

CHAPTER TWO

REVIEW OF LITERATURE

This chapter provides a literature review which covers the characteristics of pop-up books in general, the history and development of the pop-up books, related theory to support the pop-up book cycle, and relevant research about pop-up books in Thailand, including the factors affecting the perception of adult readers toward the pop-up books.

2.1 CHARACTERISTICS OF POP-UP BOOKS

A pop-up book is a combination of heavy and thick paper as base page or spread assembled with movable pieces of pop-up and glued together with heavy board on the front and back cover. It is an interactive movable book which shows important characters in three-dimensional innovative views, such as pop-up, pull tabs, pop-out, pull down, flaps, or greeting cards (*Pop-up book*, 2008). The surface of the paper is coated with varnish oil or plastic lamination films, either gloss or matte effect in order to protect the books from dirt and scratching. Even though the technology is more advanced and there are several machines to support pop-up book production today, many companies still use hand assembly to make these copies in order to maintain the delicacy and classic nature of the pop-up books.

A pop-up Book is created by paper engineering, paper folding, or paper transforming. The procedures of making pop-up books are quite complicated and take long lead-time since most of these pop-up books are made by hand assembly rather than machine assembly. This is because it begins with the concept, story line and the situation of constructing each paper component by the authors. Then all of these concepts will be passed to designers and paper engineers in order to combine all components and characters, including sound, light modules, or special materials, such as fur, feathers, or leathers into each scene of the books in different views from opening to closing the books. After that, the designers do lay-out or nest all components into paper sheet size for printing, and then these components and mechanisms will be die-cut and stripped out of the printed sheets. Finally, these components will be inserted into slots, glued with the pivots, or folded into the inside

pages and eventually formed into one complete pop-up book so that they can create movement of these paper components and make them become more interactive with the readers (*PaperGlory*, 2008).

The key characteristics which reflect good quality of the pop-up books under the readers' requirement are good fit and well-functioned mechanisms in the pop-up books. For instance, the pop-up pieces must be exactly aligned with the printed pages and the covers and angles for each component must be accurate so that these can make the pop-up books work well and be controllable.

2.2 HISTORY AND DEVELOPMENT OF POP-UP BOOKS

The history of pop-up books began about 700 years ago (Nancy, 1999). However, there is no obvious record for the exact time, date and the person who invented pop-up books. According to research by UNT Library, the history of pop-up books began in 1306 and first appeared as a manuscript of an astrological book created by the Catalan mystic and poet, Ramon Llull. His contents were about the volvelle and revolving disc, so at that period, the pop-up books contained a central pivot which could be rotated or point to the symbols or words when the books were opened (Hiner, 2008). Other purposes of creating pop-up books at that time were for teaching anatomy, predicting astronomical situations, generating confidential codes, and forecasting future incidents. Therefore, in the early stage, the pop-up books were made in order to serve adult readers' needs (UNT Libraries, 2007).

In the fourteenth century, pop-up books were constructed as special turn-up and lift-the-flap form in order to learn about the nature of humans from all different parts of the human body which were jointed together and attached on the book page. By 1564, "*Cosmographia Petri Apiani of Marjoca*," another astrological book was published, and after that the pop-up books for medical purposes were produced to study the anatomy of human body in the form of flaps and compare the artistic designs from the early until the final stage. For example, Andreas Vesalius' *De humani corporis fabrica librorum epitome* was an anatomical book which was printed in Basel in 1543. It used a movable mechanism showing the human anatomy in seven detailed superimposed layers. From this period until the eighteenth century, the pop-up books was printed and assembled for scholastic objectives, and after that the

purpose was changed to entertain children (UNT Libraries, 2007). Another obvious example was the pop-up book created by a Dresden scholar in the eighteenth century in order to study human body about hand and eye layers (Hiner, 2008).

According to Ann Montanaro (Rutgers University Libraries, 2008), the first party who invented the first movable pop-up book was McLoughlin Brothers from New York City in around 1880. They made pop-up books from large unfolded plates which were assembled into a multi-layer display. After that, in the beginning of the twentieth century, the pop-up book market was expanded by producing more inventive pop-up books when the Europeans found more inexpensive papers to produce this book type.

Pop-up books were not promoted for children readers until the early nineteenth century. Many innovative designers, such as Robert Sabuda, Matthew Reinhart, and David A. Carter tried to generate their own designs to compete with any other publishing companies in order to gain the highest share in children's market. Because of cheaper paper price and technology development during this period, the pop-up books were produced, not for academic or forecasting purpose, but they were produced for entertainment under the introduction of Robert Sajer of London and enhancing the readers' understanding toward the contents inside the books.

From WebIndia123.com (2007), it is indicated that paper engineers changed their target and aimed for producing pop-up books for adult readers in order to create new trends for pop-up books in U.S. markets. For example, Brooklyn Public Library (Carvajal, 2000) created *Brooklyn Pops up Book-The History and Art of The Movable Book* in order to give knowledge about the history and lifestyle of people around Brooklyn Bridge for both children and adult readers. Kees Moerboek generated *The Pop-up Book of Sex* for providing sex educations for adults. Bruce Foster created the *Pop-up Book of Celebrity Meltdown* and authorized Melcher Media (2006), a publishing company in the United States, to produce and publish this book in the United States and United Kingdom market. Gary Greenburg designed *The Pop-up Book of Phobias* to provide phobia knowledge for adult readers. As a result of these examples, Robert Sabuda, a famous designer and paper engineer, stated that the pop-up books were available for adults more than in the past.

The paper engineers, persons who created and analyzed for paper manufacturing, have been trying to create and prepare pop-up books for adult readers in order to support the needs of changing the target group from children to adults. Consequently, many publishing companies have been trying to differentiate their products in order to serve various purposes and usages which relate to adults' activities in the global book market. There have been three main interesting recent developments of the pop-up books which were involved the adults' activities.

Firstly, it is obviously seen that pop-up books are produced, not for children's amusement only but also for other adult purpose of introducing new products or services or taking part in advertising campaign. For instances, *Star War Pop-up Book: A Pop-up Guide to the Galaxy* by Paul Krugman was produced in 2007 in order to use the pop-up book to advertise this movie (Colbert, 2007). Moreover, Walt Disney Pictures, who manufactured the "Bedtime Stories" movie, produced *Bedtime Stories Pop-up Book* in order to distribute to all audiences in the gala premiere in December 2008 all over the world (Walt Disney Pictures, 2008).

In addition, Neiman Marcus, a luxurious department store company in the United States, launched pop-up books called *Neiman Pop-up Book 100th Anniversary* for their special and important event of one hundred years of its department store. Therefore, pop-up books took part in the adult readers' business in terms of promotional activities as well.

Secondly, pop-up books can be used for construction guidelines. For instance, Anton Radevsky and David Sokol (Black, 2008) created *The Modern Architecture Pop-up Book* for providing architectural knowledge and the history of this field so that it would be helpful for the architects and construction workers to understand the development of structure for each building since the nineteenth century until the present day.

Another outstanding example is *Frank Gehry in Pop-up Book* (Cathy, 2008). This pop-up book was created and produced by Thunder Bay Press in Spain for presenting the innovative design of five famous buildings: Guggenheim Museum, The Walt Disney Concert Hall in Los Angeles, The Seattle Center Monorail, The New Customhouse in Dusseldorf, Germany, and The Norton House in Venice Beach in order for guideline for study.

Thirdly, pop-up book are involved in the fashion industry for adults because in 2008 Visionaire Publishing, who originated Visionaire Magazine, one of the famous magazines in the United States, produced and launched *Visionaire Surprise 55: Krug* title for promoting twelve new titles related to fashion design to be sold in 2009 (*Visionaire Home*, 2008).

Moreover, Isabelle de Borchgrave, a French designer, Karl Lagerfeld, and Issey Miyake produced *Fashion a la Mode: The Pop-up Book of Costumes and Dresses* to show numerous costume figures chronologically in three dimensional views under the theme of Egyptian fashions from the eighteenth century which was the beginning period in Egypt until now. These are the examples of fashion styles shown in this pop-up book: the Victorian opera (The age of Tiffany and Sergeant, The Kimono, Chanel, the liberation of women's clothing, and the fashion as Art (Alibris, 2009).

According to these activities which pop-up books have been involved, many people understand that pop-up books are source of delight for children, but actually, the target group for purchasing and reading the pop-up books in which many pop-up book producers are interested is adult readers. Also, it is likely that pop-up books are going to be widely used in the international market because they have been involved and applied more to adults' business, such as the architectural field, the fashion industry, and marketing activities in terms of promotional tools for new products. As a result, it is said that there are more pop-up books for adults than ever before (*Pop Art New York Post*, 2006).

2.3 RELEVANT RESEARCH ABOUT POP-UP BOOKS IN THAILAND

Although foreign readers enjoy reading pop-up books and can be excited about several kinds of pop-up books with various kinds of contents and patterns which have been produced for them all over the world for centuries, pop-up books in Thailand are printed products sold in a niche market with expensive prices because they have been known only among specific groups of readers and these pop-up books are more complicated than the trade books or regular pocket books. Thus, the pop-up book prices are quite high in Thailand due to the complex characteristics of the pop-up

books themselves, compared with other book types in the market, and the labor-intensive production from hand assembly (Okonowicz, 2000). Therefore, these pop-up books are suitable for high-end readers only, or for persons who can afford them for special purposes, such as entertainment or collection hobby only. This results in the necessity to understand the readers' particular needs, especially the desirable characteristics of the pop-up books in order to meet Thai needs.

According to the statistics from the National Statistical Office, Thailand 2008, Thai adult readers read the books accounting for 64.3% only of total adult population because they were more interested in other media, such as television programs, games, or magazines rather than books. Also, the Thai local newspaper, "Khom Chad Luek," issued in October 2007 reported that Thai people read only two copies of the books per person per year and were willing to pay each time for buying the books only two hundred and sixty Baht. Apparently, the motivation for Thai people to read books, especially Thai adult readers is quite low compared with Vietnam's readers who read sixty copies per person per year. The government led by Prime Minister Surayuth Chulanont tried to encourage private publishing companies to produce various kinds of the books for the Thai market. Consequently, this was a good opportunity for pop-up books producers to generate new ideas for producing these books for the market.

According to physician Nittaya (2004), the pop-up books are appropriate for children in order to enhance learning and development of Thai children in the early life. For example, the children will know the characteristics of each component through amusing pop-up pieces and create good emotion due to the ability to reduce their boredom and stress. However, the reader perception toward the pop-up books in Thai market is that the pop-up books are produced for children rather than adult readers.

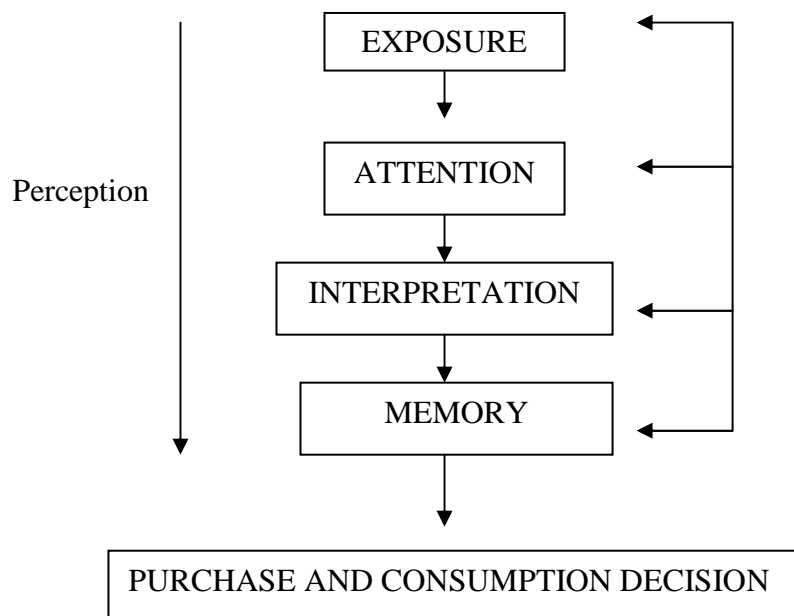
Based on the research above, it is suggested that in order to stimulate Thai adult readers to read more books and create the pop-up book perception for adult readers, it is essential to study and understand the nature of perception and how the perception is processed so as to boost adult readers' attraction to read and purchase pop-up books.

2.4 THEORY OF NATURE OF PERCEPTION

According to Hawkins, Best, and Coney (2004, pp. 278-289), the nature of perception comprises four stages which effectively stimulate target audiences, especially adult readers, and help them to recognize the characteristics of attractive pop-up books. Firstly, the exposure of the information occurs when there is a stimulus to the target audiences within a relevant environment. Secondly, the attention to stimulus activities and resulting sensation's processing in the brain is stimulated by the information received at the first stage. Thirdly, the information's meaning is interpreted from the received sensation. Lastly, the processed information is memorized for immediate decision making or long-term meaning retention.

In order to help understand this concept more easily, the flow chart below demonstrates the flow of information processing for consumer decision making about purchasing the products which consumers would like to buy and in response to the stimulus process.

Figure 2. Information processing for consumer decision making



From: *Consumer Behaviour Building Marketing Strategy* (9th ed., p. 278), by Best, J., Coney, K., and Hawkins, D., 2004: McGraw-Hill, Irwin

From this theory, attention is the most important factor which can encourage and allow adult readers to create a perception and think about the desirable characteristics of pop-up books for adult readers. The key factors to help the information processing in this stage are as the following:

- **Size and Intensity:** Larger stimuli tends to be noticed more than the smaller ones.

- **Color and Movement:** Those serve to attract the readers' attention, with bright colors and moving items being more noticeable.

- **Position:** This refers to the placement of an object in a person's visual field. For example, placing an object near the center of the field means it will be more clearly and easily seen than placing it near the edge of the field.

- **Isolation:** This is separating a stimulus object from other objects, such as using white space or blank area.

- **Format:** This refers to the pattern in which the message is presented. For instance, elements which are too complicated or require a lot of effort will decrease the attention of the audience. Thus, a simple format creates greater attention from audiences than a complex format.

- **Contrast/ Expectations:** Consumers pay more attention to stimuli that contrast with their background than to stimuli that blend with it. Consequently, differences between each page or spread and another page or spread would help stimulate the observers better than similarity.

- **Interestingness:** This relates to the individual characteristics in which each person is generally interested. Therefore, each person has his or her own interest in the material or presentation.

- **Information Quantity:** This concerns with how much the information should be presented. Too much information or information overload will result in losing audience attention.

According to this theory of stimulation, it is obvious that these factors are main elements which reflect to the perception each person has. Thus, this theory is helpful and can be applied to explore the characteristics of the pop-up books for adult readers which stimulate their minds. For example, it is applicable to determine what the pop-up book's size should be and the number of spreads or pages included in each

book. In addition, colors for printing and movement of pop-up components, as well as the position of pop-up books are important to reflect the characteristics of new pop-up books which the adult readers require. Lastly, the amount of the content and information inside the books and format arrangement are essential to point out the desirable and attractive characteristics of the pop-up books which the adult readers would like to buy or possess.

2.5 THEORY OF GENERIC COMPETITIVE STRATEGIES

Apart from the nature of perception from various factors of stimulation which can affect the characteristics of pop-up books which the adult readers would like to have or buy, cost, differentiation, and focus are the critical parts which change the characteristics of the pop-up books which they need. According to Michael Porter's strategy (2004, pp. 35-41), Michael Porter suggested that there were three potentially successful generic approaches to surpass the competitors. These approaches are concerned with the following details:

2.5.1 Cost Leadership Strategy: From his definition, this involves cost reduction and minimization in terms of efficient-scale facilities, marketing costs from R&D and sales force, or product design for convenient manufacturing, and extension of product lines to spread the cost for producing the products. As a result, the factors related to the cost of production or the prices, such as the number of pages or the paper type of the pop-up books, are critical to affect the characteristics of pop-up books in terms of reasonable, acceptable, and affordable cost.

2.5.2 Differentiation Strategy: This strategy is defined to take in the form of product design or brand name, technology, customer service, or dealer network. Consequently, to maximize the adult readers' satisfaction and motivate them to buy, extensive research and product design, such as uniqueness of the products, becomes necessary to achieve this strategy. For example, the pop-up book producers have to think about the pop design or movement in order to attract the customers or readers to be interested in buying these books and overcome the competitors.

2.5.3 Focus Strategy: This strategy concentrates on a specific group of customers, product line segment, and geographic market or particular target. Since most of the pop-up books have been imported from foreign countries, the unit price is

quite high. Therefore, in order to accomplish this strategy, the target customers for these books have been limited to adult readers who could earn or afford to purchase them.

These strategies could assist in clearly determining and achieving the goals of finding out the desirable characteristics of pop-up books based on how to differentiate the pop-up books under the acceptable cost for the focus group of adult readers who are from twenty-one years old to thirty-five years old.

In conclusion, pop-up books were originated for the purpose of not only entertaining children, but also providing academic and business activities for adults. The pop-up books all over the world are likely to be the books for adult readers more than in the past. However, the pop-up book market in Thailand is still narrow due to the price and consumer behavior. Thus, stimulus factors and generic competitive strategies are vital for this research in order to reach the objective to explore and find out the characteristics of new pop-up books which adult readers would like in 2009.