Research article

Collaboration Between Typography and Visual Narrative to Strengthen the Communication Delivery Process

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Abstract.
Visual narrative (also called visual storytelling) is a story told primarily through visual media. The story can be described using photography, illustrations, or video. It can be enhanced with graphics, music, sound, and other audio. In comparison, typography is the study of letters and their relation to the delivery of information. This study aimed to examine how visual communication carried out through visual narrative can be more quickly understood by the public when combined with the communicative power of typography. Two tactics were employed: 1) A/B testing, which involved using several images to test the effectiveness of the image or design; and 2) eye tracking, which tested how the audience read in digesting the information from the designs that were created. Recommendations and a formulation of work steps/processes that use a combination of typography and visual narrative to increase the effectiveness of delivering messages to the audience were developed.

Keywords: typography, visual narrative, communication delivery, strengthen process

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1. Introduction

Visual Narrative delivers messages using visual means, such as pictures, photos, videos, motion graphics, or other essential visual elements such as colors, lines, and basic shapes. Visual Narrative is a technique of telling a story through a collection of images that are side by side and continuous or commonly referred to as juxtaposition. [1], [2]. According to the desired message effect, messages appear on pictures that appear sequentially and are described with a particularly dramatic impression.

Paintings on the walls of caves, relics of the past, are one of the visual heritage of Narrative. Ancient people used materials from nature to describe the situation around them. The result of the image was the result of a visual study when the image was made. From the pictures on the walls of the cave, today's humans can visually know the past.

According to Eric and Sacha [3], [4], visual storytelling should include five core elements:

1. Tensity: Motivates people to keep reading the story.

2. Entertaining: Hook them up in the first eight seconds.

3. Educating: Provide information so that viewers are more educated about the topic.

4. Micro-interactions: Ensure that even seemingly small and discrete aspects – the movement of objects, dynamic adaptation of the page – provide a good experience. Viewers need small interactions that make them feel in control to enjoy the whole experience fully.

5. Call to action: Be clear about what the audiences want to do after reading the story. Then work backward to design the visual storytelling to achieve it.

An example of visual narrative application is communication delivered through comics, graphic novels, or poster series, which are now often used in advertising. [5] [6]. Visual Narrative can also stand alone in one complete picture, without the help of other images such as comics. This visual can be achieved if the content images presented can be understood by the general public. Some technical presentations of visual Narrative use the help of writing or typography.

Typography is the science, insight, and ability to arrange letters or letters for the sake of communication or expression. Typography plays an essential role in conveying messages to the audience or society [7], [8]. That is because typography has its power in conveying messages: people, in general, find it easier to convey messages through writing. Typography makes the message can be conveyed with the proper communication, according to the target audience.

At the beginning of its development, the typography used was in the form of a pictogram. Pictograms are pictures of graphic symbols used to convey messages or meanings. The image used resembles or imitates the image of the object or the actual physical state of the object. The Egyptians were an example of using pictograms, which they called Hieroglyphs. The form of alphabetic letters that exist today is developing the typographic form developed by the Romans in the 8th century AD.

Letters and writing also help humans in explaining information in detail and communicatively. On the other hand, using typography in conveying messages also has a weakness, namely not visualizing the expression and dramatization of the message content. This technique makes the message conveyed with a flat impression and less

heartwarming. This weakness can be closed by combining messages using writing or verbally, with pictures or visually narrative.

2. Method

The research method used in this research is User Testing. Jennifer and Kennet Visocky O'grady proposed this method in their book, Designer's Research Manual. In this method, the researcher tested several visual samples to the audience to conclude the sample tester [9]. The User Testing method is also referred to as the User Experience Design method. The user experience design strategy uses several tactics to acquire data: A/B Testing and Eye Tracking.

This method combines Visual Narrative with typography. This trial aims to cover the weaknesses of visual Narrative with the addition of typography, and vice versa, to cover the weaknesses of delivering messages with typography or verbally, with the strengths of Visual Narrative. The process flow of the User Testing method can be seen in Figure 1 below:


Figure 1: User Testing Method [10].

The User Testing method uses various techniques designed to measure a product's ability to meet end-user needs (accessibility, functionality, ease of use, message content absorption) while also meeting project requirements (budget, size, technical requirements). An explanation of the technical implementation of this method in product testing is as follows:

1. A/B Testing

A/B Testing evaluates two or more different design solutions, testing each with a unique user group to measure feedback and responses. Subsequent comparisons of the feedback gathered from the two groups help determine which iteration was more successful.

A/B Testing allows comparative analysis of design solutions. In some scenarios, testing the proposed design against existing guarantees allows the creative team to measure the aesthetic effect of the new concept [11]. It can also evaluate or update specific design components, such as changing navigation or adding new features or tools. A/B Testing can be performed in an online setting. The description of this Testing can be seen in Figure 2 below:
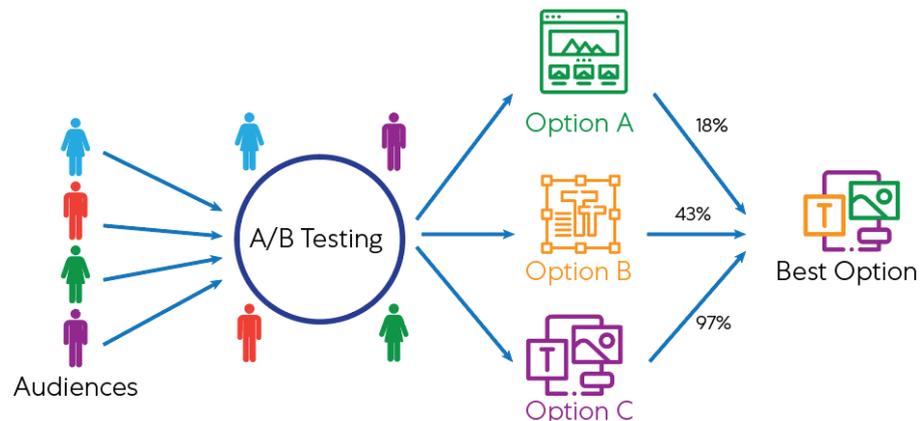
Figure 2: A/B Testing Tactic.

A/B Testing can be used as part of any research plan but is most often associated with a user experience design project. This process can help evaluate the success of a design iteration or address specific, documented usability issues. In this case, it is essential to test incremental changes to determine how slight variations in the design affect user feedback. It is difficult to determine which variables the user responds to when a radical change is displayed. Feedback is only valid if the test group is similar to the intended target audience.

1. Eye Tracking

In addition to testing the effectiveness of delivering messages, it is also necessary to test how the audience reads. Eye Tracking studies the movement, pattern, and duration of the human gaze [12], [13]. Even when we feel like we are in a staring contest, the human gaze is always moving [9], [14]. These fast micro-movements allow the brain to capture sensory data, seamlessly piecing together countless images to help designers visualize the world around them. Behavioral scientists and psychologists divide these eye movements into three distinct activities: fixation, saccades, and scan paths. In simple terms, these three activities can be seen in Figure 3 below:

1. Fixation occurs when our eyes seem to stop,

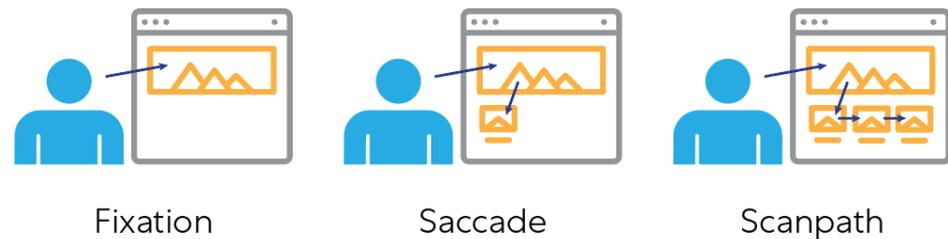2. Saccades are movements between two fixations,

Fixation   Saccade   Scanpath

Figure 3: Eye Tracking Tactic.

3. Scanpaths are accumulations of a series of fixations and saccades.

Eye-tracking research requires special equipment. This process is generally carried out in a laboratory environment. A safe source of infrared light is directed at the subject's pupil. The subject is shown the image or content on a monitor placed in front. At the same time, the high-speed camera captures the infrared light reflected from the subject's eyes. It records the eye's journey across the screen and tracks the associated eye movements. However, the designer can also use a simple technique by giving unique signs to the design to be tested. The designer asks which order the audience sees [2]. Hal ini juga menegaskan elemen-elemen apa saja yang paling sering dilihat terlebih dahulu dari sebuah desain.

3. Results and Discussion

3.1. Experiment

The experiment was carried out using 3 sample designs to test which design was the most effective in conveying the message. Figure 4 is an image that presents an illustrative image without verbal/written descriptions. This experiment will test the effectiveness and power of delivering messages from each sample image. Figure 4 below is the image used for A/B Testing:

Figure 5 is an image that only provides verbal/written information, without any illustrations. The typeface used is chosen, which has good readability, clarity, and legibility. The text in Figure 5 is:

1. *Halaman 1-2: Konon pada zaman dahulu, di pinggir hutan belantara, hiduplah sepasang suami istri bernama Ki Kures dan Nyi Kures. Ki Kures dan Nyi Kures mempunyai seorang anak laki-laki bernama Bambang Durjana.* (Pages 1-2: It is said that long ago, on the edge of the wilderness, there lived a husband and wife

Figure 4: Tester: image only.

named Ki Kures and Nyi Kures. Ki Kures and Nyi Kures have a son named Bambang Durjana.)

2. *Halaman 3-4:Sayang sekali, Bambang Durjana memiliki sifat buruk. Dia suka mencuri. Hal ini membuat Ki Kures dan Nyi Kures bersedih. Hingga dewasa, sifat buruk Bambang Durjana ternyata semakin menjadi-jadi. Tidak hanya mencuri, dia juga berani berjudi, bahkan merampok.* (Pages 3-4:Unfortunately, Bambang Durjana has a bad character. He likes to steal. This made Ki Kures and Nyi Kures sad. Until adulthood, Bambang Durjana's bad character turned out to be getting worse. Not only stealing, he also dared to gamble, even rob.)

3. *Halaman 5-6: Suatu hari, Bambang Durjana meminta izin kepada orang tuanya untuk menikah. Betapa senang hati Ki Kures dan Nyi Kures. Dalam hati mereka berharap semoga setelah menikah, kebiasaan buruk bisa hilang. Pernikahan Bambang Durjana akhirnya terlaksana.* (Pages 5-6: One day, Bambang Durjana asked his parents for permission to get married. How happy Ki Kures and Nyi Kures are. In their hearts they hope that after marriage, bad habits can be lost. Bambang Durjana's marriage finally took place.)

4. *Halaman 7-8: Setelah menikah, Bambang Durjana meminta izin pada Ki Kures dan Nyi Kures untuk hidup mandiri bersama istrinya dengan menempati rumah baru mereka. Rumah Bambang Durjana berjauhan dengan rumah Ki Kures.*

(Pages 7-8: After getting married, Bambang Durjana asked Ki Kures and Nyi Kures for permission to live independently with his wife by occupying their new house. Bambang Durjana's house is far from Ki Kures' house.)

Figure 5: Tester: verbal/words only.

Then Figure 6 is a combination of illustrated images with verbal/written descriptions. Arrange images in a layout that combines images and text on different sides.
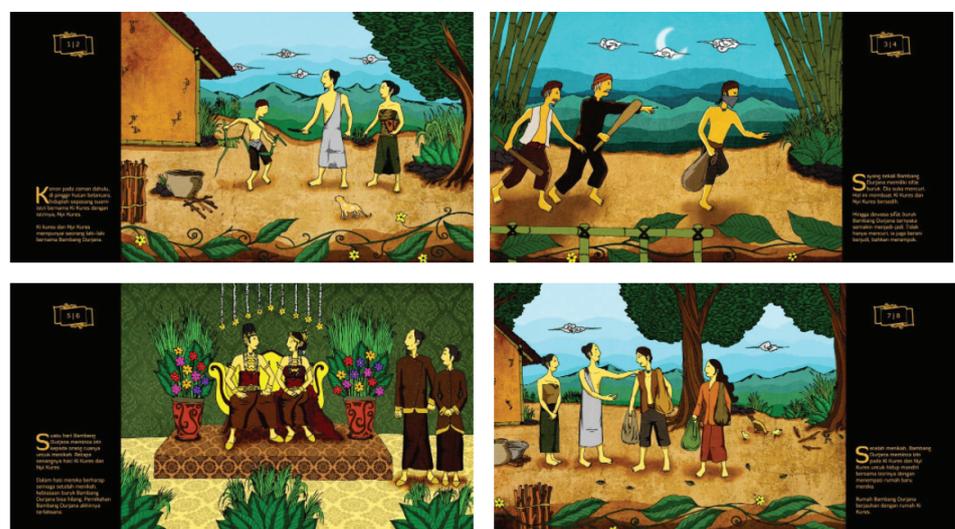

Figure 6: Tester: combine image and verbal.

3.2. Results

The results obtained based on the A/B Testing experiment using three design illustration testers are as follows:

TABLE 1: Experimental results from A/B Testing

Tester	Legibility	Clarity	Attractiveness	Effectiveness	Average
Image only	16%	67%	87%	34%	50.75%
Verbal/words only	83%	44%	12%	72%	52.75%
combine image & verbal	88%	91%	96%	97%	**93.00%**

The results based on the Eye Tracking Tactic for the sample tester, in this case, the combined image and verbal tester used, are as shown in table 2 below:

TABLE 2: Experimental results of Eye Tracking Tactic.

| Eye Tracking | Tester: combine image & verbal | | | | |
	Legibility	Clarity	Attractiveness	Effectiveness	Average
Left side: Image Right side: words	67%	81%	78%	80%	76.50%
Left side: words Right side: images	76%	83%	81%	89%	**82.25%**
Upside: Image Bottom side: words	85%	89%	74%	92%	**85.00%**
Upside: words Bottom side: image	61%	45%	55%	67%	57.00%

3.3. Discussion

Based on experiments using two tactics, several things become a concern when designers create designs to convey messages or information. First, the combination of picture and written messages produce the highest level of message delivery effectiveness. Audiences can capture messages well and feel high visual interest when the message is presented with a verbal-visual combination. It makes the audience better understand the meaning of the message conveyed. When audiences are presented with a message that only contains visual images, they are confused and guess what the message is what they see. The advantage is that the image has an excellent appeal to attract the interest of the audience. Then, when the audience is presented with a message in words or writing, they can easily catch the message. It is just that written messages are less attractive than visual messages. When the two testers are combined, the audience understands the message better, with a good picture because it is supported by an image that matches the content of the verbal message.

Second, in the results of the Eye Tracking experiment, it was found that it was easier for audiences to understand the flow of message delivery when it was arranged with a written layout on the left side and pictures on the right. In addition, audiences also find it easier to understand the flow of the message when it is arranged with the layout of the illustration image on the top side and the verbal/written message on the bottom side of the image. When audiences see the order of writing/messages placed on top of the image and followed by an image, it reduces the audience's attractiveness by paying attention to the message. Audiences are more comfortable understanding the flow of messages that are presented vertically when the visual narrative message is prioritized at the top, followed by a verbal message at the bottom.

4. Conclusion

Making designs using the User Testing/User Experiences design testing strategy can answer problems in the effectiveness of delivering messages. User testing is carried out with a combination of tactical A/B Testing and Eye Tracking Experiments. These tactics produce conclusions in combining visual narratives with verbal messages that are more effective in conveying messages.

Combining Visual Narrative with the right is written message will deliver the message to the audience easier, more enjoyable, and avoid ambiguity in the message's meaning. From the discussion results on A/B Testing and Eye Tracking Experiment, the combination of message delivery through visual Narrative and verbal messages produced the most decisive impact. In addition, the arrangement of presentations horizontally, by prioritizing verbal messages and followed by visual messages, is also more effective and visually attractive. This method can be used as a reference for designers in compiling messages in the design creation process.

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