines and paragraphs, which indicate where to begin and highlight the most important content (Tschichold, 1928/1998). According to Stockl (2005), there has to be an organizational system so the viewer can easily navigate through the content and the page. In layouts containing a large amount of text, headlines and sub-heads usually let the viewer know what the text is about (Lupton, 2004).

The headline is the attention-grabber and provides an entrance into the page. Headlines become distinguishable from the rest of the text by being much larger, and they can be set in all caps to give extra power. Sub-headings are secondary in this hierarchal set-up and function mainly to organize the information that follows. Size and weight are very important to the way headlines and subheadings are given distinct and specific character, because this determines the way the viewer distinguishes between the two as well as the way these headlines and subheadings are set apart from the body of text, and this affects the way the information is ultimately perceived.

Paragraphs are most helpful in telling the eye that a new thought is being introduced, and they give the reader a clear sense of direction. Paragraphs may be indicated by a form of indention, by a blank space before the first word of each new paragraph, or by a skipped line between one paragraph and the next (Lupton, 2004).

These elements help to lead the reader through the message, providing a clear path to follow. The overall layout sends a message as well. There are three ways the typographical treatment can dictate the style of a layout. The first is the symmetrical layout, which conveys clear balance, structure and refinement. The next is asymmetrical and is characterized as energetic and interesting, creating an implied sense of balance. The last is the contrasting layout, which displays a dramatic variety of sizes, shapes and colors.

Type as Image

    Versatility of type and examples.

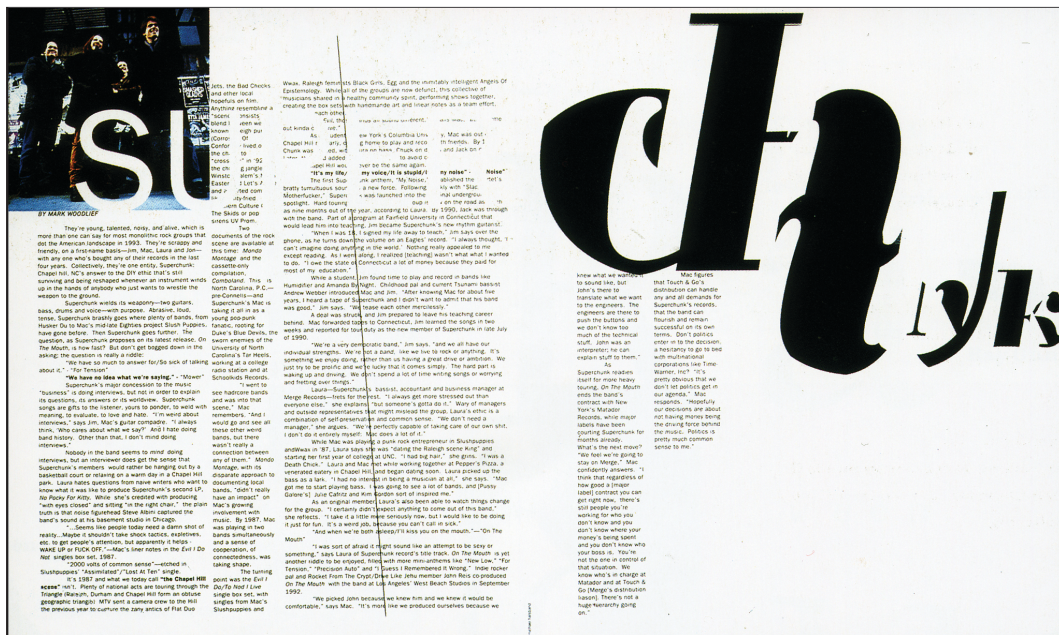Figure 7. *Superchunk* article designed by David Carson for *Ray Gun*.

Only recently has the semiotic nature of typography been a subject of research and gained an acknowledged place in typographic treatment. With respect to its relationship to language, typography can be broken into two areas, identified by Stockl (2005) as "body" and "dress." The body is considered to be the written format in which

the text is contained. In a comparison between speech and writing, Stockl explains that just as speech cannot fully be understood without the voice and inflection in tone, writing cannot be understood without attributes associated with typographic design. Dress is identified as the structure that is removed from the linguistic signification and is the stylistic aspect of the text, displaying the voice and opinion of the designer.

The experimental and expressive use of typography (figure 7) to communicate in alternative and unique ways can be seen throughout the last century, and that ideology was reborn with a vengeance in the digital age as a result of the convenient management powers that the invention of the Mac computer and layout programs made possible during the 1980's. Heller & Fili (2006) state:

Although illegibility was not entirely new–having been done before in the 1920s under the banners of Futurism, Dada, Merz, and Surrealism–when revived for the digital age it was symbolic of a new rebellion against the status quo. Digital freedom, which meant everything that could never be done because it was too difficult prior to the computer, was the nineties designers' license to be "me," and for others a free pass to be "me too" (p. 205).

These alternate views and treatments of type create a more unique experience than the typical or expected approach through which information is normally conveyed. The digital age created a place for experimental designers and typographers who were exploring boundaries and developing "a new visual curiosity and new visual needs" (Jubert, 2006, p. 398). Prominent designers known for their rebellious and avant-garde attitude and treatment of typography include David Carson, Jonathan Barnbrook, Herb Lubalin, Neville Brody and Willem Sandberg.
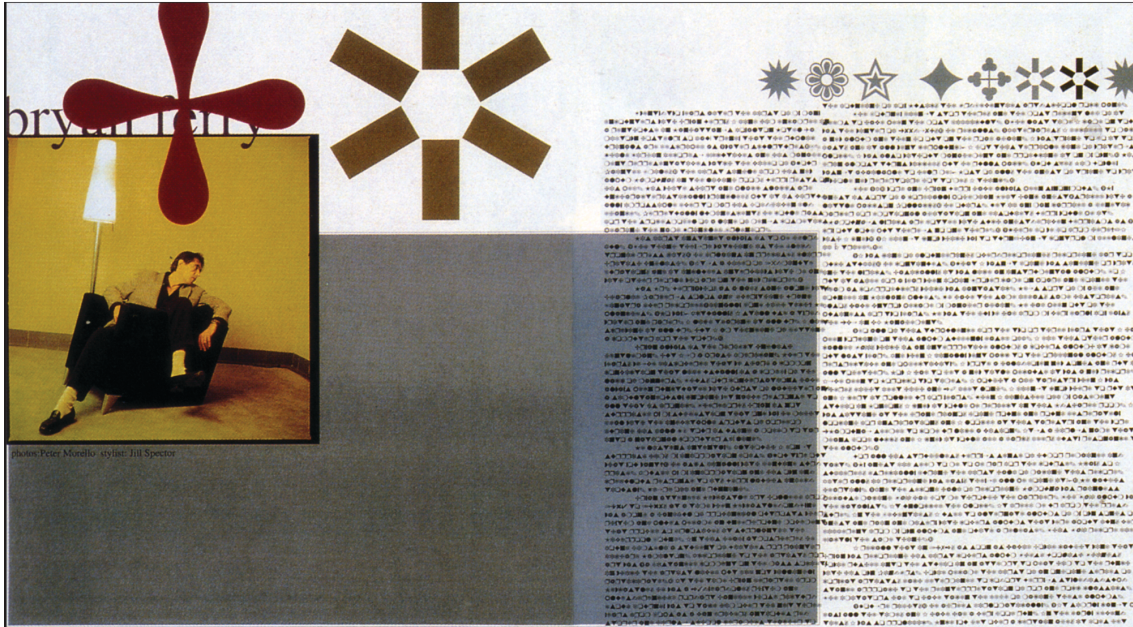
Figure 8. Interview with Bryan Ferry for *Ray Gun*, designed by David Carson.

David Carson developed his 'voice' in the design community during the 1990's while working as the art director for *Ray Gun* magazine and has become one of the most well-known defiant graphic designers. One of his most infamous designs (figure 8), is an interview with Bryan Ferry for *Ray Gun* that was typeset in Zapf Dingbats, a set of symbols and ornaments or dingbats created by Hermann Zapf in 1978, to make it more interesting because, in Carson's opinion, the interview was boring. Although not formally educated as a graphic designer, Carson helped create a rebellious and deconstructed style that affected the way young designers do their work. His philosophy of design can be summarized in two statements. Bierut (2007) states that Carson's first rule of thumb is 'never do the same thing twice' and the second is 'things are only done when they seem appropriate' (p. 40). In his forward (1995) to Carson's book *The End of Print*, David Byrne states:

> That print-books, magazines, newspapers will become icons, sculptures, textures
> – that they will be a means of communication of a different order, and that simple

information transfer will be effected by some other (electronic) means. Print will

no longer be obliged to simply carry the news. It will have been given (or will

have taken, in this case) its freedom, and there is no going back. David's work

communicates. But on a level beyond words. On a level that bypasses the logical,

rational centers of the brain and goes straight to the part that understands without

thinking (para. 5-6).

Carson's work provokes positive and negative responses, but above all else his work

excites interest. Michael Bierut (2007) suggests that Carson's design is essentially the

'end of thinking' but goes on to acknowledge that his works still hold the 'capacity to
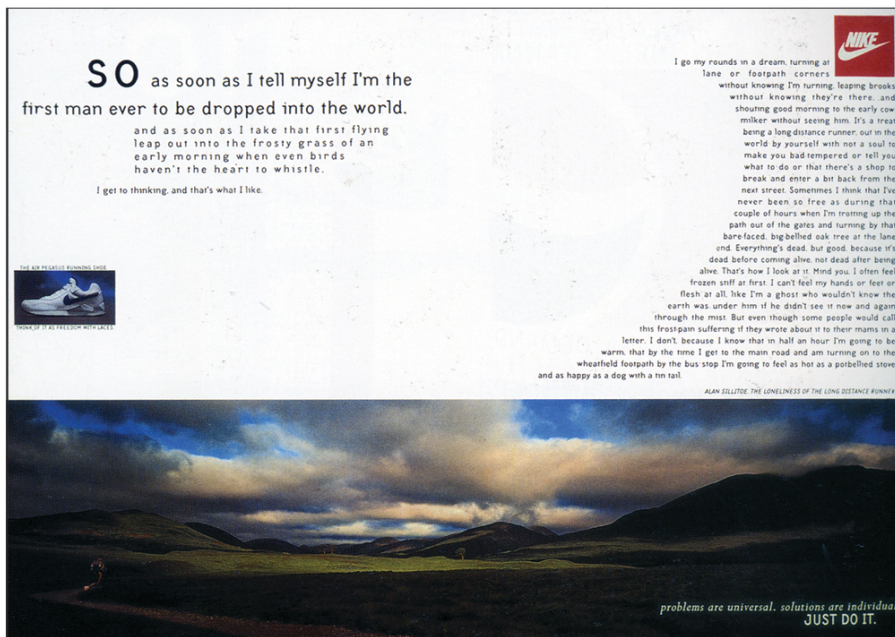
Figure 9. Nike ad designed by David Carson.

surprise with their freshness and daring' (p. 40). Carson has been criticized for the

alleged lack of ideas in his work and for his pursuit of a 'novel' approach for its own

sake. His work, however, does attract well-known clients such as Nike (figure 9) and

Pepsi. Carson's designs may be classified as chaotic design illustrations rather than

meaningful communication, but he has gained an unquestionable status for pushing the

boundaries of graphic design and typography. Carson forces his audience to the limit of

understanding when interpreting his designs.

Another designer who experiments with the boundaries of typographic

communication is Jonathan Barnbrook. Barnbrook is a typeface and freelance designer

with a prestigious client list who is known for his revolutionary typeface designs, which

have an eccentric flair with heavy decorative notes. The rebellious tones of his typefaces

are made obvious by the names he assigns to them, such as 'False Idol,' 'Melancholia,'

'Prozac,' and 'Infidel,' as shown in figure 10 (Macmillan, 2006).

Figure 10. Typefaces designed by Jonathan Barnbrook, False Idol (left) and Melancholia (right). Graphic illustrations showcasing typefaces and explanations behind the designs.

Figure 11. Introduction to Jonathan Barnbrook's book, *The Barnbrook Bible*.

Barnbrook's passion for typography and design is evident in his work. He shows

respect for design principles and considers the appropriateness for the piece, whether it

entails breaking the rules or not. Barnbrook's designs are not meant for sheer shock-

value; a humility comes through in his work due to his attentiveness to design

fundamentals, and no matter how bold or daring his approach, he executes his message

with a subtle finesse. His book, *The Barnbrook Bible* (figure 11), documents his

philosophy on design and showcases his typeface and freelance work. Barnbrook believes

that "good ideas are the lifeblood of design" and should be a channel for social and

cultural transformation as well as discussion (Barnbrook, 2007, p. 7).

Barnbrook (2007) considers *The Corporate Vermin That Rules America* (figure

12) "one of the most important pieces we have done to raise the issue of corporate
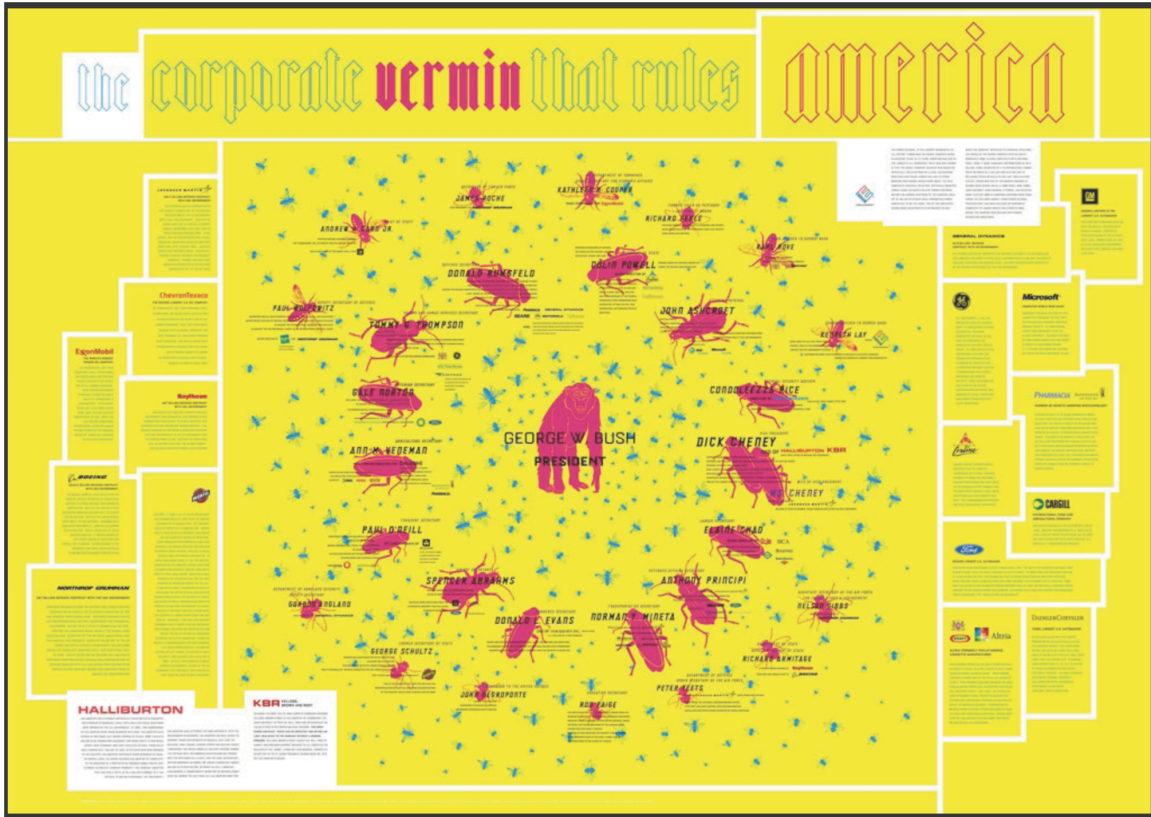
Figure 12. The Corporate Vermin That Rules America, limited edition print designed by Jonathan Barnbrook (2003).

power" (p. 266). His work is known for its ability to provoke critical thinking about complex issues such as religion, politics and death. Although he often exploits these controversial subjects, Barnbrook also has an impressive client list that includes The
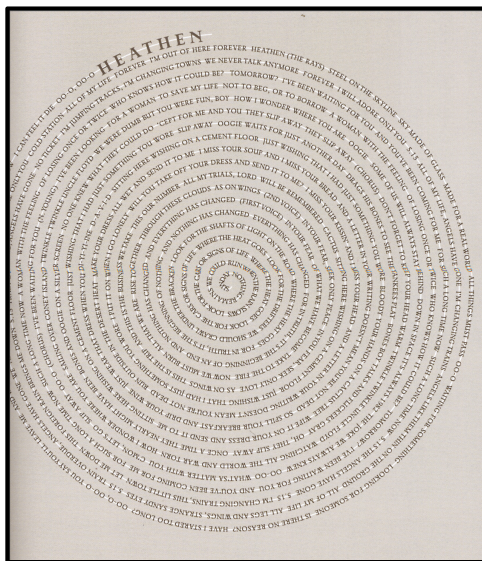
Museum of Contemporary Art in Los Angeles, the Mori Arts Center in Tokyo and David Bowie. Figure 13 is a page from one of Bowie's album booklets, and Barnbrook designed the text to spiral around continuously, indicating the intense process of writing lyrics.

Figure 13. Excerpt from David Bowie's album booklet, designed by Jonathan Barnbrook.
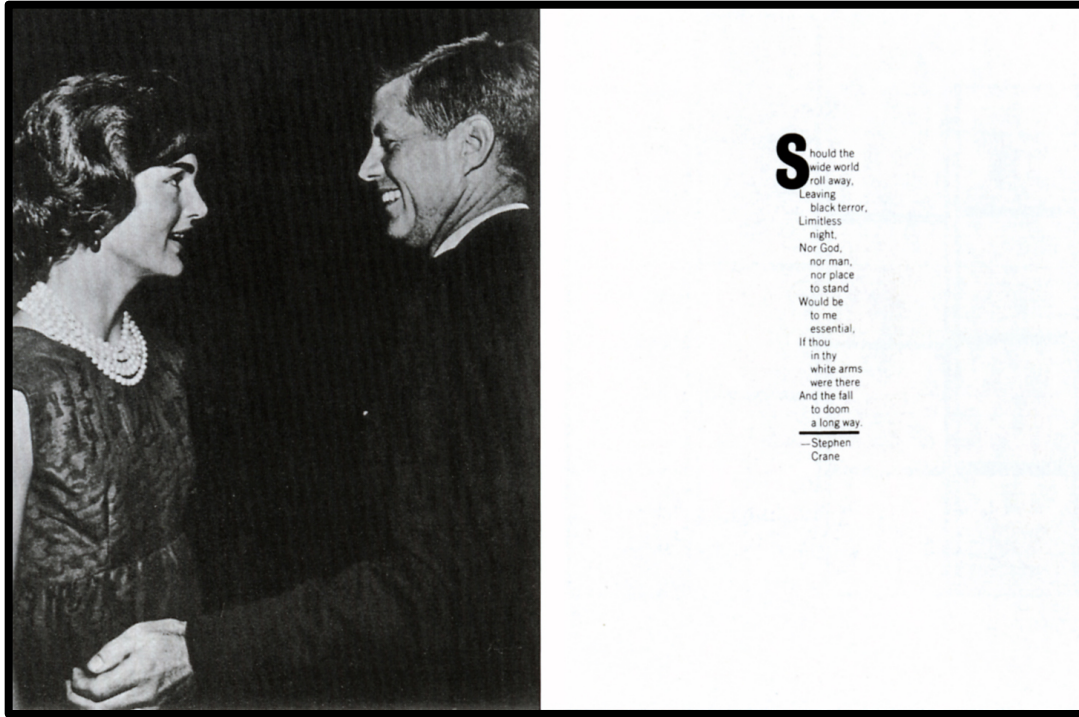
Figure 14. Herb Lubalin. Editorial spread for *Eros*, 1962.

Figure 15. Typograms created by Herb Lubalin displaying the connection between type and image.

As a graphic designer and typographer, Herb Lubalin contributed much to the design field through his typographic design and exploration, as well as his participation in the founding of ITC, International Typeface Corporation, and as art director of the renowned magazines *Avant Garde* and *Eros* (figure 14). He focused on using type to communicate beyond its convention and utilized type treatments to create some of the most recognizable logos, as seen in figure 15 (Macmillan, 2006). Lubalin's appreciation and

Figure 16. Herb Lubalin. Editorial spread integrating the implied sense of music with movement through typography and image.

exploitation of digital advancements let him achieve extraordinary yet simple executions

of typography, allowing his style to enhance the visual experience be enforcing meaning

without sacrificing legibility (Dodd, 2006). The lines between words and images became

non-existent to Lubalin. He treated letters as objects that would create an interactive

experience to allow the viewer to participate with his work as seen in how he connects

the elements to each other within the page (figure 16). His most revolutionary work

combines form and concept into a typogram, which is defined as "a brief, visual

typographic poem" (Meggs, 1998, p. 356). According to Meggs (1998), "Lubalin's wit

and strong message orientation enabled him to make type talk, to transform words into

ideographic typograms about the subject" (p. 356).

Neville Brody and Willem Sandberg are also among the prolific designers who

have impacted typography's discipline with their typeface designs as well as their

Figure 17. Neville Brody. Editorial spread for *The Face*, 1985.

Figure 18. Page from *Experimenta Typographica* designed by Willem Sandberg.

unyielding design philosophies and aesthetics. During his education, Brody questioned whether humanism had been completely lost within mass communication, and he went on to develop a more expressive approach with his design. In the early years of his career, Brody contributed great design with a punk flair to the record industry, and later in his career his revolutionary impact on magazine design made him the first graphic designer to reach celebrity status (Dodd, 2006). Brody's magazine experience started with *The*

Face and *Arena* magazines during the 1980's, where he created powerful spreads with

headlines acting as dominant objects meant to convey the significance of the content. In

figure 17, the headlines and imagery are integrated to create an energetic and

sophisticated layout. Brody was also involved with fellow typographer and designer Erik

Speakerman in the launching of digital fonts through FontShop International, an online

type foundry, and he continues to experiment with digital typefaces (Macmillan, 2006;

Meggs, 1998). Sandberg is best known for *Experimenta Typografica*, which showcased

his experiments with type. Sandberg focused on typographic exploration and

experimented with using contrasting opposites while integrating a playful sense of design

(figure 18) (Meggs & Purvis, 2006).

These attitudes and experiments with typography help drive graphic design into

the future by inspiring action, the act of thinking and making decisions. Sturken and

Cartwright (2009) state:

> We learn the rules and conventions of the systems of representation within a
>
> given culture. Many artists have attempted to defy those conventions, to break the
>
> rules of various systems of representation, and to push the boundaries of
>
> definitions of representation (p. 14).

Experimental methods, as shown in figures 19 and 20, force designers as well as

audiences to think about the way in which a message has been presented, about the

appropriateness of the design to the message, and about the balance between relevance to

content and aesthetic enhancement. Whatever the conclusion, an action occurs and a

decision is made, whether it be to accept the message regardless of its presentation or to

disregard it.

Figure 19. The Roth Explosion. Poster for *La Fete du Livre*, 1999. The author's face is illustrated using only typography.

Purposes of versatility.

As designers and as a society, we search for techniques that are new, unique and

interesting. Our aptitude for asking questions, the right ones and the wrong ones, leads to
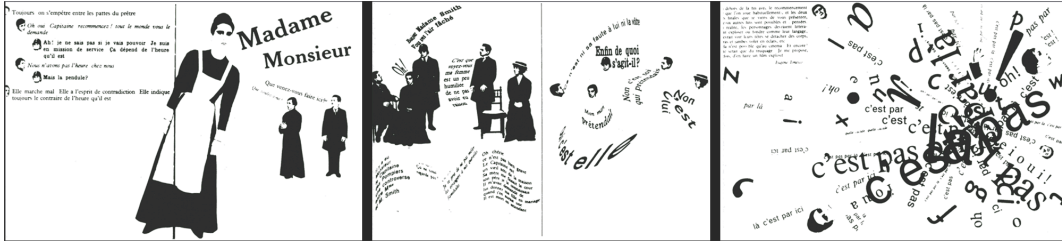
Figure 20. Spreads from Eugene Ionesco's first play, *La Cantatrice Chauve,* 1964. The layout was designed by Robert Massin.

solutions in all areas of communication. According to Berger (2009), designers have the ability to see reality as a variable that can be altered. Our visually demanding culture expects that we will have experiences with what we see. As a result, information is communicated through new methods to create new experiences. Designers become masters at reinterpreting information through a number of methods, such as combining two unrelated objects or ideas into one design. Combining two unrelated ideas in a unique way that makes sense creates a strong and successful solution, as shown, for example in figure 12 where Barnbrook used insects laid out in a family tree to represent the political structure of society. Today this sort of creativity and innovation is a necessity because of the need for new and unique interpretations; all communicators must reinvent in order to continue to communicate effectively to the viewer.

Conclusion

The image has emerged as the most accessible visual communicator, with photography representing the most common form of an executable version of an image, but the treatment of typography as image can allow type to join the ranks of the image. A rich cultural language of experimental typography developed throughout the last century from print design to the information age, where it presents itself in the form of commercials, movie introductions, and webpage design. Experimental typography has

not, however, reverted to the book, which is where Neurath claims that design started (Vossoughian, 2008). The information age has allowed many technologies to assist us in our day-to-day living, working and enjoyment. Technology continually offers new and quicker means of gaining information through faster processors and conveniently smaller devices with which to access that information. We have limitless design, technology and printing capabilities at hand, but we tend to stop short in design with literary content, and anything more serious than a magazine seems to demand a standard layout, with no thought given to typographic treatments that might create a more engaging experience while reinforcing the meaning of the content.

Books have been the subject of considerable critical discussion concerning how they are portrayed with the advancements in technology, making their content more quickly and easily accessible. In spite of this, their content has suffered from a lack of adequate consideration of layout and visual interest. This research shows that there is a deficiency in the way that literary content in books is presented on an adult level due to the learning process and limitations in the printing process. The use of visual communication is pervasive in most areas of our daily lives; this imagery, however, has not yet affected books intended for adults. There is a lack of visual imagery in literary works published for adults. Technology has made the content more accessible to the viewer but has ignored the visual possibilities within the overall layout and the manner in which it appeals to the viewer.

Methodology

This study asks the question, "How can the communicative capacity of literary texts benefit from explorative typographic treatments considering developments in graphic design techniques and technological advances?" The five designed books attempt to break the constraints of the typical book format by using type as image to display the communicative potential of typography by illustrating the narratives of five nursery rhymes. Nursery rhymes are a primary learning tool for children, and building on them by adding complexity and sophistication through a multi-level technique that emphasizes the interaction of design and content allows an adult audience to use these texts as learning tools. Using type as image gives an added dimension of meaning in addition to the more familiar language-based learning process. This technique permits a more complex interpretation of the content, allowing readers to apply what they already know, giving them a foundation to build upon and thereby enabling them more easily to retain the expanded content in memory. Type as image also gives the audience the responsibility of deciphering the images and interpreting the content, forcing them to participate in the design. This multi-level approach to illustrating nursery rhymes allows the viewer options in processing the information contained in the text, presenting the nursery rhymes in a new way for adults. The audience is able to interact visually with the content, which creates an engaging learning experience about the history of nursery rhymes and discloses their unfamiliar origins and meanings.

The research presented in the literature review provides a strong foundation for this design application by addressing the use of technology within design and typography while showing how adult learning can be an enjoyable and an engaging experience

comparable to the original childhood experiences of learning. Although children learn the

alphabet one letter at a time, using type as image raises the possibility of using those

individual characters in a more complex way, allowing adults to revisit childhood nursery

rhymes with a more sophisticated means of interpreting their meaning. This multi-level

method requires the careful synthesis of elements including type, color and paper, which

digital and printed literary texts often lack. Using the book as a medium was a natural

choice, because we are conditioned to accept books as learning tools that contain

substantial and important information. Books have long been a conventional choice to

present learning material, and this project utilizes this established convention to present

the narrative of selected nursery rhymes in a new, enhanced format for adult readers.

      The variety within the books is visually comprehensible at first glance through

type, color and paper choices, which establish the value that each narrative conveys

through its application to the conceptual structure, creating variety from book to book

through their distinctive uses of type, color and paper. Value is determined through the

variety that is offered. Variety enhances our perception of objects, inclining us to

attribute a greater value to uniqueness, whether that unique quality be the result of setting

a text apart from all others or of distinguishing differences within a group. The familiar

topic of nursery rhymes, a simple color palette, specific structure in type treatment, and

translucent papers in every book all create variety, while simultaneously providing

continuity from book to book. They are also united through the various ways the nursery

rhymes function within the multi-level methodology.

Nursery Rhymes

Nursery rhymes have existed for centuries and are one of the first forms of literature and learning we encounter as children, and they are a valuable resource for helping children learn to read, memorize and count, because they provide an enjoyable experience. Nursery rhymes, originally geared toward an adult audience, were used to tell stories about topics that were considered too controversial or too complex to communicate directly. These stories, and an occasional slur, evolved into short rhymes in order to deliver coded messages and meanings that could be remembered easily. Nursery rhymes were a short expression of ideas that could not be stated openly or that may have been too difficult to discuss, and they facilitated the oral transmission of knowledge in non-literate communities (Jack, 2008; Roberts, 2004).

Adults' and children's entertainment intermingled until the Victorian era, when nursery rhymes were made more acceptable for children by rewriting them to focus on a moral code. During this period, some nursery rhymes lost original words or verses, and their original meaning was consequently forgotten. In some instances, nursery rhymes have become disconnected from the original contexts and purposes in which they were remembered, and their historical origin has become more difficult to connect to the rhyme. However, most nursery rhymes still maintain a substantial aspect of their original intention, allowing the recovery of information that had been eliminated for the sake of children (Roberts, 2004).

Topic selection.

Nursery rhymes were chosen as the material for this series of books because of their familiarity and their lack of specific image assignment. For children, nursery rhymes

are a fun and lighthearted means of learning. Introducing the rhymes' historical origin

allows us to put these rhymes in context of time and place. We are more comfortable with

what we know and are more apt to accept change if we already have a familiarity with the

original content. The lack of associated imagery allowed for the opportunity to create

new meaning through the use of type as image without re-assignment of content to

image. We have all grown up with nursery rhymes but not knowing where or how they

originated or what they originally meant. Using familiar rhymes in conjunction with their

historical contexts to tell these narratives are a valuable learning instrument for adults

because we used the rhymes to learn with as children, creating a direct link to how and

what we learned in the first place. This newly acquired knowledge of the historical and

contextual information associated with each narrative is valuable because it educates the

audience through an engaging presentation (Jack, 2008).

        The criteria used in the selection of the five nursery rhymes chosen for this project

were based on popularity and the amount of available information that could be used to

interpret through the structure of the concept. Popularity and familiarity establish better-

known rhymes precedence over lesser-known nursery rhymes. The more popular nursery

rhymes elicit greater interest because they are more familiar to a wider audience, creating

a knowledge-base on which this thesis project builds using historical information and

other factual details. Value and variety were achieved through research, which assured

there was enough historical information about each nursery rhyme to contribute to this

revisionary process.

        Variety is one of the primary advantages of using nursery rhymes as a topic as

there is a vast quantity of rhymes available with sufficient information to use for the

purposes of these narratives. Additionally, the short content of the nursery rhymes allowed for adequate treatment of historical and contextual information while including imagery created from text without presenting an overwhelming or overly complicated presentation of the narratives. Furthermore, the fact that specific imagery is not associated with nursery rhymes allows for the creation of new imagery instead of re-assigning imagery that could cause confusion.

Relevance and benefit (relevance to study).

These five narrative books are an exploration of the possibilities available as a result of technological advances in type, paper and printing, and they create a meaningful and enjoyable learning experience for adults who have interest in literature and history. These books use type as image to expand the process that we used to learn with as a child, while reinterpreting historical and factual information about the chosen nursery rhymes in a functional and sophisticated manner by adding depth and complexity, which are emphasized by the impact that graphic design and typography have on the texts. Utilizing type characters to display information beyond their usual purpose of ensuring the readability of the verbal text while pushing the boundaries of typographic communication provides a different, exciting way of presenting and understanding information. This treatment of typography allows non-designers to appreciate its possibilities, adding to the value of presenting information in different ways. This technique has the potential to command immediate attention from audiences because of the unique display of typographic narrative imagery, which offers quick interpretations of content that audiences can appreciate despite limited time and sensory overload present in today's society.

Design Process Overview

Type, color and paper were selected in order to provide meaningful multi-level

conceptual approaches to each rhyme. Each element was selected based on its

contribution to the narrative. Type, color and paper support different aspects of each

narrative by the ways they are applied to each book.

Concept.

The nursery rhymes and their historical contexts are presented using a multi-level

approach that involves three levels of information. The three levels involved offer a

useful method of presenting complex mature graphics and content in an appropriate

manner for an older audience, demonstrating variety and value by applying information

from each nursery rhyme in a different way and providing an alternate approach to

CONCEPT		
TYPE	**Familiar**	**Rhyme** (readable & illustrative)
COLOR	**Unfamiliar**	**Historical & symbolic references** (differentiates between historical meaning & rhyme)
PAPER	**Factual**	**Varies depending on rhyme** (separates additional factual information from rhyme)

Figure 21. Chart explaining how concept uses each element within the narrative books.

historical and contextual material. The structure of the conceptual approach (figure 18) allows each element to be

used uniquely within its category. First, type introduces the familiar rhyme,

demonstrating differences between typography's readable and illustrative applications.

Next, color is used to introduce unfamiliar historical and symbolic meanings,

differentiating between the rhyme and original context. Paper is then used to separate

factual information from the literal and contextual aspects of the nursery rhyme, as well

as to support the meaning of the narrative with a tactile element.

Content: typeface, color and paper.

Typefaces were selected based on their historical relevance to the nursery rhymes, as well as on their visual characteristics. Exploring typefaces before selecting a typeface ensured that specific typefaces used were not chosen arbitrarily or at random. The specific typefaces show how the message can be displayed with relevance to the narrative, offering not only a visual relationship to the content, but a much deeper link to the historical epoch of the rhyme as well.

Specific colors were chosen because of the meanings with which they are conventionally associated and the way that meaning supports the narrative of each rhyme. Instinctually we associate colors with meaning and impose that meaning on what we are looking at, seeking a connection between color and content. Color meanings can be culturally contingent, but a universal understanding of the principles of color, whether they be cool or warm, indicating calmness or tension, differentiate between implication and association. For example, blue is a cool color that implies calmness, however it may be associated with religion or royalty in certain cultures. The specific colors used have a direct relationship with the content of specific rhymes, allowing the viewer to grasp the implied emotion presented by the verbal text. The colors used in each book reflect a straightforward association with the nursery rhyme with which they are used, in order to establish an immediate, recognizable relationship. The simple color palette of black and one additional color lets the viewer quickly understand how to differentiate between the rhyme and its historical context and quickly to associate the relationship between the color and the meaning it represents with the narrative. Black is used consistently throughout each narrative book, providing a neutral foundation on which to present the

received texts of the rhyme. Shades of gray add subtlety as supporting elements that create a continuous flow connecting each layout with the next.

Paper allows for another level of information to be introduced, creating a more complex experience by playing on more than one sense. The selection of paper was based on the tactile quality that would best support the narrative. We enjoy touching, feeling and holding objects, which adds to the experience of the books by creating a physical connection to the content. Different papers offer different qualities that can contribute to the meaning through visual and tactile traits, and as a result the paper differs from book to book depending on how it relates to the meaning of the narrative. The main paper and the translucent paper were chosen to complement each other, allowing one to play off the other. The translucent paper appears delicate, which balances the strong graphics, as it introduces contextual information. This choice of paper also permits the contextual information to be integrated into each layout through the use of the diagram that indicates specific elements located within each spread. The diagram acts as a label to explain subject matter further. This technique is important because of its ability to point out specific objects and offer a more complete explanation in relation to the narrative.

Although paper and color were not extensively addressed in the literature review due to their role as supporting elements in the design portion of this thesis, their importance must be acknowledged. Paper is significant because it is the carrier of the message, and its relevance and contribution should not be overlooked. Paper offers different textural qualities that support meaning within content, acting as a subtle reinforcement of the message. The message should not be interrupted by the paper selection; instead, the paper should play a supporting role in order to deliver the content

effectively without obstruction of the message. Color also plays a supporting role in this study. Color is used to distinguish between different portions of the content. It aids in the interpretation process and does not hinder the message's outcome. Utilizing the psychological associations of particular colors reinforces the intended message.

Layout and size.

The layouts, or spreads, create an environment within each spread allowing the reader to interpret the content through balance, scale, rhythm, repetition and color. These principles allow the three levels of the concept to intermingle and create unifying scenes. Elements are distributed throughout each composition, telling the story of the nursery rhyme through movement and dynamism. Each spread presents the narrative through a combination of readable and illustrative treatments of typography, incorporating color to distinguish between familiar and unfamiliar aspects of this nursery rhyme. Type as image is used to integrate a literal representation of the original rhyme and the historical meaning behind each nursery rhyme. The imagery is developed entirely from the characters of the alphabet, specifically from the main typeface used to present the nursery rhyme verse. Readable text is centered on each page, creating a stable presence that allows the imagery to remain dominant and providing an axis around which the imagery moves (Lupton, 2004). Each spread presents an engaging experience, narrating the events to tell the story of the rhyme, including both literal and historical translations. The layouts work individually and collectively to present the narratives with a sense of cohesiveness.

The book size was selected to create a more intimate experience for the adult audience. The content is very bold and powerful, and the size of the book offers balance so that the content is not overwhelming. The dimensions, 6" x 6", create a perfect square,

suggesting harmony and equality, both of which are ideas involved in the design

approach (*Oxford American Dictionary*, 2005).

Production.

The choice of perfect binding with a paperback cover was a function of feasibility

and control. Producing and binding the books with this method was an acceptable choice

because it allowed for the most control over the variety of paper used both inside and as

the cover of the books. The paperback cover created the opportunity for perfect binding

and allowed for uniformity by using, for the cover, a heavier stock of the paper chosen

for the interior pages. Another reason for choosing a paperback cover was to prevent the

bulk of the cover from overpowering the thin content of the book and to create an overall

sense of visual and tactile balance. This choice also distinguishes these books from

children's books, which are typically hardback.

Title and additional content.

The process of naming each book with an appealing title began by assessing the

main theme of each narrative. The title is meant to intrigue the viewer at first glance,

creating a sense of mystery as it represents the unrecognized underlying theme within

each book, which becomes clear as one progresses through the pages of each narrative.

Each book's unique content is reflected by a title set in all caps to inspire a sense of

importance, urgency and power, representing the historical and factual information that is

presented in each narrative book.

Each book begins with an introduction that provides a brief summary of the

historical meaning behind the book and a guide that describes how to read the book

through the different levels. The main content is divided into several spreads, creating a

narrative of each rhyme and of the historical accounts that underlie the specific nursery rhyme. Alternative versions and interpretations of the nursery rhymes are included after the most familiar version. The alternative versions present each rhyme in varied forms, indicating the ways they change between cultures or have changed over time. The alternative interpretations explain additional meanings that are also associated with each rhyme but are not as substantial or familiar as the meaning illustrated in the main content. Finally, the credits provide technical information about each book, including production information and acknowledgements. This section was included to provide access to the reference sources that were used to create the narratives, since all of the content is based on research.

Bush: Here We Go Around the Mulberry Bush

Bush follows the experiences of female inmates at the Wakefield House of Correction. *Here We Go Around the Mulberry Bush* was developed as a chant to pass the time while doing the many chores that were required of the prisoners, and allowed different chores to be substituted in the lyric. The repetitive structure reflects the monotonous nature of the chores and the bleak life that the women endured.

Concept.

CONCEPT		
TYPE	**Familiar**	**Rhyme**
COLOR	**Unfamiliar**	**Female imprisonment**
PAPER	**Factual**	**Significance of mulberry bush**

Figure 22. Concept chart for *Bush*.

This rhyme was shortened into a narrative version to eliminate the redundancy of the only slightly different verses and the chores they designate. The structure of this nursery rhyme allows the idea to be conveyed by presenting one of the verses that refers to a specific chore, because the chores are commonly replaced based on the audience's inclination. This nursery rhyme is composed in a manner that supports the narrative and conceptual approach (figure 19) that is used within each of the books.

Content.

The typeface used for *Bush* is Rockwell, developed in 1800's, coinciding historically with the rhyme's original publication date of 1840. Rockwell is classified as a
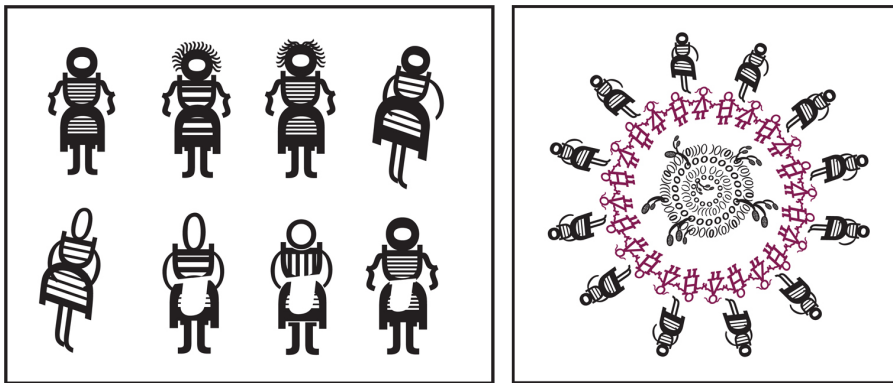
Figure 23. Character studies for *Bush*.

slab serif or Egyptian style typeface. Slab serifs are distinctive in their very thick serifs, which make them appear very heavy. The serifs appear to be thicker than the actual letterform. These characteristics, as shown in figure 20, create a visual context appropriate to this tale of incarceration. The heaviness of the slab serif typeface refers to the dreary outlook on life that must have consumed the female inmates, as well as to the architectural mass of the prison. This style of typeface has been most commonly

associated with 'Wanted posters,' reflecting an obvious relationship to the prison

experience conveyed through the narrative of *Bush* (Dodd, 2006).

A deep and slightly muted reddish purple is used to represent the mulberry bush

in this narrative. This color lets the audience identify the relationship between the color

and the content; although there are white, red and black mulberry bushes, this purple is

typically correlated to the berries on the mulberry bush. Symbolically, this subdued color

conveys the idea of calm and quiet, relating to the confined life of the female prisoners.

Purple has also been associated with mourning, referencing the hopelessness that is

linked with losing one's freedom (Chapman, 2010; Marks, 2006).

The paper used for *Bush* is a matte paper, Cougar Smooth White 80 text weight and 100

cover weight, suggesting the plain lifestyle of the prisoners. The simplicity of the smooth

matte paper indicates the daily life of the inmates, while offering a suitable finish to

complement the pattern of the translucent paper. The translucent paper, Translucent

Opaque, has an obscure finish with a speckled pattern, expressing the prisoners'

monotonous, bleak outlook on life. The inmates did not have a clear and bright future,

and this is represented with the opaqueness of the translucent paper. The speckled and

gritty pattern within the paper also suggests the filthy conditions in which the inmates had

to live.

Layout.

The narrated tale for Bush is told through four main spreads with translucent

overlays that present the details about the mulberry bush's centrality to the narrative. The

first spread explains that the female inmates used the rhyme as a chant to pass the time,

and also as an entertainment tool that they taught to their children. The imagery focuses

Figure 24. Preliminary layout for third narrative spread in *Bush*.
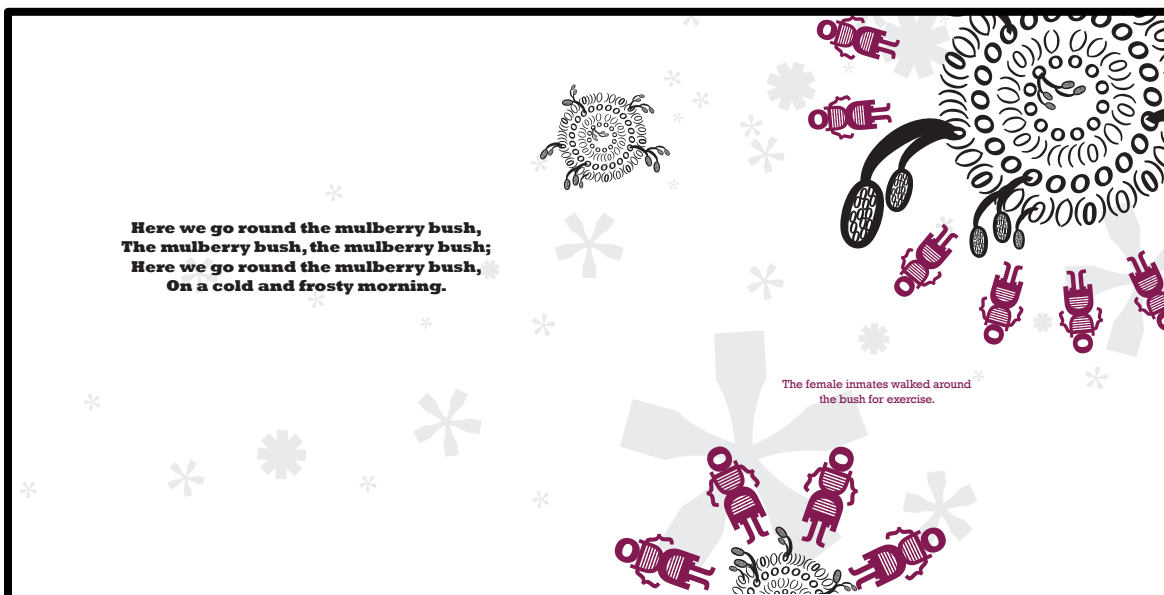
Figure 25. Preliminary layout for fourth narrative spread in *Bush*.

on characters encircling a mulberry bush, indicating both the inmates and children's

relationship to the bush. The second spread represents the inmates' monotonous chores

by showing a repeating pattern of female inmates wearing aprons. The third spread

(figure 21) illustrates the specific chore of doing laundry, while alluding to the fact that it

had to be done often because they only had one change of clothes and lived in very

austere and filthy conditions. The fourth spread (figure 22) shows us how the women

utilized the mulberry bush for exercise, describing another level of significance that the

mulberry bush has within this nursery rhyme.

Crash: Humpty Dumpty

The English Civil War between the Royalists and the Parliamentarians during the

1640's provides a historical and interpretive context for the tale of *Crash*. This narrative

focuses on Humpty Dumpty, an extremely powerful cannon used by the Royalists. The

Royalists overtook an enemy city, using Humpty Dumpty to keep the opposing forces at

bay, but the cannon was soon destroyed and the Parliamentarians achieved victory

(Alchin, 2007; Jack, 2008; Roberts, 2004).

Concept.

CONCEPT		
TYPE	**Familiar**	**Rhyme**
COLOR	**Unfamiliar**	**English Civil War**
PAPER	**Factual**	**Military information**

Figure 26. Concept chart for *Crash*.

Content.

The typeface used for *Crash* is an old face known as Goudy Old Style. Old face

classification is used to define the contrasting thick and thin strokes, promoting a more

refined and sharper profile (Boardley, 2007). This typeface was developed and became

widely used during the 1600's, during the period of the English Civil War. Additionally,

Baroque letter, which became popular during this time period, utilized both roman and

italic fonts on the same line, as shown in figure 24. This style is integrated into the

narrative to produce a sense of motion through the use of the two fonts, which, according

to Dodd (2006), "featured exaggerated motion and clearly interpreted detail to give a

sense of drama and grandeur" (p. 39). This is a fitting style to represent the dramatic

events that take place during a war. The Baroque letter style is interpreted into the same

spread, opposed to the same line, and represents the opposing forces within the narrative

(Dodd, 2006).
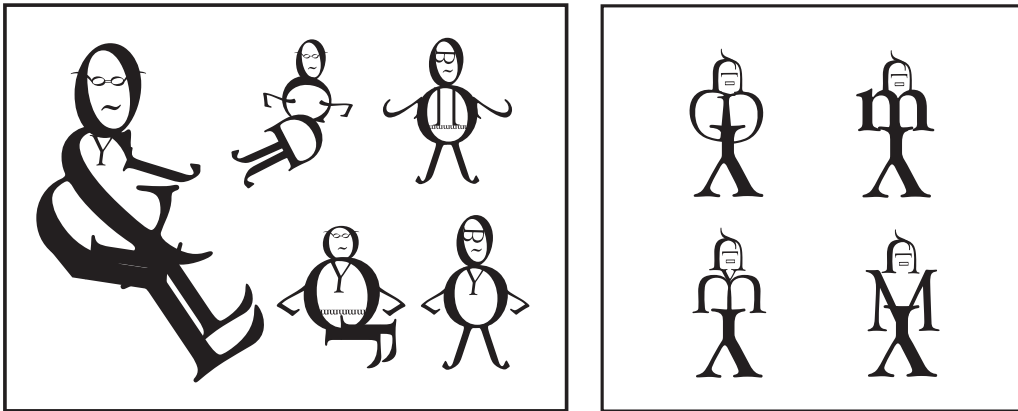
Figure 27. Character studies for *Crash*.

   The specific color chosen for *Crash* is based on the literal and symbolic value it

holds. Green expresses energy and loudness, directly relating it to the spirit of war. Green

is often associated with military because of its use in camouflage. The olive tone used for

this narrative remains bright and strong, reflecting the spirit that both armies must have in

order to persevere to the end. Also, green is symbolic of celebration, tying it to the

Parliamentarian victory (Marks, 2006).

The two papers chosen for *Crash* complement each other while reinforcing the idea of war described within the narrative. The main paper, Mohawk Superfine White Eggshell 80 text weight and 100 cover weight, has a subtle textured matte finish indicating the rough and rugged nature of war and references the modern representation of Humpty Dumpty as an egg. The matte finish contributes to the narrative by creating a flat and raw surface on which to present the scenes. A thick translucent paper, UV Ultra Translucent White 36 cover weight, was selected to represent the harshness of the battle. The opaque finish of the translucent paper signifies the clouds of smoke and debris that must have been created in battle. The dense nature of this paper also alludes to the idea that the opposing sides could not see past what they felt to be right and were fighting to achieve.
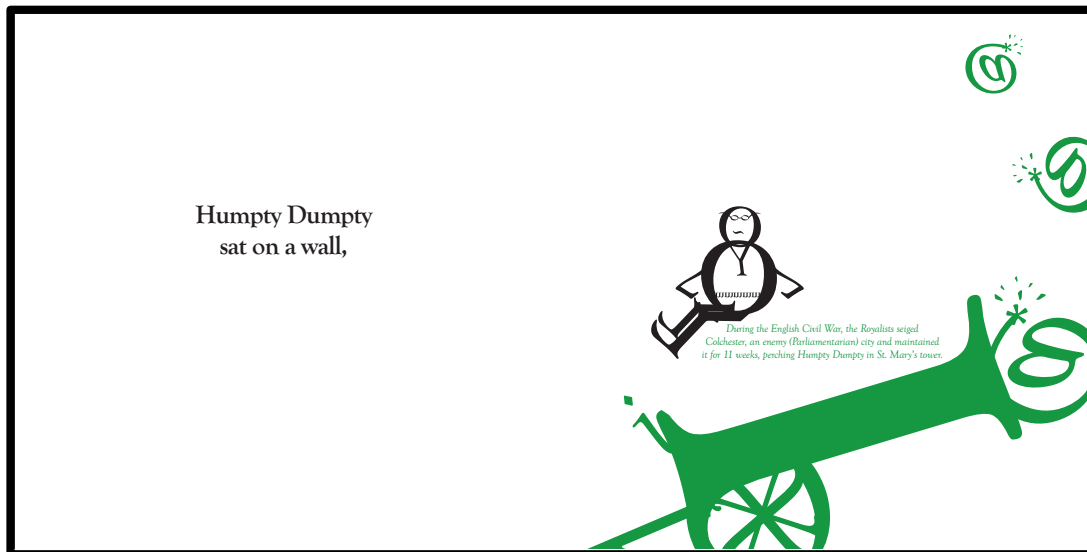
    Layout.

Figure 28. Preliminary layout for first narrative spread in *Crash*.

All the King's horses
and all the King's men

*The fight for the crown spurred the King's men to retrieve the cannon
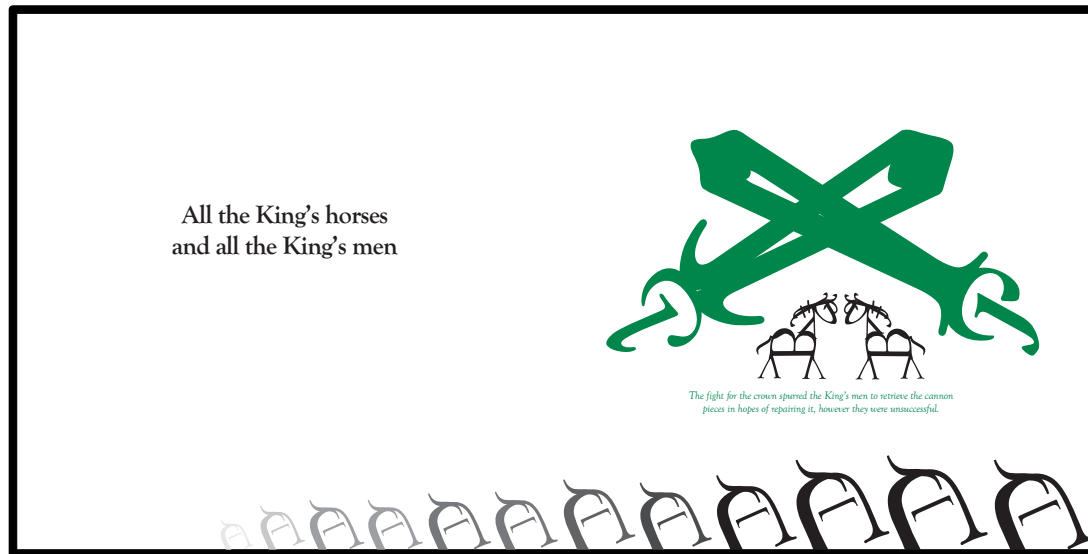pieces in hopes of repairing it, however they were unsuccessful.*

Figure 29. Preliminary layout for third spread in *Crash*.

Four main spreads are used to present the narrative of *Crash;* in combination with

the translucent overlay, they convey military facts related to this nursery rhyme. The first

spread (figure 25) depicts the modern-day, egg-like Humpty Dumpty sitting on the

cannon Humpty Dumpty, merging familiar and unfamiliar aspects of the narrative. The

second spread exhibits what happened when both Humpty Dumptys fell to the ground, a

situation resulting in their mutual destruction. The third spread (figure 26) combines

illustrations of a group of soldiers with the horses carrying pieces of Humpty Dumpty the

cannon, representing the Royalists' resolution to keep fighting although their main

weapon had been destroyed. The fourth spread suggests how the Parliamentarians

surrounded the King's men, forcing their surrender, which is indicated by flags tied to the

swords.

Faith: Mary, Mary, Quite Contrary

Faith refers to two queens, Mary Tudor of England and Mary Stuart of Scotland,

who are the main characters in *Mary, Mary, Quite Contrary*. Strong religious

implications create the environment for the story of the two Catholic queens and their

attempts to return their kingdoms to Catholicism and abolish the Protestant faith by

extreme measures. Their personality traits tie them both to this nursery rhyme, due to the

fact that they both had strong intentions but executed their decisions in unpredictable and

contradictory ways (Alchin, 2007; Jack, 2008; Roberts, 2004).

   Concept.

CONCEPT		
TYPE	**Familiar**	**Rhyme**
COLOR	**Unfamiliar**	**Quest to return England to Catholicism**
PAPER	**Factual**	**Religious information**

Figure 30. Concept chart for *Faith*.

   Content.

   An old face, Old Style, is featured in *Faith*. Old faces are characteristically

defined by greater, distinguishable thick and thin strokes, resulting in a more polished

appearance. However, in support of the paradoxical theme in this narrative, this typeface

has slight imperfections directly contradicting the very quality that defines it, as shown in

the character study in figure 28 (Boardley, 2007). This typeface was developed during the

1500's, coinciding with both queens' reign. During this time, italics were developed and

quickly gained popularity. An italic version was employed within the narrative,

displaying the rhyme that dominates the page as well as the contextual information,

representing the queens' power. Italics express an elegance within the letterforms,
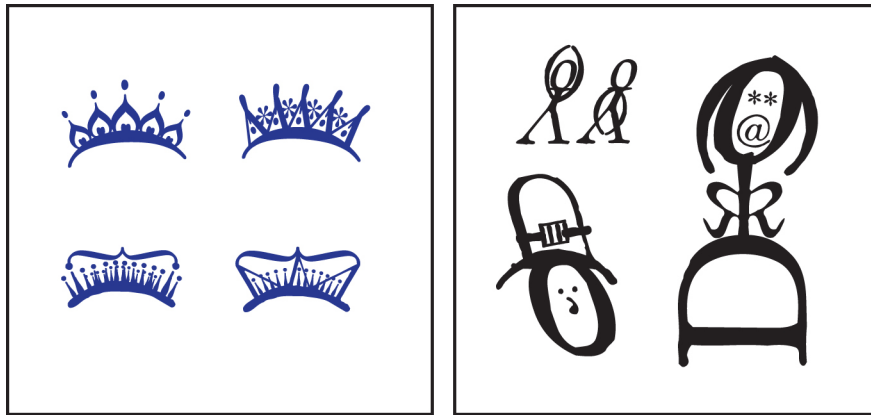
Figure 31. Character studies for *Faith*.

suggesting a more feminine and softer tone, alluding to the main characters, although the

queens do not appear to be soft or meek, which supports the contradictory theme (Dodd,

2006; Lupton, 2004).

A fully saturated vibrant blue is used to represent *Faith*. Blue is commonly

associated with royalty and is rich with power and elegance, linking the color to the

nursery rhyme. This color is symbolic of being trustworthy, which directly challenges the

personality of both queens. When this color is paired with gray it suggests a

sophistication that suggests royalty authority. The color blue attains is often also used to

refer to spirituality and religious notions, ideas that are at the core of this narrative. The

Virgin Mary is typically represented wearing blue, and both queens were named Mary

and sought to restore public devotion to the Virgin Mary, which the Protestant reformers

in both England and Scotland had discouraged (Chapman, 2010; Marks, 2006).

The two papers chosen for *Faith,* Endurance Silk White 80 text weight and 100

cover weight and Translucent Silver, balance each other while reinforcing the regal

personalities presented within the narrative. The main paper is a silk paper, showcasing a

semi-gloss finish that allows the content to appear in intense color, evolving the power of

the two queens. The silk paper is paired with an opaque, pearlized translucent paper that

reflects the regal nature of the narrative through its shimmering quality, which suggests

the riches associated with royalty.

Layout.

Faith is told through four main spreads that recite the nursery rhyme *Mary, Mary,*

Quite Contrary and that include translucent overlays presenting details about religion,
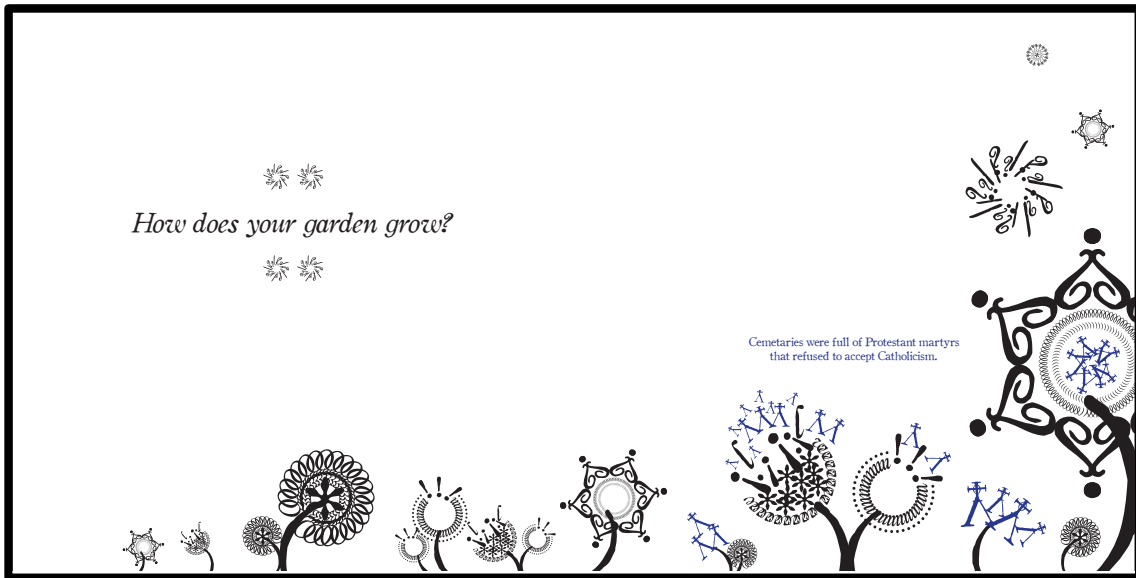

Figure 32. Preliminary layout for second narrative spread in *Faith*.
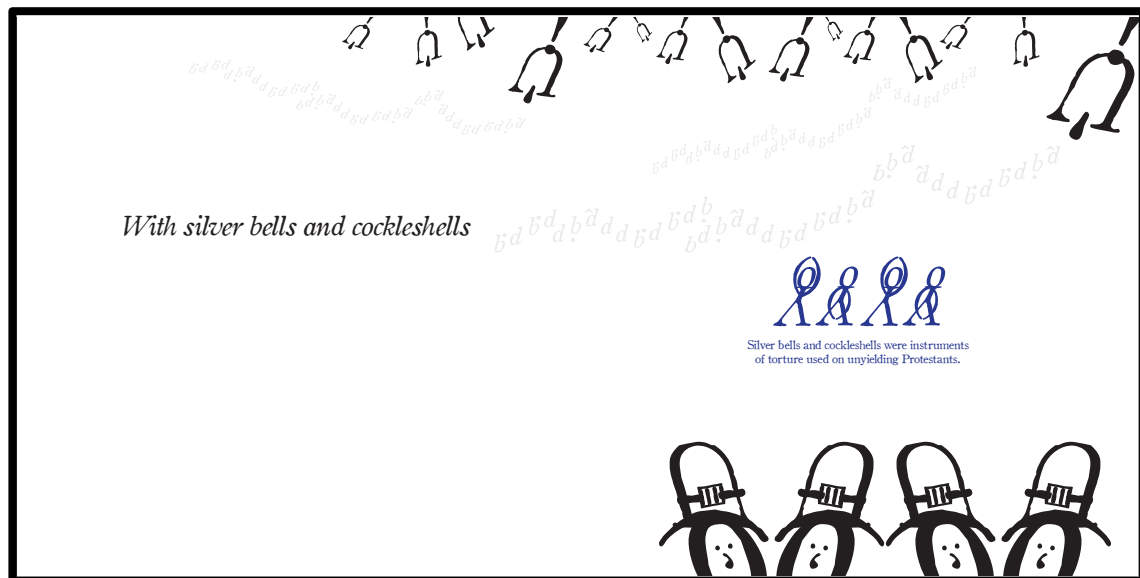

Figure 33. Preliminary layout for third narrative spread in *Faith*.

mainly Catholicism as it pertains to the narrative. The first spread introduces figures

representing the two queens, along with an explosive display of characters that use scale

and color to represent the chaotic and unpredictable nature of the queens. The second

spread shows an integration of the rhyme with the historical context by illustrating a

flower garden with tiny tombstones incorporated into the flowers, as if they are growing

out of the flower, as shown in figure 29. The third spread (figure 30) blends illustrations

of bells, Protestants with cockleshell badges on their hats, and figures demonstrating the

results of the tortures that wee inflicted, providing an alternative implication of bells and

cockleshells. The fourth spread illustrates four female figures, one of whom is

decapitated to suggest the manner in which one was punished if one did not conform to

the queens' wishes.

Flame: Jack Be Nimble

   Flame is a tale based on pagan beliefs about ways of predicting the future. It was

believed that jumping over a candlestick without putting the flame out would ensure a

prosperous and successful year ahead, whether through luck, fertility or marriage. Candle

jumping was an extreme sport and was part of the annual feast of St. Catherine, which

was celebrated on November 25th (Jack, 2008; Roberts, 2004).

   Concept.

CONCEPT		
TYPE	**Familiar**	**Rhyme**
COLOR	**Unfamiliar**	**St. Catherine's feast**
PAPER	**Factual**	**Beliefs & superstitions**

Figure 34. Concept chart for *Flame*.

Content.

The two typefaces used for this narrative were designed during the late 1700's, around the publication date of *Jack Be Nimble*. The main typeface used for *Flame* is a modern typeface known as Bodoni. Using a modern typeface is appropriate for this narrative because the theme indicates strong beliefs in the possibility of predicting the future. Flame-jumping was considered an extreme sport, and Bodoni conveys the same feeling through its use of extreme thick and thin strokes, as shown in figure 32. This quality, however, prevents it from being legible in smaller sizes because the thin strokes
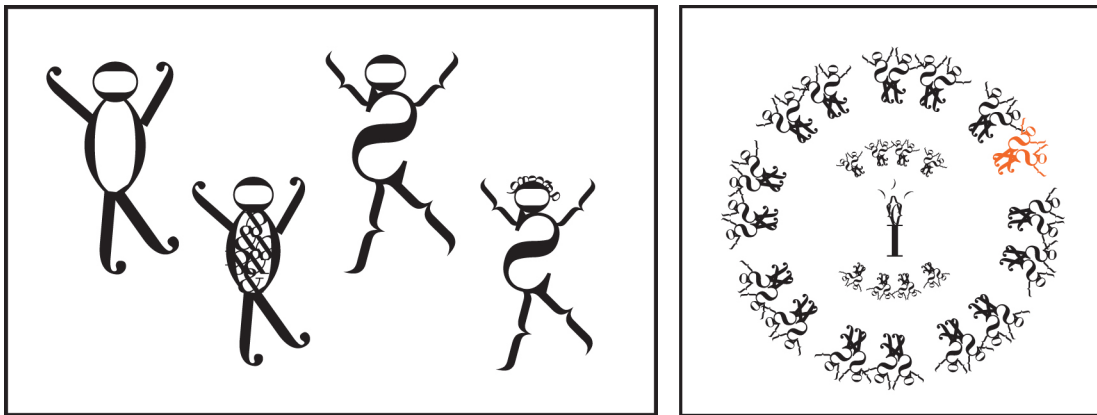
Figure 35. Character studies for *Flame*.

are reduced to hairlines and become almost invisible. Therefore a complementary sans serif typeface is used, further illustrating the idea of 'modernity.' Today, sans serif typefaces are typically used to communicate a modern style. A condensed version of Futura is used for this supporting text, to convey a sense of energy and urgency through the closeness of the tall, thin letters. These two typefaces reflect the excitement that women must have felt in choosing their husbands during the celebration of St. Catherine's Day. Futura is practical and functional, promoting legibility while reinforcing the conceptual aspect of the narrative (Dodd, 2006; Lupton, 2004).

The color orange is used for *Flame,* in reference to fire. Symbolically, orange expresses friendliness and creates an energetic environment, which recalls the nature of the festivities that constitute the unfamiliar historical context of the nursery rhyme. This color also conveys health and change, objectives of the belief system implied within the narrative. Orange fosters a sense of happiness and cheer, creating a direct link to this narrative (Chapman, 2010; Marks, 2006).

The papers chosen for this book work together to add another level of information to the narrative. A smooth glossy paper, Beckett Enhance Gloss White 80 text weight and 100 cover weight, is used to allow the images to remain vibrant and bold, supporting the cheery attitude associated with the celebration of St. Catherine's feast. The phrase 'where there is smoke, there is fire' led to the selection of the translucent paper, Translucent Smoke. The translucent paper features a smoke pattern, which is easily seen over the smooth gloss paper, allowing the two papers to complement one another. The factual information presented on the smoke-patterned translucent paper indicates the good that will come as long as one does not put out the flame while jumping over the candle. A sense of irony is expressed by presenting information about what could happen if the flame remains lit on paper that recalls smoke, which suggests that the flame has been extinguished and reinforces the idea that clearing the candle without putting the flame out is necessary to achieve prosperity and success in the year ahead.

Layout.

Flame includes three main spreads depicting the nursery rhyme *Jack Be Nimble*, accompanied by translucent overlays that discuss different ways to ensure a prosperous year ahead. The first spread shows fireworks overhead and multiple versions of the main character, Jack, who appears to be proving his nimbleness and agility, as shown in figure

Figure 36. Preliminary layout for first narrative spread in *Flame*.

Figure 37. Preliminary layout for second narrative spread in *Flame*.

33. The second spread (figure 34) displays the characters in a circle, one almost running over the next, creating a strong sense of movement that evolves events at the celebration. The third spread shows characters, both male and female, taking turns jumping over an open flame, depicting events that took place at the feast of St. Catherine.

Ring: Ring Around the Roses

The historical account that underlies *Ring* concerns disease and death. This nursery rhyme has been linked to the Bubonic Plague that overtook Europe in the mid 1300's. The narrative explains symptoms that plague victims manifested and the actions that were taken in hopes of protection and prevention (Jack, 2008; Roberts, 2004).

Concept.

CONCEPT		
TYPE	**Familiar**	**Rhyme**
COLOR	**Unfamiliar**	**Bubonic Plague (Black Death)**
PAPER	**Factual**	**Scientific & biological facts**

Figure 38. Concept chart for *Ring*.

Content.

The main typeface used for *Ring* is Olde English Regular, which is classified as black letter type and was developed in 1300's, the time of the plague (Dodd, 2006; Meggs, 1998). Black letter typefaces are characterized by their dramatic thick and thin strokes and occasional elaborate swirl. These typefaces have been most closely associated with extreme political conditions and belief systems, visually represented by the dominating quality of the heavy letterforms, which consume the page. This style of type creates an appropriate analog to the extreme conditions that the Black Death created (Heller & Fili, 2006). This typeface is distinguished by letterforms that command attention with their bold and ornate characteristics, as shown in figure 36. These powerful

letterforms evolve the severity of the dire situation experienced during the plague. The

delicate and ornate characteristics of this black letter typeface represent the fragility the

people experienced in the face of this disease and the quick death that followed.
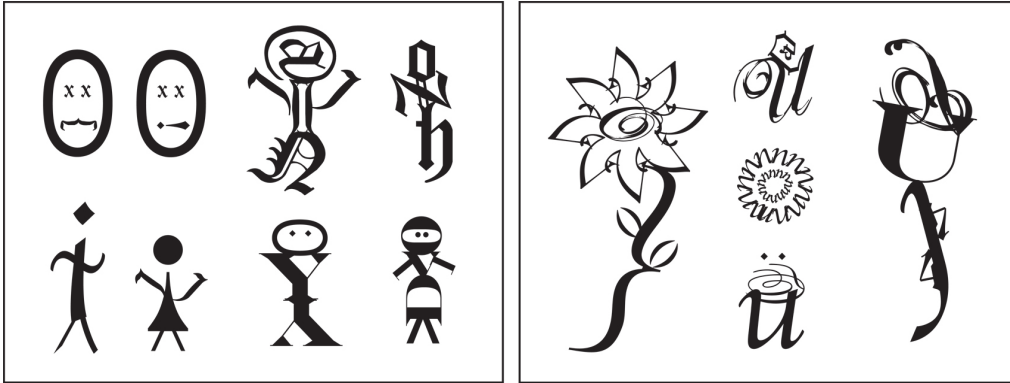

Figure 39. Character studies for *Ring*.

Complementing the black letter type, a transitional serif typeface known as

Baskerville presents the accompanying text in order to insure the information is legible,

because black letter text loses clarity in smaller sizes because of its exaggerated

characteristics and details (Farley, 2009). Baskerville is known for its readability due to

its "generous x-height and open letterforms" (Dodd, 2006, p. 51). Although this typeface

is characterized by the use of delicate thick and thin strokes, it harmonizes with the more

dramatic black letter, giving a more subtle display of readable text.

The color chosen for *Ring* is red, which reflects the literal and symbolic meanings

within the narrative. Red was chosen because it is commonly associated with the rose as

well as with the rash manifested by plague victims. Red denotes boldness and excitement,

and these characteristics support the idea underlying the rhyme, which refers to the

effects of the Black Death. Additionally, in support of the narrative, red symbolizes the

death and danger (Marks, 2006).

The two types of papers, Beckett Enhance Silk Arctic 80 text weight and 100

cover weight and Translucent Clear, work together to contribute an additional level of

information to the book. A slightly bumpy textured paper is used to represent the rash

caused by the plague, while offering an orderly pattern that recalls the systematic fashion

in which the disposal of the bodies of plague victims took place. The translucent paper is

used to complement the textured silk paper, allowing the graphics and color to remain

vibrant and bold and affording the viewer indirectly to experience the effect the plague

had on the people.

Layout.
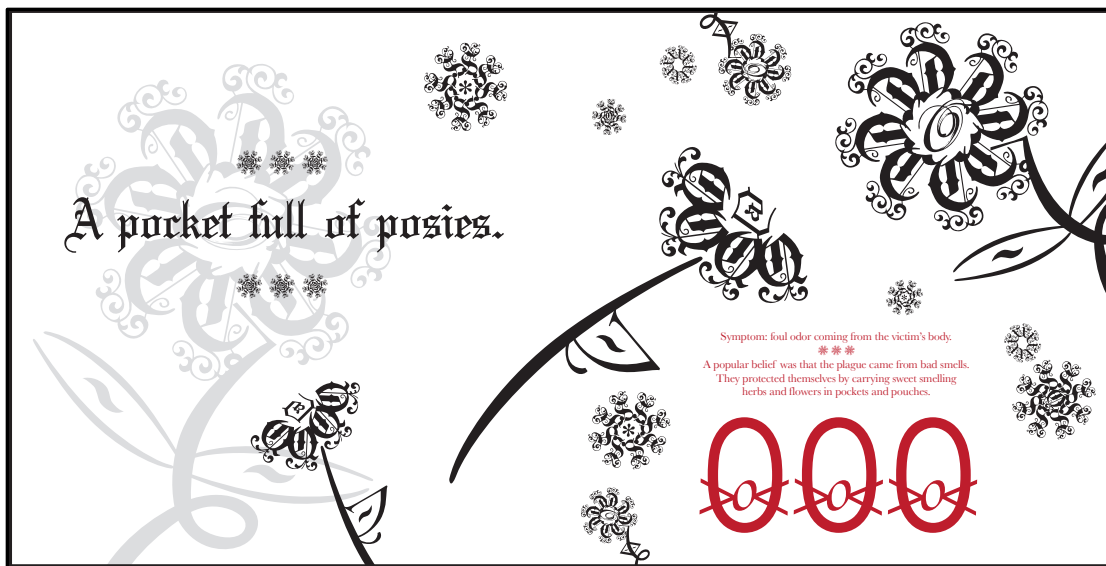
Figure 40. Preliminary layout for second spread narrative spread in *Ring*.

Ring is comprised of four main spreads depicting the nursery rhyme *Ring Around*

the Roses, accompanied by translucent overlays that provide scientific and biological

information supporting the narrative. The first spread provides a literal interpretation of

the rhyme in black, with children playing in a circle around a rose. Other imagery shows

the children circling an image representing a rash. The second spread displays flowers

that seem to take over the composition, as displayed in figure 37, in reference to the use

of fragrant flowers to overpower the infectious vapors that were imagined to cause the

disease. The red illustrations indicate the feared vapors that prompted plague doctors,

among others, to wear masks over their faces. The third spread shows flames (figure 38),

representing the Great Fire of London in 1666, which swept through the city following

the last outbreak of the plague in England and the rats that had infected the population, as

well as illustrating the widespread use of cremation to dispose of the bodies. The red

imagery also alludes to another symptom, sneezing, which is substituted into the verse in

an alternative version of the familiar rhyme. The fourth spread finishes the story by

explaining that plague victims were buried in mass graves due to the rapid rate of death.

Figure 41. Preliminary layout for third narrative spread in *Ring*.

Conclusion

Visuals are sometimes ambiguous, giving the viewer too much responsibility to interpret the intended message; it is the designer's job to present information in a way that will be clear. Using type as image, instead of relying on photography, creates a subtle link between the type we read and the illustrated typographic imagery. Since we focus on letters and words from an early age, type as image is an obvious choice to bridge the gap between readable text and its illustrations to create an engaging learning experience for an adult audience. In some ways we have a more intuitive understanding of type as opposed to photos, because type does not require the same measure of abstract thought as imagery when determining meaning. Translating the characters of the alphabet into imagery represents a natural evolution in the ways in which type can be used and understood. Type as image offers an alternative means of conveying information, while creating an enjoyable experience.

Through technology we have moved forward into new ways of presenting and processing information. With new design programs and printing capabilities, we are able to design more quickly and have much more flexibility with respect to how we distribute content onto a page. We can use technology efficiently to deliver content not only by presenting the information in its most conventional form, as bodies of written text, but also through different treatments of type, which expand the understanding of typographic possibilities. As a result of our visually demanding culture's expectations, information is being translated through different methods to create new experiences. The recent popularity of kinetic typography is also reason for the timely experimentation with typography to enhance communicative capacities of written texts for adults. Typography

offers a link between letters and image through manipulation techniques that transform

the letters from characters into visual images that offer an engaging experience and allow

audiences to learn and enjoy type in a different way. This sort of creativity is a necessity

because audiences seek new stimuli to hold their attention. Communicators must reinvent

typography in order to continue to communicate effectively to the viewer in a swift and

effective manner.

The books created using the methodology described in this thesis demonstrate the

relationship between type and image through manipulative typographic treatments that

create illustrations that describe and contextualize the narratives and offer an encounter

between the familiar content and unfamiliar origins of nursery rhymes. The use of

multiple elements within the multi-level concept creates an experience that has yet to be

attempted in digital books, and offers an engaging interaction between the content and the

viewer without motion. Type as image, color and paper co-exist within each book,

supporting each other and mediating the narrative effectively and in an appealing manner,

which adds value through meaning. Newark (2007) states, "Meaning is created by a

structure of relationships so vast" (p. 48) and further implies that the relationship

structure of ideas are successful when it is unclear where one idea ends and the next

begins. The elements used in these books are interrelated in the way the content is applied

to the conceptual structure, creating a strong impression on the reader because one

element's meaning connects to the next element and continues in order to convey

meaning and value. This relationship between typography and its environment bridges

the gap between printed material and digital technology by utilizing these digital

techniques and applying them to printed books.

Limitations

There was not always sufficient historical contextual information to make clear the origins of specific nursery rhymes. Additionally, some nursery rhymes are very straightforward in their story, with the rhyme precisely specifying the events and leaving little room to discuss alternative meanings. However, this is not the norm, as many nursery rhymes have alternative meanings that can be documented satisfactorily.

The printing process was confined to a more practicable technique because of the small quantity of books needed. It was not feasible to print these five books on a 4-color offset press, because this would have not been economical for so short a press run. Printing the books on a digital press also prevented the use of papers that had significant textural finishes, including some papers that had originally been selected for these books. Despite this constraint, suitable papers were chosen to support the narratives. Other limitations involved the availability of papers. Some of the paper was mill order only, and small quantities were therefore not available to the printer, but alternative papers were substituted that adequately supported the books' interpretation of the narratives. Additionally, several papers are completely inaccessible today. The most disappointing limitation involved the translucent paper selection process. Many of the translucent papers that were originally chosen were unavailable, because they no longer existed and were no longer being manufactured, leaving very few options. However, compatible translucent papers were selected that contribute to each book in ways similar to the way that the unavailable translucent would have done.

Suggestions For Further Research

This project opens up several areas for further research. The next step for this study would be to test the effectiveness of the books on an adult audience. The specific

nursery rhymes chosen were among the more familiar rhymes learned by children, but further studies could continue this design and conceptual process to include less familiar nursery rhymes, as there are many from which to choose. This continued research, design and conceptual activity would further verify this technique as significant and relevant. Other techniques could be explored to narrate texts meant for an adult audience, as well as exploring longer texts to discover alternative presentation methods.

Possibilities abound with the varying symbolic meanings and psychological implications associated with color, creating the opportunity to investigate this element further. Color could also be explored by utilizing more than two colors within each narrative in order to extend this element's contribution to the meaning of each narrative. Paper choices could be explored further also. While the specific paper chosen was selected with sufficient attention of its contribution to the narrative, other papers might support the narratives in different ways.

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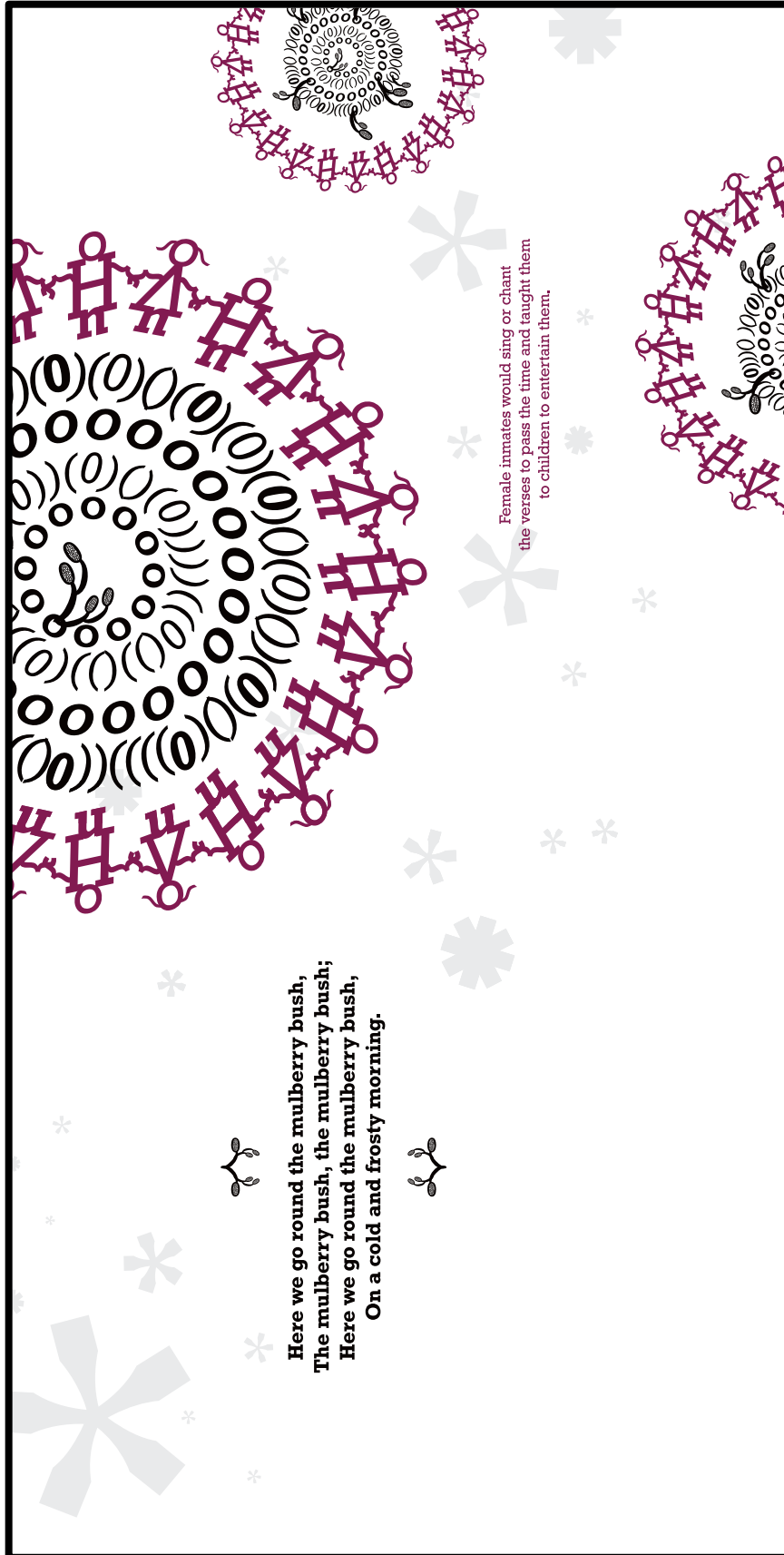
Appendix A
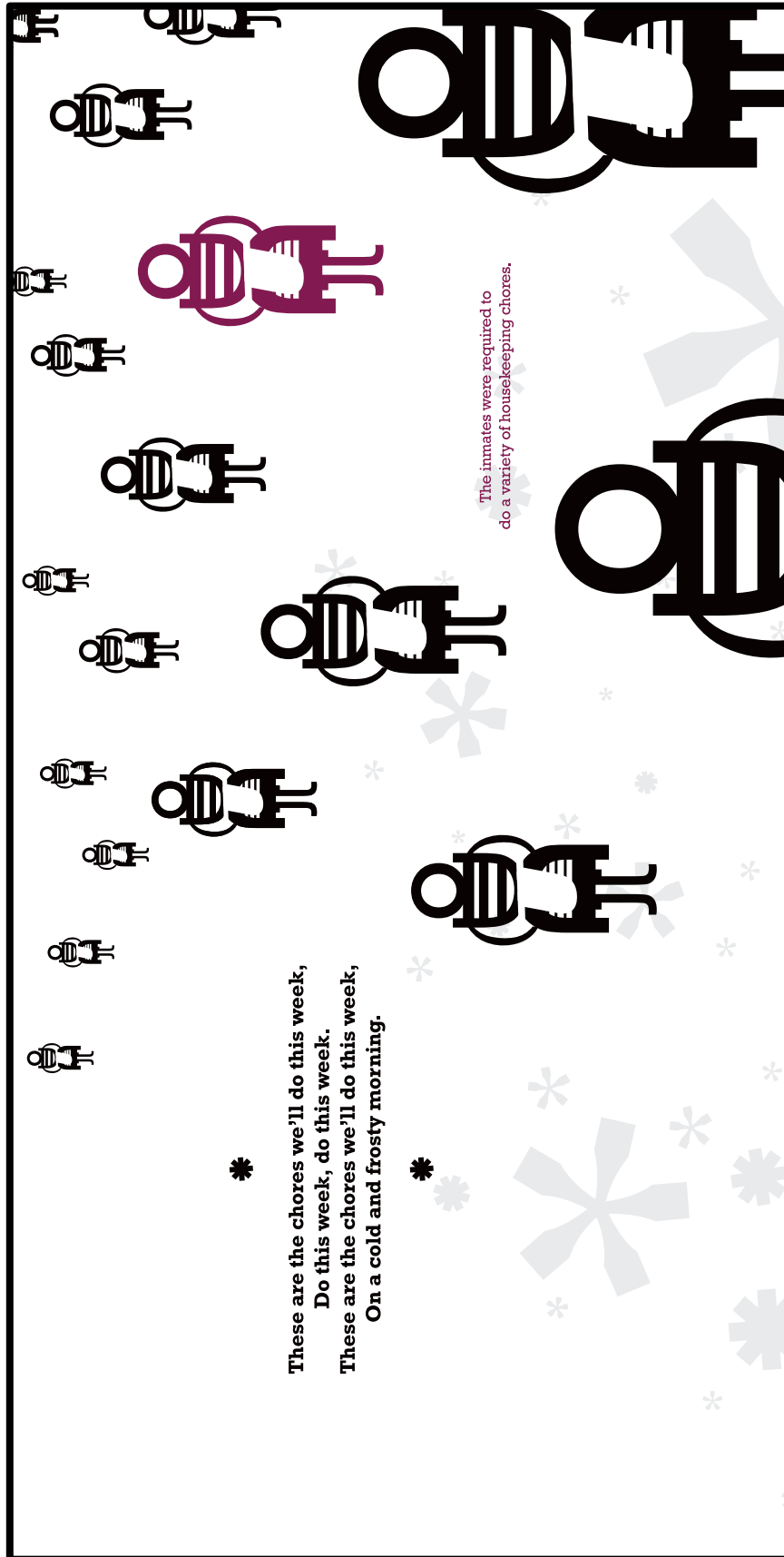
Nursery Rhyme Conceptual Chart

NARRATIVE	RHYME	TYPE	COLOR	PAPER
BUSH	Here We Go Around the Mulberry Bush (4 lined verses; 4 verses)	Rockwell: a narrative version of rhyme, using verses	Purple: female imprisonment	Cougar Smooth White 80T & 100C, & Translucent Opaque: factual information about the mulberry bush
CRASH	Humpty Dumpty (4 lines)	Goudy Old Style: rhyme	Green: Humpty Dumpty, the cannon	Mohawk Superfine White Eggshell 80T & 100C, & UV Ultra Translucent White 36C: Military factual information regarding the narrative
FAITH	Mary, Mary, Quite Contrary (4 lines)	Old Style: rhyme	Blue: about Mary Tudor & Mary, Queen of Scots	Endurance Silk White 80T & 100C, & Translucent Silver: religious information regarding the narrative
FLAME	Jack Be Nimble; (3 lines)	Bodoni & Futura: rhyme	Orange: St. Catherine's feast	Beckett Enhance Gloss White 80T & 100C, & Translucent Smoke: beliefs about predicting the future & superstitions regarding the narrative
RING	Ring Around the Roses; (4 lines)	Olde English Regular: rhyme	Red: Bubonic Plague	Beckett Enhance Silk Arctic 80T & 100C, & Translucent Clear: biological and scientific information regarding the narrative

Appendix B

Final Design of Narrative Books

Female inmates would sing or chant
the verses to pass the time and taught them
to children to entertain them.

Here we go round the mulberry bush,
The mulberry bush, the mulberry bush;
Here we go round the mulberry bush,
On a cold and frosty morning.

The inmates were required to
do a variety of housekeeping chores.

These are the chores we'll do this week,
Do this week, do this week.
These are the chores we'll do this week,
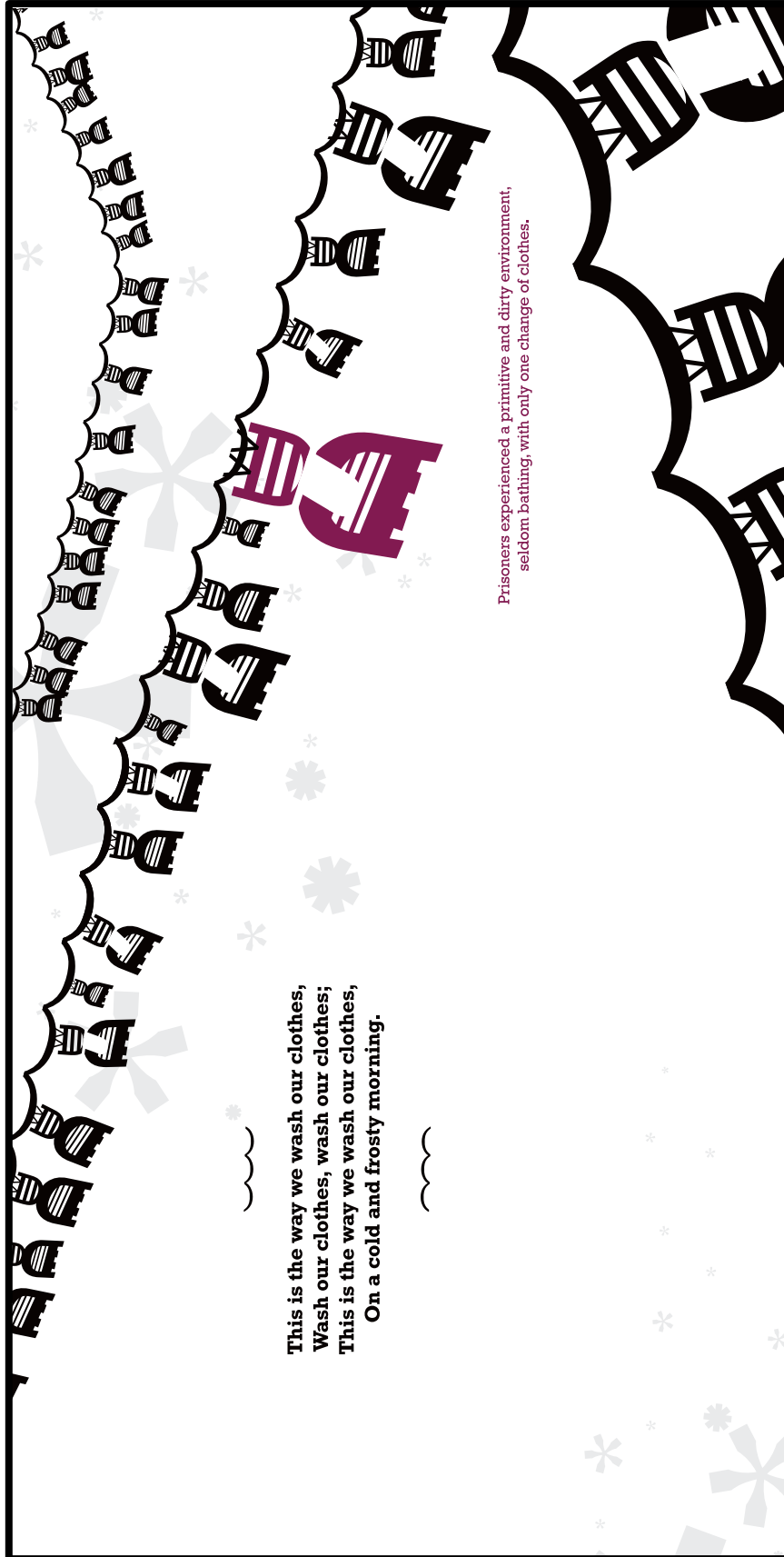On a cold and frosty morning.

This is the way we wash our clothes,
Wash our clothes, wash our clothes;
This is the way we wash our clothes,
On a cold and frosty morning.

Prisoners experienced a primitive and dirty environment, seldom bathing, with only one change of clothes.
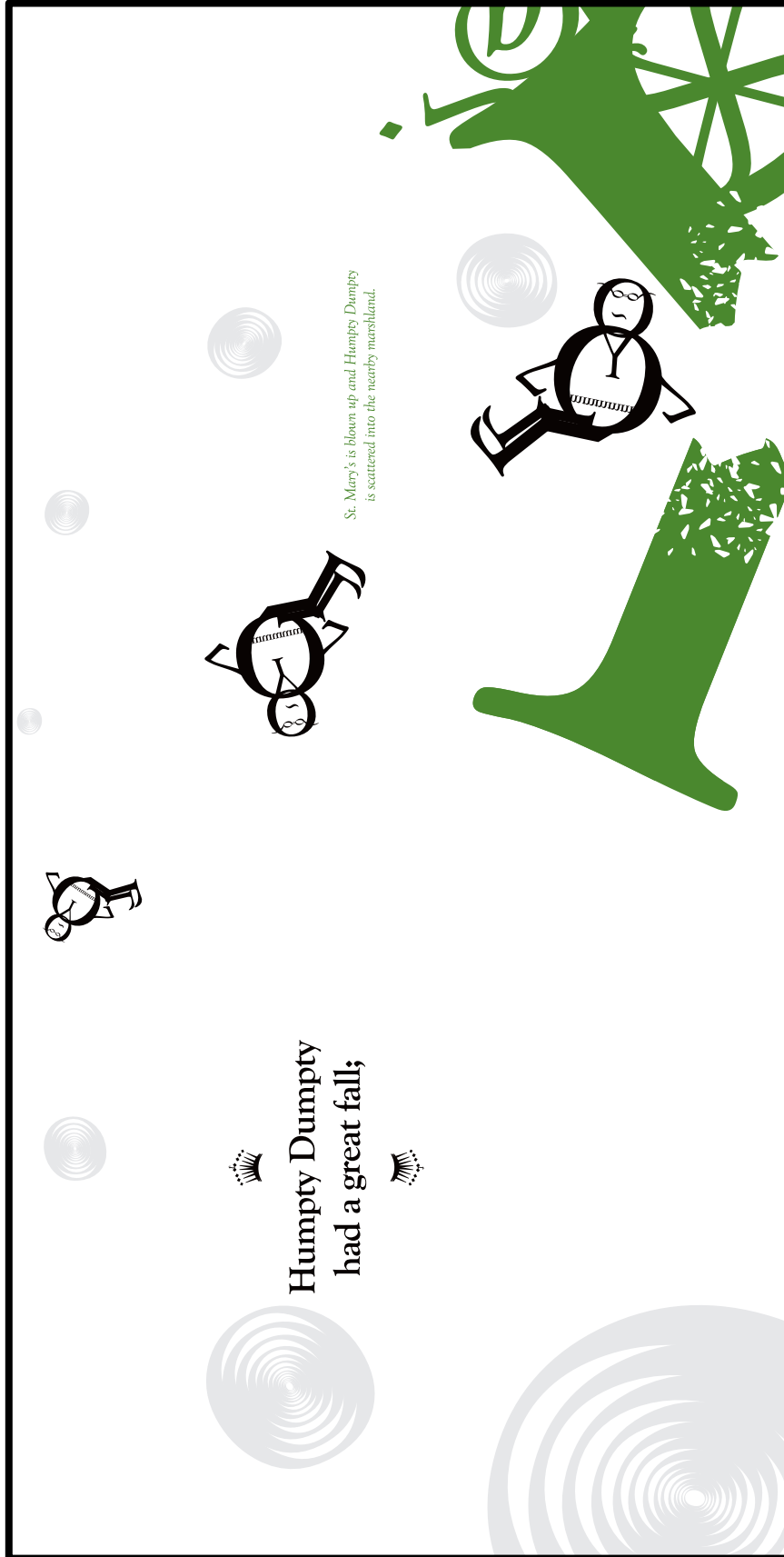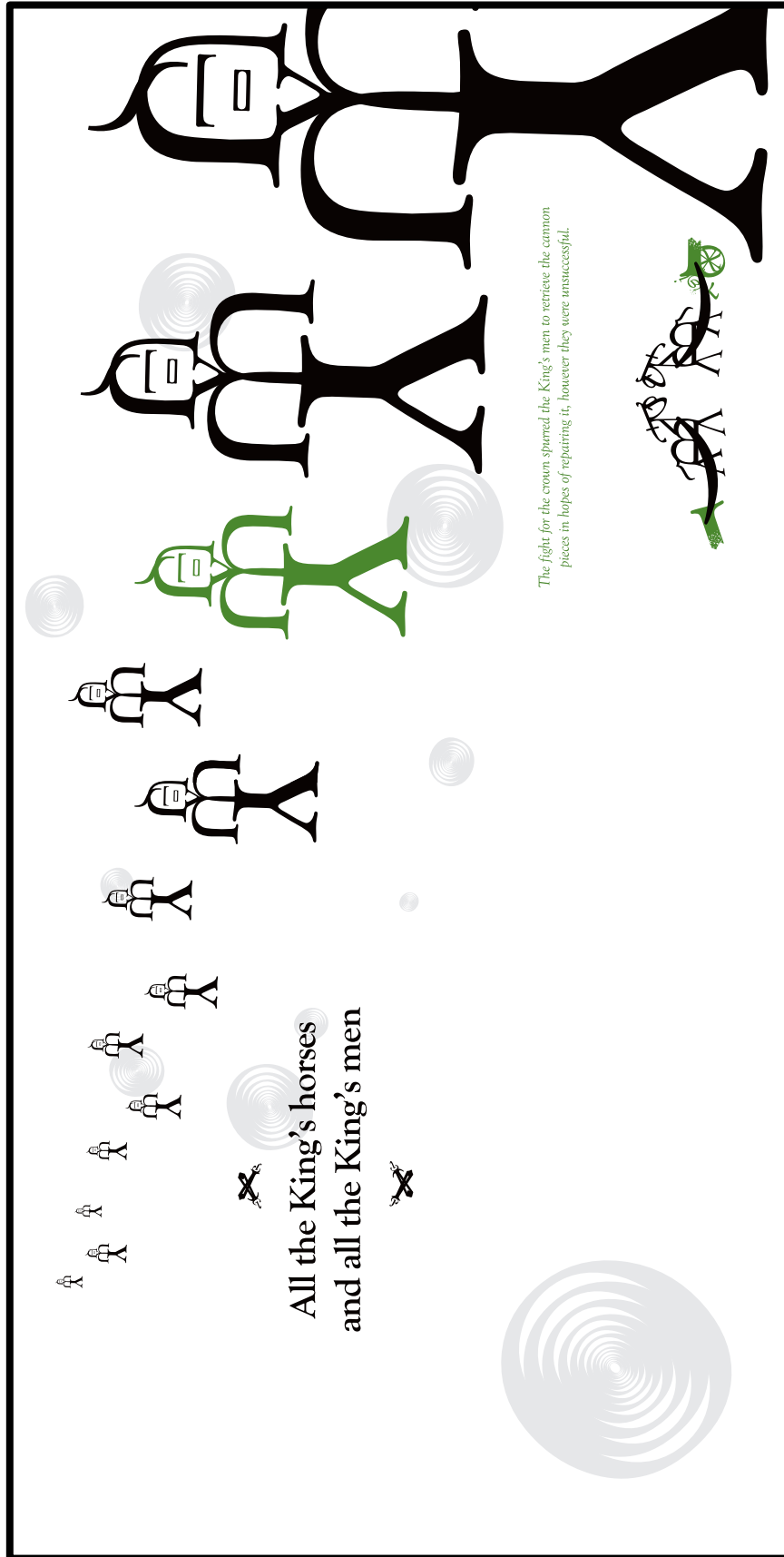
The female inmates walked around the bush for exercise.

Here we go round the mulberry bush,
The mulberry bush, the mulberry bush;
Here we go round the mulberry bush,
On a cold and frosty morning.
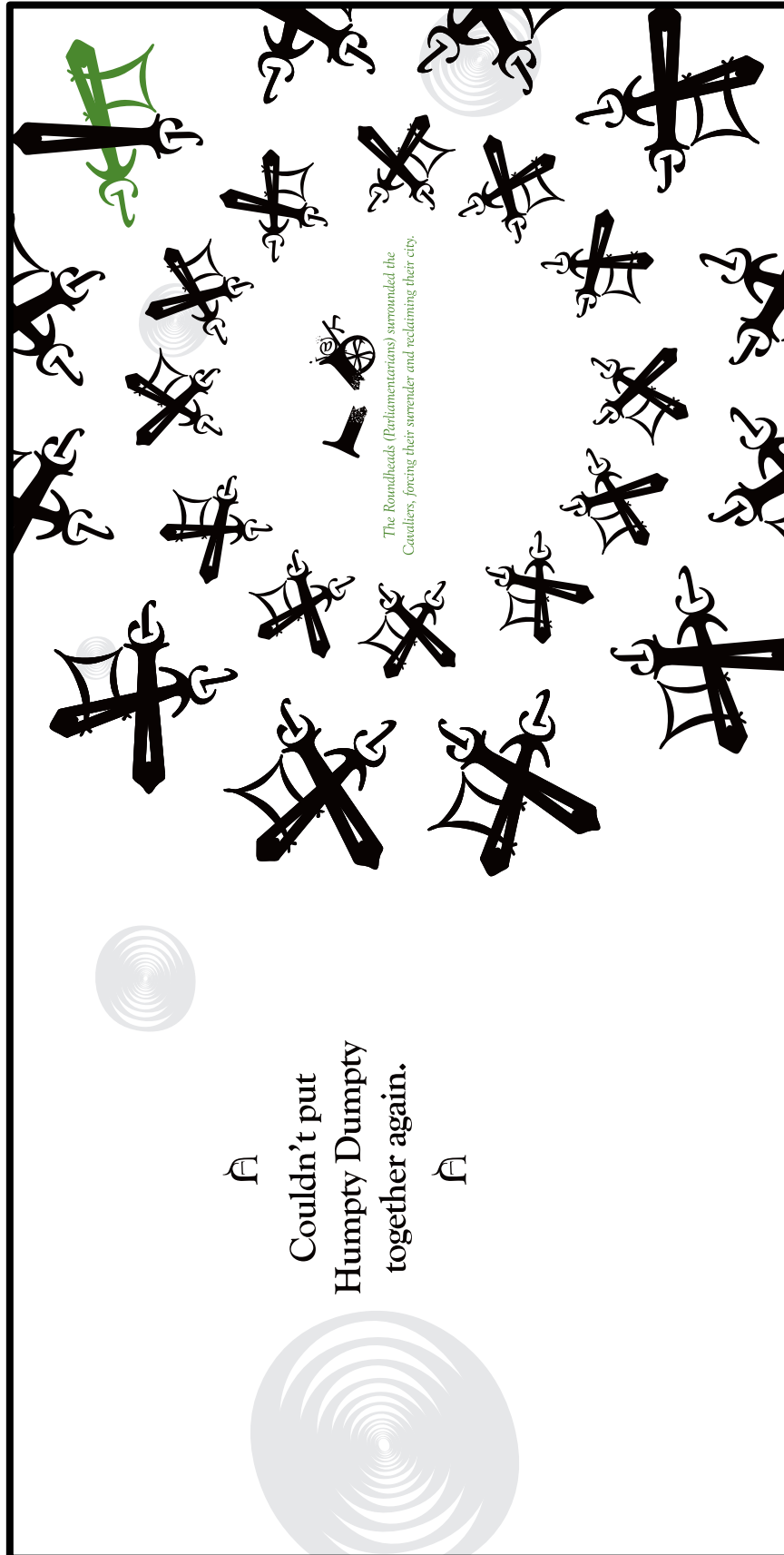
Humpty Dumpty
sat on a wall,

The Royalists besieged Colchester, an enemy (Parliamentarian) city and maintained the siege for 11 weeks, perching Humpty Dumpty in St. Mary's tower.

Humpty Dumpty was slang for an overweight, clumsy or nerdy person.

Humpty Dumpty
had a great fall;

St. Mary's is blown up and Humpty Dumpty is scattered into the nearby marshland.

All the King's horses
and all the King's men

The fight for the crown spurred the King's men to retrieve the cannon pieces in hopes of repairing it, however they were unsuccessful.

The Roundheads (Parliamentarians) surrounded the Cavaliers, forcing their surrender and reclaiming their city.

Couldn't put
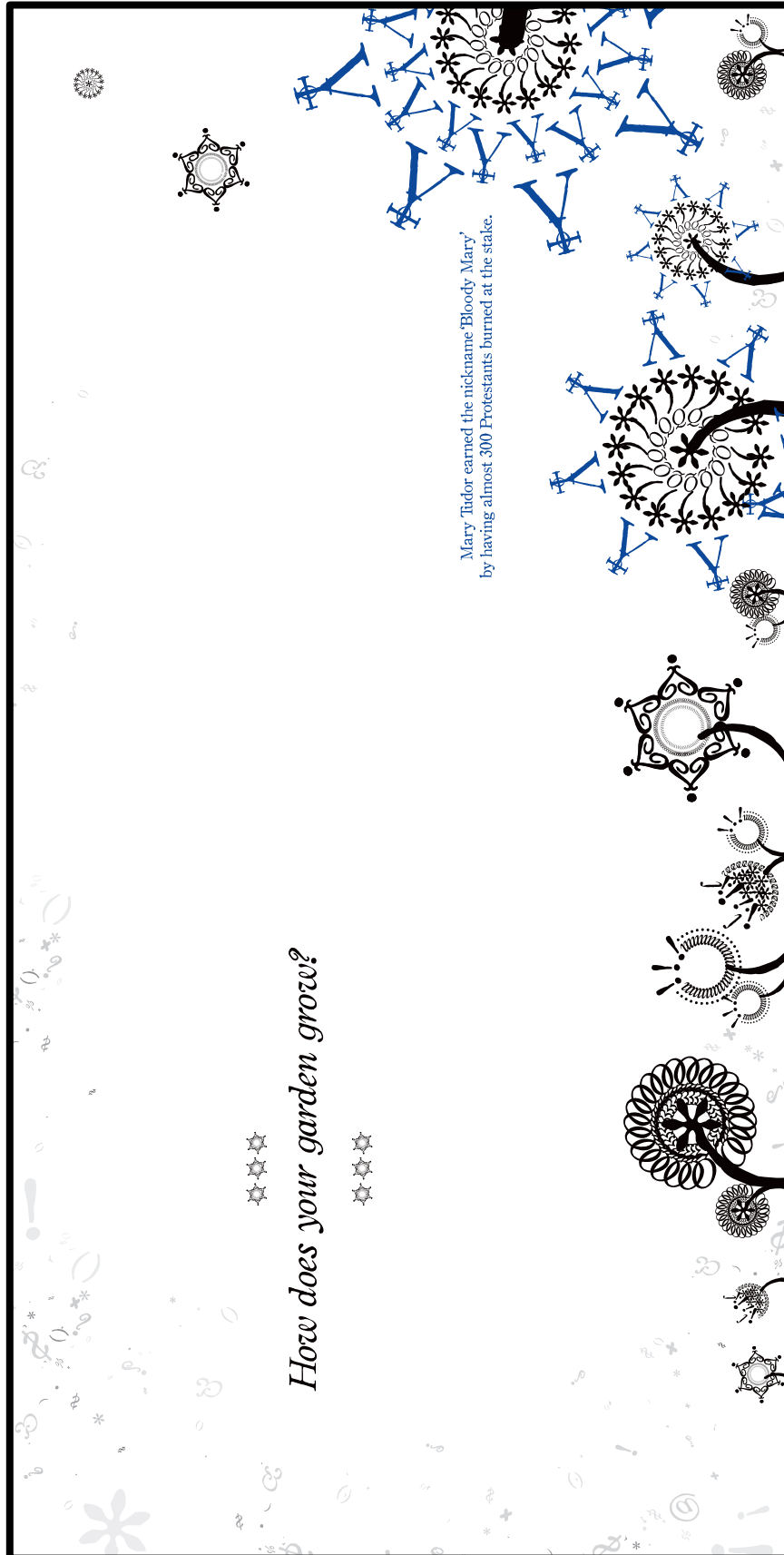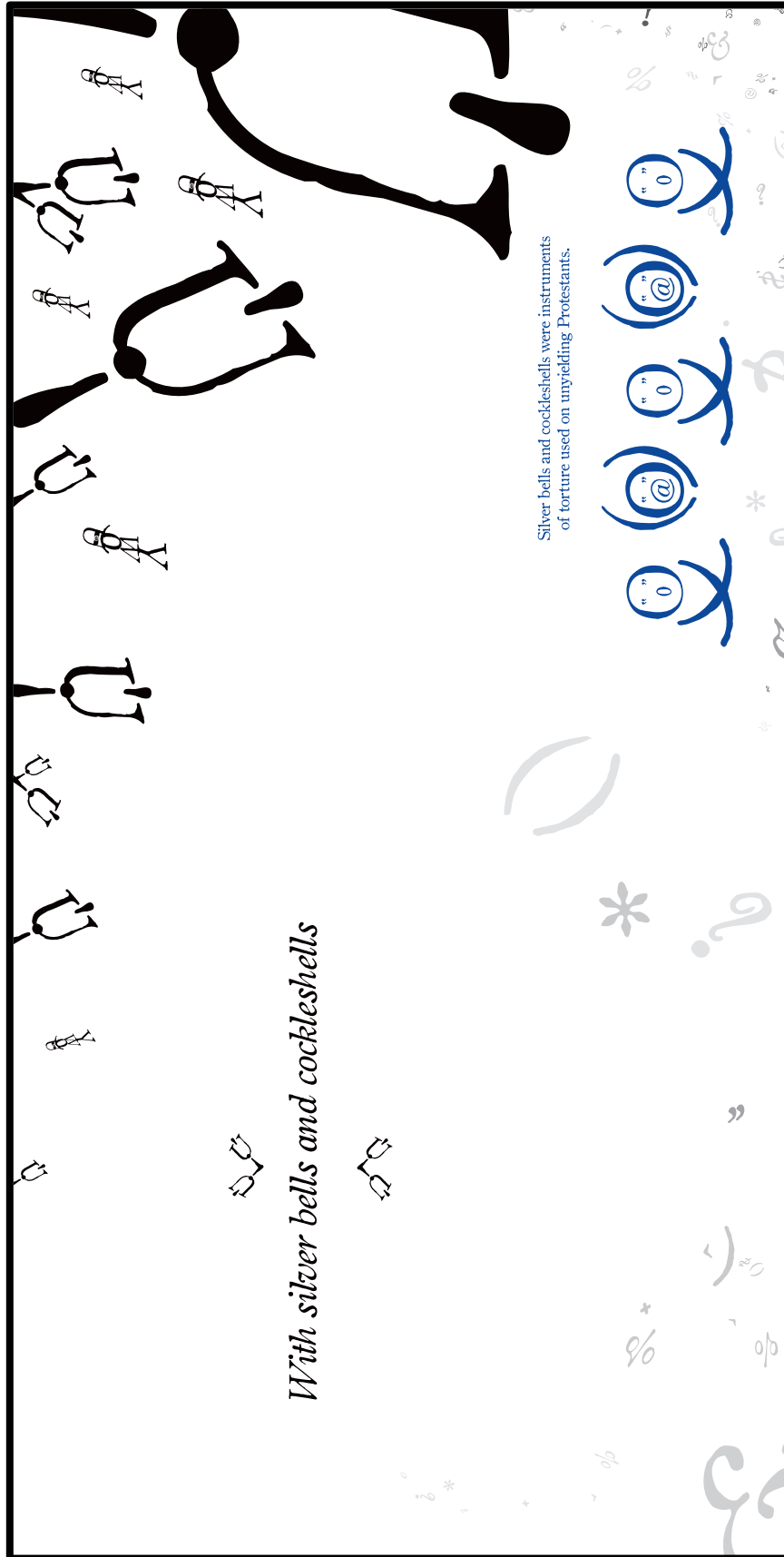Humpty Dumpty
together again.

Mary, Mary, quite contrary,

Mary Tudor and Mary, Queen of Scots, were demanding in the religious choices they imposed on others, and were unrelenting in their efforts to enforce them.

How does your garden grow?

Mary Tudor earned the nickname 'Bloody Mary' by having almost 300 Protestants burned at the stake.

With silver bells and cockleshells

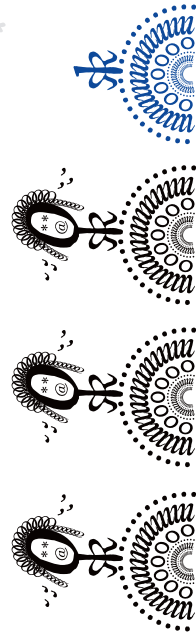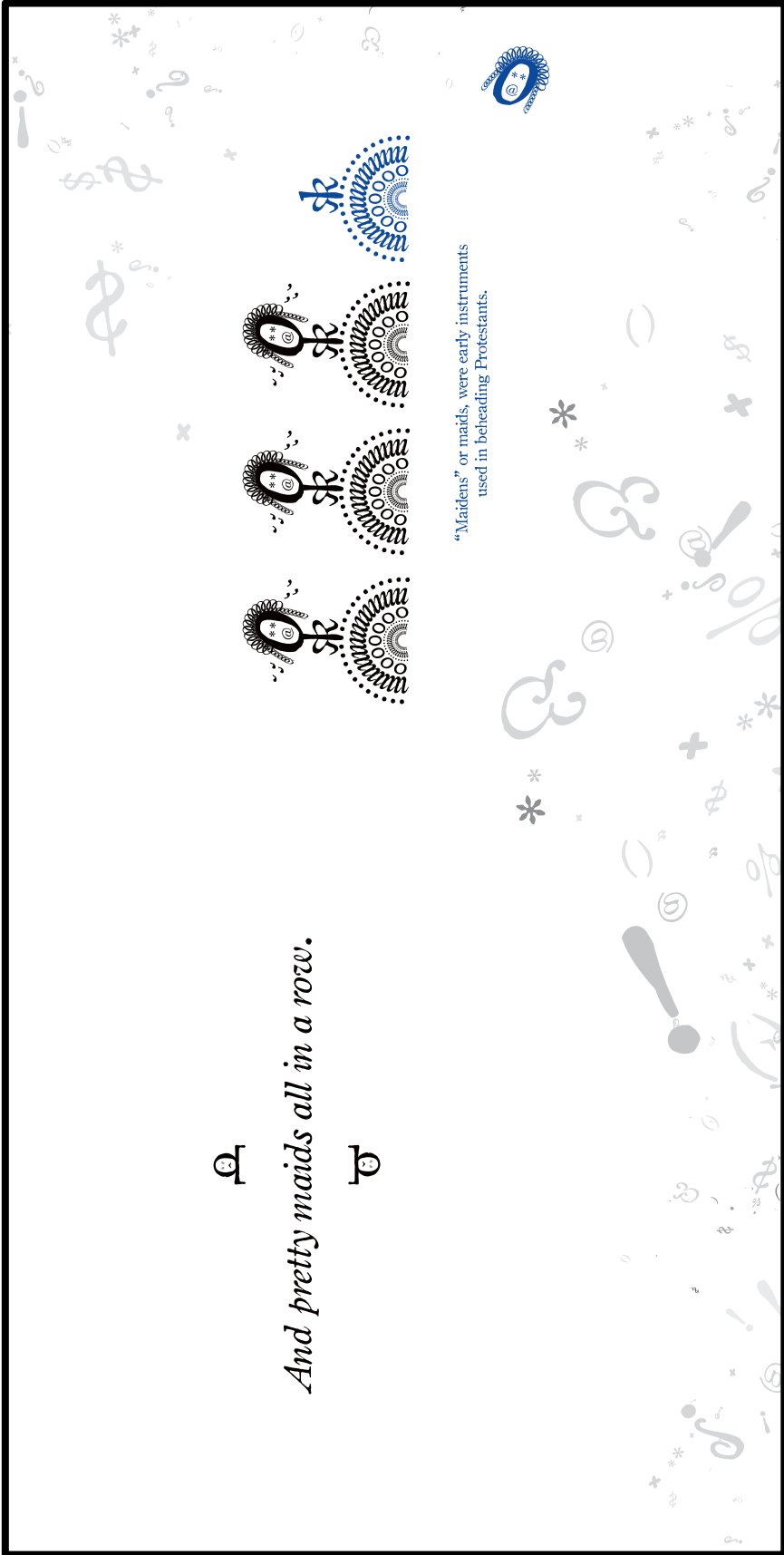Silver bells and cockleshells were instruments of torture used on unyielding Protestants.

And pretty maids all in a row.

"Maidens," or maids, were early instruments used in beheading Protestants.

The feast of St. Catherine, held every year, honored the patron saint of unmarried women with a celebration of fireworks, food and dance.

Jack be nimble,

Potential husbands danced around the party while unmarried women watched in hopes of making a good decision.

Jack be quick,

{ }

Jack jump over the candlestick.

The evening's highlight was candlejumping, which originated from bonfire jumping (bonfire jumping was later banned).
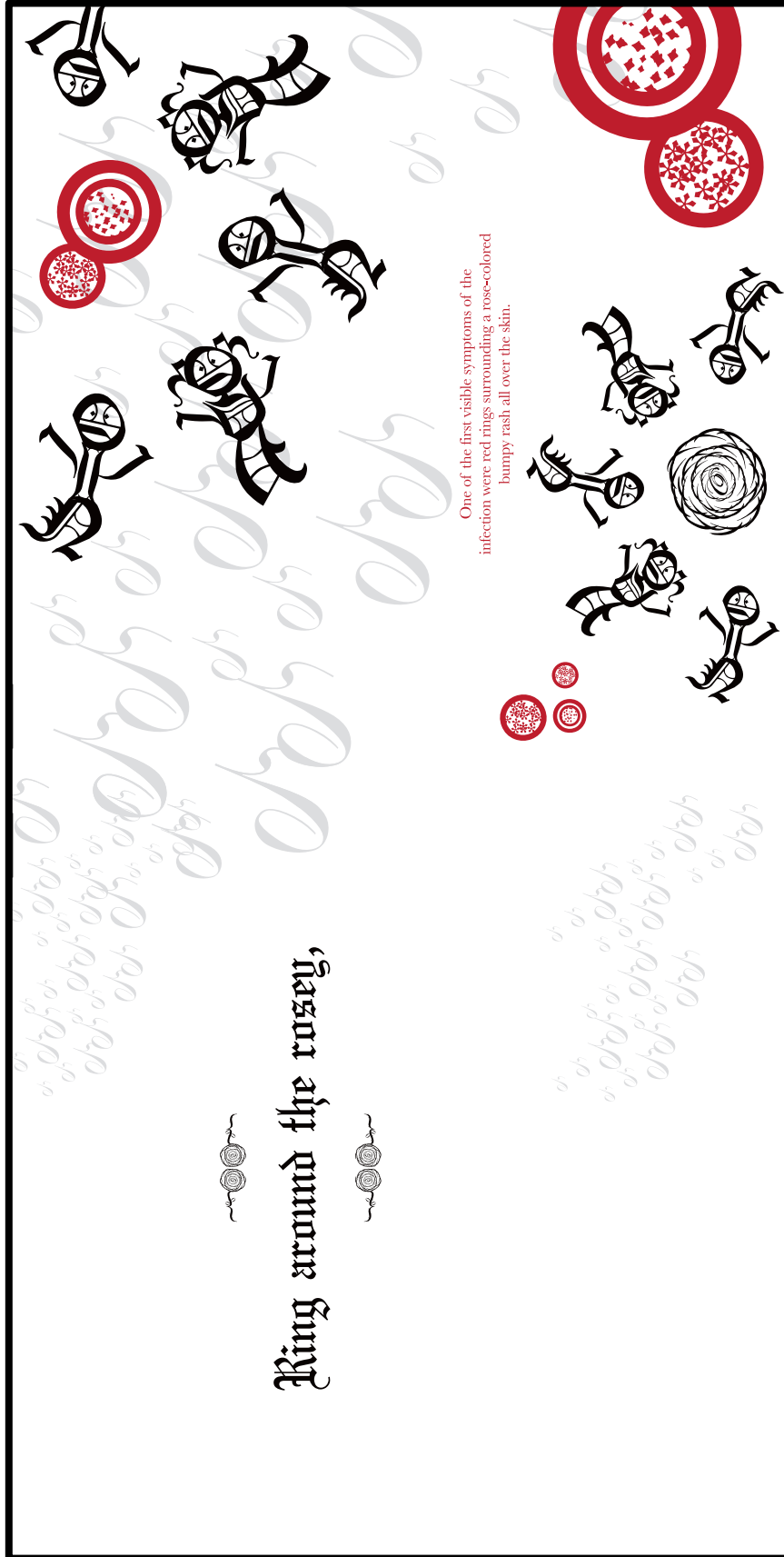
One of the first visible symptoms of the infection were red rings surrounding a rose-colored bumpy rash all over the skin.

Ring around the rosey,

Another symptom was the foul odor coming from the body.

A popular belief was that the plague came from bad smells. They protected themselves by carrying sweet smelling herbs and flowers in pockets and pouches.

A pocket full of posies.

Ashes, Ashes

Another symptom was uncontrollable sneezing. Cremation was one method of disposing of the dead bodies.

Mass graves were dug for the dead bodies.

We all fall down.