

The Analysis of Storyness in Visual Composition and Emotion Experience

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Abstract: Following the trend of the economics of aesthetics, story-telling acts an important role in visual communication design and product design. This research aims to identify the narrative characteristics of story-telling in graphics design which inherited from the distinctive features of postmodernism, i.e. entertainment, pastiche, paradox, de-centeredness, intricacy, irony, intertextuality and meta-dialogics. To explore the readers' opinions on storyness in graphics design, this paper employs 7-point Likert Scale, Factor Analysis, and Open Coding methods. The test sample includes 36 advertisement pictures selected from Living Magazine and is reviewed by 21 subjects. Some characteristics of storyness in visual composition are identified as follows: 1) gesture and eye-contact of main character, 2) diary or scrawling text, 3) the hint of story background, 4) the obviousness of theme, 5) dramatic and imaginary space, 6) fairy tale and reminiscence, 7) contrast or special layout, 8) full of clues and dialogue box. The readers' emotional experience to storyness is also summarized as follows: 1) positive affection, 2) impressiveness and familiarity, 3) expectation to outcome, 4) plot felt, 5) message perceiving. The finding will enrich the variety of design study and postmodernism culture and also offer new thinking to designers.

Key words: *storyness, narrative, postmodernism, emotion experience, visual composition*

1. Introduction

In succession to obvious characteristics of postmodern design, story narration emphasizes on paradox and intricacy, entertainment, amusement, and historic styles, which takes the lead in art field. Architecture, product design, visual communication design and other design fields have also brought enthusiastic discussion and application. Designers, readers, users and even business firms and advertising agency have requested for story telling, using rich expression in design work to attract viewer's attention. Through manipulations of style, manipulation of accident, and manipulation of meaning, the aspect of "Form Follows Function" of modernism is replaced.

Affected by various art trends, graphic design has been shown in art works of many noted graphic designers since 19th century, which reported obvious postmodern art effect since 1960. Narrative design is similar to the

postmodern trend that is shown on architecture work at the very beginning and gets prevailed to visual communication design later. They are categorized by Yang[6] and other scholars as old-fashioned, ironic and imitative, local, high-tech, ideological, overlapping text, digital, photography skills and overlay, context, and narrative styles. Currently when scholars talk about narrative design, they emphasize “theme, subject, motif” strategies, and stress on brainstorming and completion of design end. Our research aims to study story perception and emotional experience of readers for graphic design. We will use the findings to reconsider the story and story narration from the designer’s perspective.

1.1 Definition of terms:

1. “Story” : includes people and moving objects. These incidents are associated through time order and cause and effect logic which enable people’s curiosity to explore.
2. “Storytelling” : discuss the phenomenon, issue and overcoming of subjects when turning the written stories into oral stories, and explore the subtle interaction between storytellers and audiences.
3. “Storytelling by graphic design” : instant presentation of extension of visual story, with image showing character, time, space, cause and effect and other symbols.
4. “Storyness” : the impact the story has on readers.

2. Literature review

2.1 Visual communication and representation structure

Early hunters traced the tracks left by their preys, and these tracks can be viewed as simple image symbols. These symbols are rather rudimentary in the eyes of today’s people – who are buried under complex signals daily – but through observation and analysis, these imagery symbols can be used to visualize the prey’s action. Whether it is symbols, pictures, or between pictures, each new combination might enable a brand-new meaning through special arrangement by designers[2]. Arrangement of text and picture, forming of meaning, psychological association and behavior response, lead to a series of interactions between designers and audiences.

Before the end of 19th century, poster designers tend to follow esthetics perspective normally instead of product style or symbolizing certain concept, such as Scheler, Lautrec and Mucha for Art Nouveau. In 1950s, U.S. graphic designer Paul Rand has advocated “one concept delivered per work” [2] in terms of a combination of picture and text, where text and picture are independent from esthetics point of view. In fact, graphic design has been obviously affected by Art Nouveau, DADA, Art Deco, POP Art and postmodernism since the end of 19th century, which is divided into “Narrative” and “Conceptual” two major types in terms of visual representation structure.

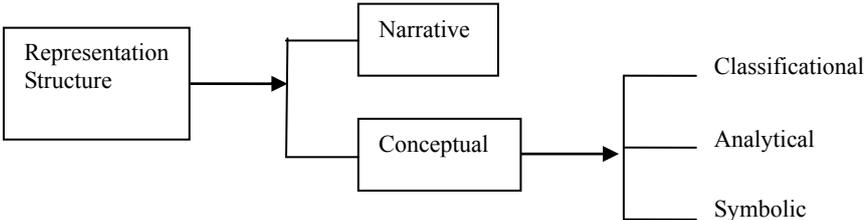


Figure. 1 Major visual representation structure (Kress & Leeuwen , 2000)

According to Kress and Leeuwen[3], narrative type features the existence of arrow. Arrow might mean the movement caused by body, limbs or tools, or diagonal line that turns elements into action, which might represent direction, process, transition, or even an active verb extensively. Narrative process can be divided into: 1. Action processes. 2. Reaction process. 3. Speech processes and mental processes. 4. Conversion processes. 5. Geometrical symbolism. 6. Circumstances.

Comparing to representations of undisclosed actions and incident, changing process, transitional space in narrative representation, conceptual representation suggests participants with broader or stable nature, hierarchy, structure or meaning. Classification process includes tree structure chart, flow chart, network chart and other concepts. Abstract art uses analytical structure that allows audiences to interpret on their own. Symbolic process means meaning or identity that relate to those participants without details. In short, narrative representation demonstrates the cause-effect relationship and directional features while conceptual representation is more inclined to parallel and stable features.

2.2 Symbolic coding and storytelling

Image is regarded as an integrated symbol, with metonymic, analogical, displaced, and condensed 4 coding types proposed by Asa Berger, in which metonymic (symbol 1) is aggregate of symbols which causes viewers' association and assumption; analogical coding (symbol 2) is a group of symbols that causes viewers' comparison in mind; displaced coding (symbol 3) will help convert the meaning of symbols; condensed coding (symbol 4) is composed by many symbols to form a new composite type [4]. In other words, comparing to symbol 2, symbol 3 (such as what's been shown in montage movie) and 4 (composite media art), symbol 1 metonymic is more appropriate for studying storytelling in graphic design via associating with aggregate of symbols.

Storytelling is one of the distinguishable features of postmodern design. Postmodernism is enabled by architects since 1960, claiming that architect can be complicated and contradictory, double-dealing, less rigorous, and to be particular about sense of history, sense of place. Shortly, trend of narrative design is then enabled with design works that emphasized on storytelling, rich expression, using stylish symbols for collage or apposition, and lead to attractions for entertainment, irony, and meaningful purposes. Manipulations of style, manipulation of accident, and manipulation of meaning design gimmicks were introduced to replace "Form Follows Function" of modernism [6].

2.3 Reader's response theory and affection delivery effect

The trend of over consumption of postmodern also affects Ads design and position of Ad reader. Ads design is developed from simply "informative" to communication. Consumer driven, dynamic, interactive Ad design feature changed the function of Ad from "expression level" to "communication level". Communication level is to have "emotion, thought, opinion" on the main subject and to be expressed through "text, symbol, language" and delivered to certain object (object set originally). Second, to revise, adjust "emotion, thought, opinion" of main subject through the message demonstrated via the same approach or certain object, to achieve communication effect or make a turn [5].

As for the role of graphic design readers, Paul Rand has proposed concept of “The New Advertising” early in 1950s, i.e. “role of audiences is no longer passive but active as they have to be curious and spend time thinking about the meaning of work during appreciation process of one design work.” [2]

Originated from 1960s, 1970s, reader’s response criticism is affected by deconstruction, which believes that the conversation between work and interpreter is infinite, with representation of definite meaning along passage or sliding of “Chain of Signifier”, fun of reading lies in participating this infinite free game [1] which is different from directing readers to united activity to view work [2] and challenges for text meaning that allows to rule readers, concepts created by readers. In which it not only involves an understanding of reproduction of text meaning but also involves new meaning generated by readers. Generally speaking, this kind of readers includes text readers, image readers, even viewers of other art patterns. However, storytelling of graphic design also echoes the reader’s active interpretation, prolonged imagination concept.

Regarding the affection delivery effect, what makes visual message a powerful communication pattern is the stimulations it brings to the mind and emotion that allow us to think and feel [4]. We accept and decode those messages and also, acknowledge the feeling enabled by those messages, which is also the most frequent technique used on Ad. In Ad marketing scholars’ point of view, humans showing tendency of certain affection is advantageous for the enhancement of people’s emotional experience. In other words, people’s feeling towards media contents “stimulates” affection. Advertisement for instance, will cause emotional tendency of audiences. If this tendency is meaningful to people’s life, symbolic meaning in particular, the emotional experience will rise and affect consumers’ decisions and behaviors. Such an affection delivery effect is also one of the features of story narration in graphic design.

3. Research Methods

3.1 Research framework

The research employs Likert scale, factor analysis and conducts analysis on open coding questionnaire, to explore readers’ viewpoints on storyness of graphic design, with samples selected from advertisements between Sept.~Dec., 2007 in Living Magazine which focus on improving the quality of home life. Its Ads focuses on daily appliances and female health care. It is suitable for exploring the story narration of graphic design. The magazine features esthetics and quality with certain standard of design quality for Ad. Respondents will not be affected by different quality of product design. The script of Ad is written in English. To avoid error judgment of respondents due to different cultural background and language misunderstanding, each picture will be briefed orally in Chinese, which is the native language of respondents.

The research is divided into 2 stages, with Likert scale, factor analysis and strength analysis of story conducted on the 36 graphic designs and with top 5 Ads selected by each respondent. In stage 1, the top 12 pictures selected by participants will be indicated. In stage 2, researcher will analyze the reasons why respondents consider the pictures with strong storyness include visual composition through open coding in terms of the 12 pictures selected in stage 1.

3.2 Stage 1: test readers' viewpoints on storyness of graphic design.

1. Objective: test readers' viewpoints on storyness and select pictures with strong storyness considered by respondent.
2. Respondents: 21 1st-year college student from Department of Visual Design in Taiwan
3. Samples : 36 Ads between Sept.~Dec., 2007, Living Magazine 2007, those with double page spread or consecutive pages will be combined onto a page.
4. Method: There are 3 steps in this experiment. (1) questionnaire with Likert scale is displayed on projector from 01~36 by order. The interpreter orally brief the product functions and summarized English script, using the same amount of time for picture viewing by each respondent. The interpreter translates brief and make sure that each respondent complete the tick motion at the end of each picture. (2) have respondents select the picture number with top 5 strong stories and with 20 effective questionnaire obtained. (3) conduct 2 -Way ANOVA on the 36 pictures and respondents through Excel to examine the significant difference and to rank the 36 pictures as per average of story strength.

3.3 Stage 2 : content analysis of storyness strength

1. Objective : exploring why respondents consider the Ad as strong/low storyness strength.
2. Samples: 12 pictures chosen in stage 1
3. Method : Have respondents write down the reasons for the top 5 strong stories and analyze the reasons behind through open coding.
4. Result : the reasons written by respondents are (1) visual composition (2) emotional experience and categorize accordingly.

4. Results and Discussions

4.1 Analytical results :

Results include the mean value of story strength, 2-way ANOVA on the 36 pictures and respondents, in which the top 12 pictures by story strength are shown in table 2 (06, 08, 36, 22, 15, 25, 33, 05, 09 in order), and top 10 pictures of top 5 pictures elected by story strength (06, 08, 36, 22, 15, 25 , 20, 13, 33, 18 in order).

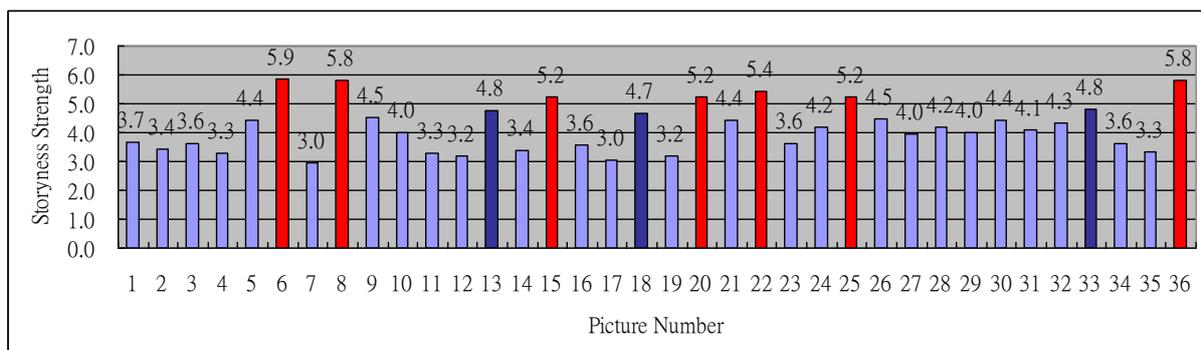


Figure. 2 Mean value of storyness strength

Table 1. Two-way ANOVA on 36 pictures and respondents

Source	SS	Degree of freedom	MS	F	P-value	Critical value
respondents	264.7722	19	13.93538	6.691344	2.85546E-16	1.602194
pictures	510.2944	35	14.57984	7.000794	1.67687E-27	1.440834
error	1384.928	665	2.082598			
Total	2159.994	719				

Table 2. The top 12 pictures by storyness selected by respondents

		
No.06	No. 08	No. 36
		
No.22	No.15	No.25
		
No.20	No.13	No.33



4.2 A similarity between significant difference on question answering and storyness strength cognition

According to stage 1, there is significant difference on question answering; no matter the opinions between respondents or comments on different pictures, P-values of 2-way ANOVA are all less than 0.05, F are all above critical values, therefore null hypothesis is declined with significant difference. Among top 9 average numbers in Likert scale (08, 06, 36, 22, 15, 25, 33, 05, 09 in order) and top 10 of top 5 strong stories selected (06, 08, 36, 22, 15, 25, 20, 13, 33, 18 in order), 7 pictures are selected repeatedly, except No.33, all the variances fall under 1.25~2.5. The data indicates that despite respondents have different comments on certain pictures they will still have similar cognition on strong storyness pictures.

4.3 Categories of visual composition :

The contents written by respondents in stage 2 include (1) visual composition , and (2) emotional experience. After being categorized accordingly, the results is listed in Table 3 and Table 4.

Table 3. Eight categories of visual composition

Category	Gesture and Eye-Contact of Main Character	Diary or Scrawling Text	Hint of Story Background	Obviousness of Theme
Related primary data	<ul style="list-style-type: none"> * rich facial expression of character, attractive * eye-catching character * role performance * exaggerated facial expression * body gestures * repetitive people by different actions, in different places * children * look 	<ul style="list-style-type: none"> * paintings in story book * has many texts * Hand-painted painting diary * scrawling fragment 	<ul style="list-style-type: none"> * background object effect * sense of space * tone & manner of background * environmental message 	<ul style="list-style-type: none"> * clear explanation * concise layout * apparent product

Category	Dramatic and Imaginary Space	Fairy Tale and Reminiscence	Contrast or Special Layout	Full of Clues and Dialogue Box
Related primary data	<ul style="list-style-type: none"> * sense of drama * tension * imagination space 	<ul style="list-style-type: none"> * old-fashioned * reminiscence * Feeling of fairy tale * old photos * origin of fairy tale * fables * running account 	<ul style="list-style-type: none"> * unified color * bright color * outstanding layout * fantastic scenario * strong contrast * distinct color * special demonstration 	<ul style="list-style-type: none"> * rich details * dialogue frame * messy & abundant * numerous pictures

Table 4. Five categories for emotional experiences :

Category	Positive Affection	Impressiveness & Familiarity	Expectation to Outcome	Plot Felt	Message Received
Related primary data	<ul style="list-style-type: none"> * visionary * esthetic * ambient * surprise with joy * beautiful scene * adorable * rich and fun * feel * feel his happiness * harmonious love between parents and children * affecting * human's scent 	<ul style="list-style-type: none"> * exaggeration * attraction * impressive * well-known * cartoons that you will watch as a child 	<ul style="list-style-type: none"> * Many stories Behind * would like to get deeper * guess what will be in next moment ? * imagination space for storytelling * feeling of drama 	<ul style="list-style-type: none"> * Record what has happened * hear conversation 	<ul style="list-style-type: none"> * Good product * you know as long as you see it * strong effect * Direct expression, easy to understand

4.3 Analysis of storyness strength : visual message receiving, personal cognition, positive affection identity, sense of drama

According to stage 2, respondents analyze the top 5 strong stories selected by them in open question. They express the visual composition in their own feelings, the most common reason they mention are due to personal emotional experiences. After these two major concepts were categorized, there are visual composition such as : 1) gesture and eye-contact of main character, 2) diary or scrawling text, 3) the hint of story background, 4) the obviousness of theme, 5) dramatic and imaginary space, 6) fairy tale and reminiscence, 7) contrast or special layout, 8) full of clues and dialogue box while in “emotional experience”, there are : 1) positive affection, 2) impressiveness and familiarity, 3) expectation to outcome, 4) plot felt, 5) message perceiving. The analysis structure is shown in figure 3.

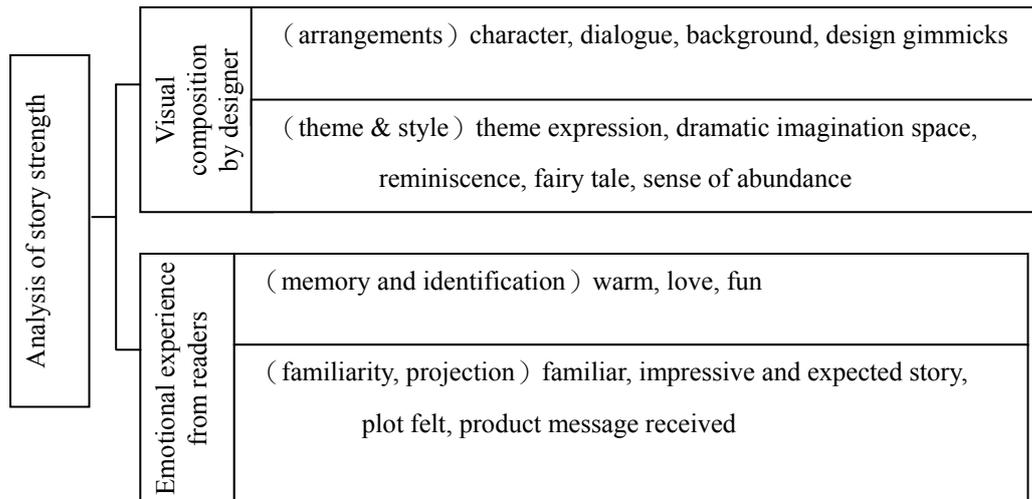


Figure. 3 Analysis of storyness strength

4.4 Analysis of storyness strength level

I. Analysis on what makes a strong storyness

1. The stronger the visual cognition strength, the stronger the storyness strength

(proving that mental activity by Carolyn Bloomer : memory, projection, expectation, choice, habit, significance etc.)

2. Warmth, love, amusement and other positive emotions will gain recognition. The stronger the memory it causes, the stronger the storyness strength.

3. Historical story and story character strengthens the story.

4. Exaggerated and detailed facial expression of characters increase the storyness strength.

5. The stronger the message, the stronger the storyness strength (but requires other supporting factors)

6. The strength of the storyness is increased via different presentations such as hand-writing, scrawling text, and diary documentation.

II. Analysis on what makes storyness strength insignificant :

1. Picture apposition (scene to be cut equally) reports middle storyness strength.

2. Photo comparison reports middle storyness strength.

3. Printed text reports weaken storyness strength more than handwriting.

4. Monotonous background will report insignificant storyness strength if positive affection is not enabled.

5. Weak culture identity enables weaker storyness strength.

5. Conclusions and Suggestions

According to the research, the stronger the visual cognition; the easier the warmth, love, enjoyment and other positive affections are recognized and will promote memory. Characters of historical story with exaggerated facial expression, detailed and abundant, strong drama, handwriting, scrawling text, and diary documentation features will enable stronger storyness to readers while apposition (scene to be cut equally), picture comparison report middle storyness strength. Monotonous background will report insignificant storyness strength, weaker

culture identity and weaker storyness strength if positive affection is not enabled. Printed text reports weaken storyness strength more than handwriting or scrawling text.

Besides, storyness strength shown in visual composition with cause-effect relationship, “narrative” visual composition with directional feature, “conceptual” visual composition with stability and with overlap in between. The relationship will be discussed in further research. Also, the research will continue to develop questionnaires to explore the cognition and emotional differences between professionals and non-professionals. The researchers hope to expand the experiment to different media and include participants of all ages. By doing this, we will have a better understanding of the “total situation for storyness narration” model and apply the findings on visual communication review, teaching and design practices.

6. Acknowledgement

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