

To learn is to experience: How our daily interactions with objects, events, the environment and people can be a classroom.

Keyword: experience design, experience, curriculum design, experimental, visual.

Abstract: Testing a premise put forth by Nathan Shedroff (2001) that there is always an experience created by an object, an event, the environment and people, this paper is a report for an experimental course at a communication school within a university in Singapore. Using experience as a form of pedagogical technique in bridging our experience to what could be learned and shared was tested by 144 students in two phases: a group presentation with five predetermined categories to choose from, followed by an individual assignment based on a set of question derived from a combination of their interpretation of the group assignment and four other categories as a comprehensive framework, documented via 10 photographed images accompanied by their verbal description of the images. It was found that our experiences can act as a depository of “raw materials” that can contribute to the learning process in a personal and endearing way.

Introduction and background

In an era when camera phones and images are ubiquitous as the society becomes increasingly visually-saturated, the need to incorporate a course which takes into considerations our personal experience is not a new approach. Tom Barone (2000) has suggested the development of a heightened perception could enables us to critically evaluate the cacophonous messages and abundance of images we experience through the various media that constantly assault our senses. According to social scientist, Denzin (1978), our social reality is known and understood as a social production in which human beings are capable of producing their own definitions of situations which is shaped and guided by our own behaviour and that of others. As we develop our own standpoint and interact with others, we are actually interacting with each other. Because of our interactions, our social world does not consist only of objects that have intrinsic meaning but the meaning of objects is found in the actions that we take toward them. There are categorically three types of objects: physical, social, and symbolic (Denzin, 1978). Physical objects are those that may be used in the leisure occasion such as balls, bats, craft supplies, and so forth. Social objects are other people, including leaders, friends, mothers, and other participants in a program. Symbolic objects such as ideas, philosophies, or doctrines which can present possibilities for interactions (Ibid., 1978).

As such, our experience is constantly shaped by our definitions and interactions with objects, people, event, and ideas that carry symbolic meanings which arise as a result of the interaction one has with them.

Csikszentmihalyi (1991) writes that “creating meaning involves bringing order to the contents of the mind by integrating one's actions into a unified flow experience” (p. 216). Accordingly, the human experience is a process of constant change which is subjected to redefinitions, relocations, and realignments. Each person simultaneously carries on conversations with himself or herself and with significant others. According to Moriarty and Barbatsis (2005), establishing an adequate curriculum has always been a challenge for educators due to the broad and interdisciplinary nature of visual communication which ranges from visual perceptions to how images are visually and cognitively processed through the human eyes and brain (Barry, 2005) to inquiries about visual culture within specific social and cultural dimensions (O'Donnell, 2005). However, the importance

of visual communication has grown exponentially especially since the growth of the internet which is regarded a visual medium (Kim & Chung, 2012).

From a practical standpoint, visual communication deals specifically with a variety of practical media which requires educational exposures in typography, graphics, still and moving images within a framework of cultural, critical, historical, ethical and logistical perspectives (Lester, 2010). In today's multimedia and predominantly visually-oriented environment, the importance of visuals as a communication tool has grown and expanded over the years (Goldberg, 1991). Not just visual communication specialists are expected to work in multimedia platforms, ordinary citizens are actively involved in using visuals to communicate. Such an impact coupled with the rapid development of technologies which has led to the converging of media further pushes for mass communication schools to acknowledge and revisit the courses they offered.

About Creative Visual Experience and Design

Using our experience as a platform for learning is the idea behind this reflective and hands-on approach to a visual communication course which recognizes that there is always an experience created by an object, an event, the environment and people we come in contact with. These interacting elements play a part in contributing to our overall experience. "Creative Visual Experience and Design" is an attempt to establish an adequate visual communication curriculum at a mass communication school within a public university in Singapore which has been a challenge due to its broad and interdisciplinary nature (Moriarty & Barbatsis, 2005). The course is based mainly on the argument put forth by Nathan Shedroff. According to him, an effective communication occurs when form and content are contextually engaged in a message carried over time and medium in either digital, physical or natural formats. To the Design Strategy Chair at California College of the Arts (CCA) in San Francisco, California, our experience is a personal connection with the moment and every aspect of living is an experience, whether we are the creators or simply chance participants. In general, this course is about explaining experiences and how they affect us. Because not all experiences are created equally and they must compete for the audience or participants' attention, we can have a profound reaction when our beliefs and expectations are confronted. (Shedroff, p. 6)

The promoting of experience as a form of pedagogical technique in bridging what is experienced to what could be learned and shared in a visual realm through a series of assignment that students explore is the main objective of the course. This course seeks to orient students to five selected spectrums of human experience through which the different dimensions of their observations are reflected upon and shared, first in a group project before ending with an individual assignment. For each student, the catalyst for learning is his/her own reflections and observations which are documented and shared. This paper documents their observations mainly about the two aspects of their assignments: a summary of their group presentation and an analysis of two selected individual assignments which is a capstone project, an accumulation of what they experienced throughout the 13-week course. In their report, the students are encouraged to include an introduction by first answering how the visuals are supportive of the descriptions accompanying them. They have to identify and document the evidence of their experience via text and images. Each of the paragraphs of text accompanying the image should be focused on a single idea that supports their claims in the clearest, most sensible and reflective ways. Finally, they will conclude with some memorable thoughts, perhaps a lesson or two learned, or an interesting twist of logic.

The five categories

The predetermined categories are “A Colourful Experience”, “A Designed World”, “Repetitive Things”, “Things Beautiful” and “Minimalism.”

Depending on the final enrolment, students are divided into groups of 3-5 students per group to select from the five categories below for their group assignment. Each group must ensure that the following sections are covered/touched upon: Introduction (5%), Research components (20%), Observations (20%), Examples (30%), and Interpretation [meaning] (25%).

Categories	No. of groups per category	No. of 3 students per group	No. of 4 students per group	No. of 5 students per group	Total
A Colorful Experience	6	1	0	5	28
A Designed World	7	4	2	1	25
Repetitive Things	6	1	1	4	27
Things Beautiful	7	0	1	6	34
Minimalistic	7	2	1	4	30
Total number of students enrolled					144

Table 1. Categories assigned and number of students grouped per category.

In the following section, the topics chosen by each group are summarized and listed. It is necessary to provide a general idea of the profiles of these groups as the group assignments are a form of “introduction” for the students to link the category they belong to with the other four categories. With the five categories, a question which acts as a framework for which further explorations is formed. This is further explained in preceding section titled “Individual assignment.”

A Colorful Experience

In this group, six groups of students (n=28) seek to discover crucial visual and emotional perspectives in color and how color can be used for effective communication in the various possibilities. Below are the number of groups and the selection of topics:

GROUP 1: Colorful HDB (Housing Development Board) flats

GROUP 2: Colorful Cigars

GROUP 3: Colorful Power Rangers

GROUP 4: The Absence of Color

GROUP 5: Colorful Food

GROUP 6: The Colors of Fashion

By exploring various topics such as the public housing estates of Singapore (HDB flats), cigars, popular television characters for kids with superheroes dressed in different color outfits, colors the fashion industry as well as the absence of color, these six groups of 28 students managed to highlight how colors are used to reinforce the identity of a company or an entity in ways that bolster a brand's presence. Inadvertently, this also introduces aspects of marketing in which colors have become a commodity that can be used to market things and services in ways that change our perceptions is capable of influencing our habits. The absence of colors is

about food and beverage companies that use very minimal or neutral colors in their interiors and exteriors of premises to evoke a minimalistic yet sophisticated awe in the minds of their customers. Appealing to our senses, natural or artificial colors used in foods can affect the way foods are presented and served. Hence, the presentation of food through color can also affect the way the food taste.

A Designed World

Seven groups of students (n=25) look around their surroundings and discovered how everything is a product designed by someone, usually defined as a designer for a certain purpose. Below are the number of groups and the selection of topics:

GROUP 1: The design developmental stages from Roman era to the present

GROUP 2: Shopping

GROUP 3: Gardens

GROUP 4: Ikea

GROUP 5: Books Actually

GROUP 6: Design for the Ladies

GROUP 7: Art vs. Design

Historically, design has been part of us. Seven groups of 25 students presented design as seen from humanistic, decorative, occupational and functional angles. They presented how a socially designed world can make our world a better place to live in from a humanistic point of view and from a decorative angle, how design has enriched people's lives through what is artsy to what is "designerly". Operationally or occupationally, spaces such as theme parks, food courts, shopping centers, malls, etc are not just places that we play but area also important places that influence the way we live, work and commute. Finally, they shared how daily objects we use have become so entrenched that we take certain designs for granted. This is where the functional aspects of design as opposed to design, merely decorative elements are being explained.

Repetitive Things

Five groups of students (n=22) observed visual patterns that can be noticeably found in various things to form a pattern-based framework to investigate how patterns affect the way we live, work and play. Below are the number of groups and the selection of topics:

GROUP 1: Repetition in Product Design

GROUP 2: Repetition in Rituals

GROUP 3: Repetitive Symbolic Things

GROUP 4: Repetition in Fashion Magazine

GROUP 5: Repetition in Coffee Shops

A light that blinks repeatedly gets our attention. Our repeated patterns become a behavior. A piece of mosaic laid repeatedly next to each other covers a designated area. Five groups of 22 students presented their observations in various topics ranging from products, rituals, symbols, fashion magazines and coffee shops in which they discussed the elements of design that deals with size, shape, and texture. Our repetitiveness can be found not just in objects we designed and built but in human constructs such as birthdays, weddings, and other rituals that repeat themselves over and over. Other observable patterns can be found in mundane objects such as upholstery, rugs, floors, wallpaper, clothing, fabric, tile, mosaics, paintings and more are some of the surfaces that provide us with opportunities to compose forms, shapes, and texture to fill the space in which we

occupy for purposes of ostentation for dimensional and structural enhancement.

Things Beautiful

Seven groups of students (n=34) investigated how beauty as an underlying value can be understood in our search for perfection beauty. Below are the number of groups and the selection of topics:

GROUP 1: Beauty of Death

GROUP 2: Beautiful Pinnacle @ Duxton (condo-styled apartment complex)

GROUP 3: Beauty in Advertisement

GROUP 4: Perfectly Imperfect

GROUP 5: Beauty in Advertisement

GROUP 6: Beauty in General

GROUP 7: Beautiful Asian Women

How beauty has enriched us is a fundamental question that is both subjective and interpretive. How we decide what is beautiful and our search for beauty in art, design, and architecture becomes the quest for 34 students in seven groups as they pry into morbid subjects that often do not deem death as something beautiful to our desires. The beauty industries exploit our insecurities and deliver things, environments, and events that connect at a visceral level. The automotive manufacturers create objects that are sculptural and functional but yet when they are scratched or outdated, they are regarded as imperfect or defective. Regardless of the price, it seems, we yearn for beauty not just in ourselves but also in animate and inanimate objects. The groups discussed how has the pursuit of beauty enriched us and what has the pursuit of beauty turned us into.

Minimalistic

Eight groups of students (n=32) investigated some important questions such as "Is less truly more? Is less simply just lesser?, Is being minimalistic important?, Is it true that being complicated is easy and being content with lesser is harder to achieve?" Below are the number of groups and the selection of topics:

GROUP 1: Minimalism in Movie

GROUP 2: Minimalism as a Lifestyle Choice

GROUP 3: Minimalistic Logos

GROUP 4: Minimalism in General

GROUP 5: Minimalistic Logos

GROUP 6: Minimalism: Dialogue in the Dark

GROUP 7: Minimalistic Foods

GROUP 8: Minimalism in General

If "minimalism" is characterized by sparseness and simplicity, is the notion of "less is really more?" Through products, logos, movies, lifestyle choices and so forth, eight groups of 32 students presented their ideas that simplicity and clarity both can lead to good designs and communications. A graphic designer who arranges the numerous necessary components to create an impression of extreme simplicity has to ensure that every element and details are absolutely minimized to achieve a maximum effect for things like logos and packaging. Basic forms without decoration or simple materials and structures can represent a sense of order as they are not just essentially the qualities in architecture but also in our choices in a hectic lifestyle to simplify for a parsimonious approach in life.

Individual assignment

The final individual assignment is a form of a photo ethnographic study which requires the students to photograph a series of 10 images from a question developed from mixing the category they once belonged to when they were clustered in a group and to link it with four other categories to complete a question which becomes a framework such as the question below:

"Where is (the category that the student belongs to) being _____ to create _____ in a _____ manner."

To put it simply, the answer is in the question but only if the students fill in the four blanks spaces, indicated by " _____ ", to form an investigative question which verbally allows for many forms of visual interpretations. The students are given the freedom to mix and match the other four different categories which they were once excluded from to form a sentence that makes sense to them but they have to use the category from the group they belong to at the beginning of the sentence. To reduce any misinterpretation, the categories with more than one word such as the "Colorful Experience," "A Designed World," "Repetitive Things" and "Things Beautiful" are reduced to one single word for the blanks. For example, a student who belongs in the "Colorful Experience" category could possibly phrase his/her question as such:

- Where is COLOR being DESIGNED MINIMALLY to create BEAUTY in a REPETITIVE manner
- Where is DESIGN being MINIMALLY REPEATED to create BEAUTY in a REPETITIVE manner
- Where is MINIMALISM being COLORED REPEATEDLY to create BEAUTY in a DESIGNED manner
- Where is BEAUTY being REPEATEDLY COLORED to create DESIGNS in a MINIMAL manner
- Where is REPETITION being MINIMALLY DESIGNED to create BEAUTY in a COLORFUL manner

The 10 images must be accompanied by an analytical description for each photo and because there is no encompassing theme that is put in place, the individual assignment allows for broader explorations and interpretation for each of the image within a contextualized framework. In order to avoid the images being interpreted wrongly or being too vague and abstract, care was exercised through the use of narratives, limited to maximum 100 words per image. Although there were some repeated observations, much like the topics chosen in the groups, students were assured that repetitions in their observations are expected but the meaning in which their 10 images can evoke are contextualized and interpreted in manners that are individualistic as they are drawn from their own experiences. In that way, even if there are repetitions of topics, every observation is, in fact different. They are also allowed to place images next to each other within an image as a way to compare and contrast. The 2-in-1 image will be considered as one. However, they are advised not to re-arrange, arrange or digitally manipulate the image as it would be considered altering the reality but they can enhance the clarity of the image. Since there are students from different faculties who may not have access to professional or proper equipment, they are allowed to any image-capturing device from sophisticated DSLR cameras with interchangeable lenses, to point and shoot cameras or even their own cell phones equipped with cameras. The basic requirement is that the image must be clear and not overly pixelated.

Analysis of two individual assignments

In this section, samples from two selected individual assignments are selected to be included in this paper.

Figures 1 - 3 are from an English major while figures 4 and 5 are samples from a 2nd year Communication Studies student. Verbatim presentations of their textual analyses with accompanying images are provided.

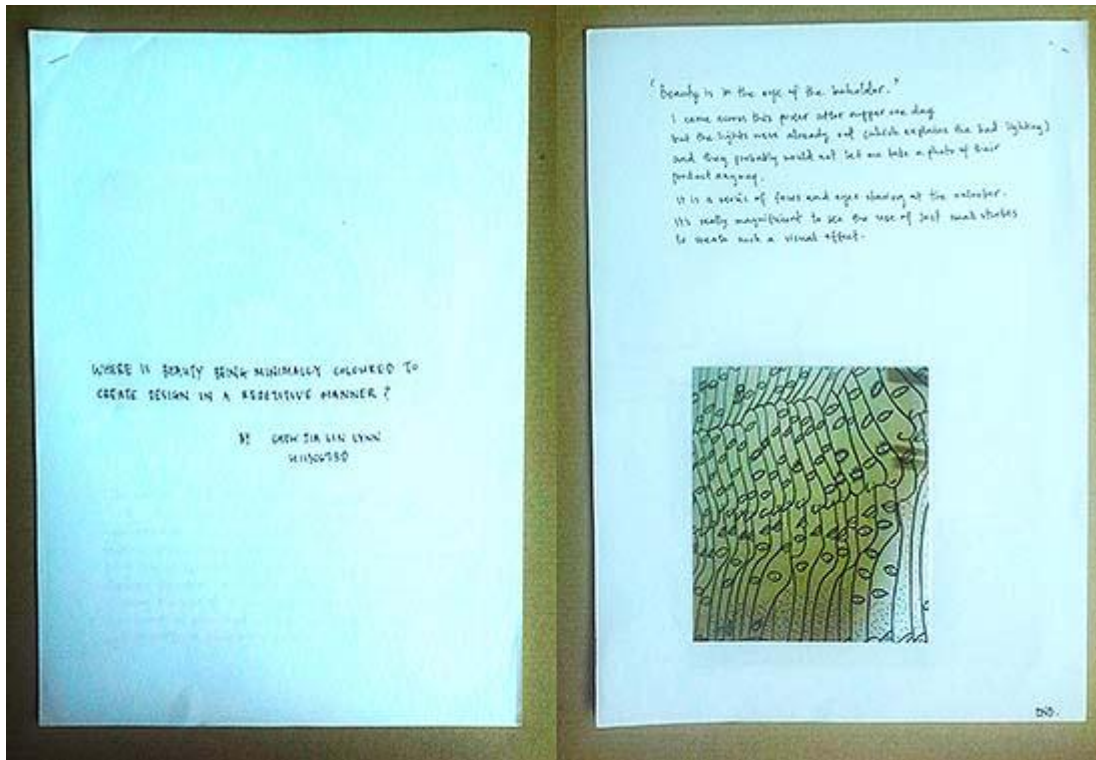


Figure 1.

A longhand approach from this English major for her report was surprisingly refreshing, especially when she purposefully arranged the text which describes her pictures in fashions that uniformly matched the text. Because the student initially was part of "Things Beautiful", she phrases her question as such "Where is BEAUTY being MINIMALLY COLOURED to create DESIGN in a REPETITIVE manner? Here are some of her verbatim reflections as reflected in figure 1: "Beauty is in the eye of the beholder. I came across this poster after supper one day but the lights were already out which explains the bad lighting and they probably would not let me take a photo of their product anyway. It is a series of faces and eyes staring at the onlooker. It's really magnificent to see the use of just small strokes to create such a visual effect."

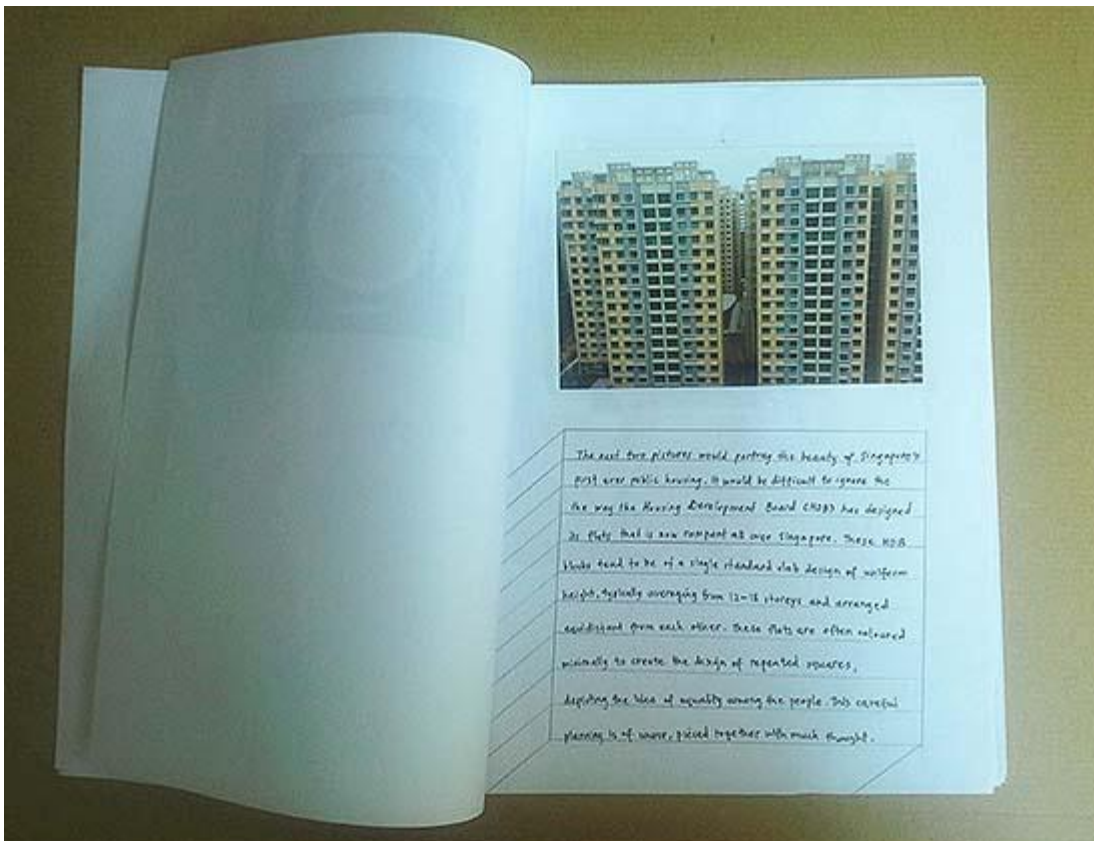


Figure 2.

Student's verbatim reflection:

"The next two pictures would portray the beauty of Singapore's first ever public housing. It would be difficult to ignore the way the Housing Development Board (HDB) has designed its flats that is now rampant all over Singapore. These HDB blocks tend to be of a single standard slab design of uniform height, typically averaging from 12-18 storeys and arranged equidistant from each other. These flats are often colored minimally to create the design of repeated squares, depicting the idea of equality among the people. This careful planning is of course, pieced together with much thought."

Analysis of the student's report:

What is unique about the report is that it was written reflectively, especially when the student highlights that the public housing in Singapore is a form of "careful planning" through design. Through this process, the student engages in a dialogue with herself through an observation of her surroundings. By engaging the student in a qualitative inquiry process, this assignment has created opportunities that lead to the interpretations of meanings. It has also allowed the student to question the mundane routine which is mandated and regulated in conventional academic practices through the process of discoveries that is artistic and individualistic. With an emphasis on aesthetical experiences, in addition to cognitive and intellectual endeavors, this assignment is supportive of the different ways each student learns as he/she sees the world in which they function in.

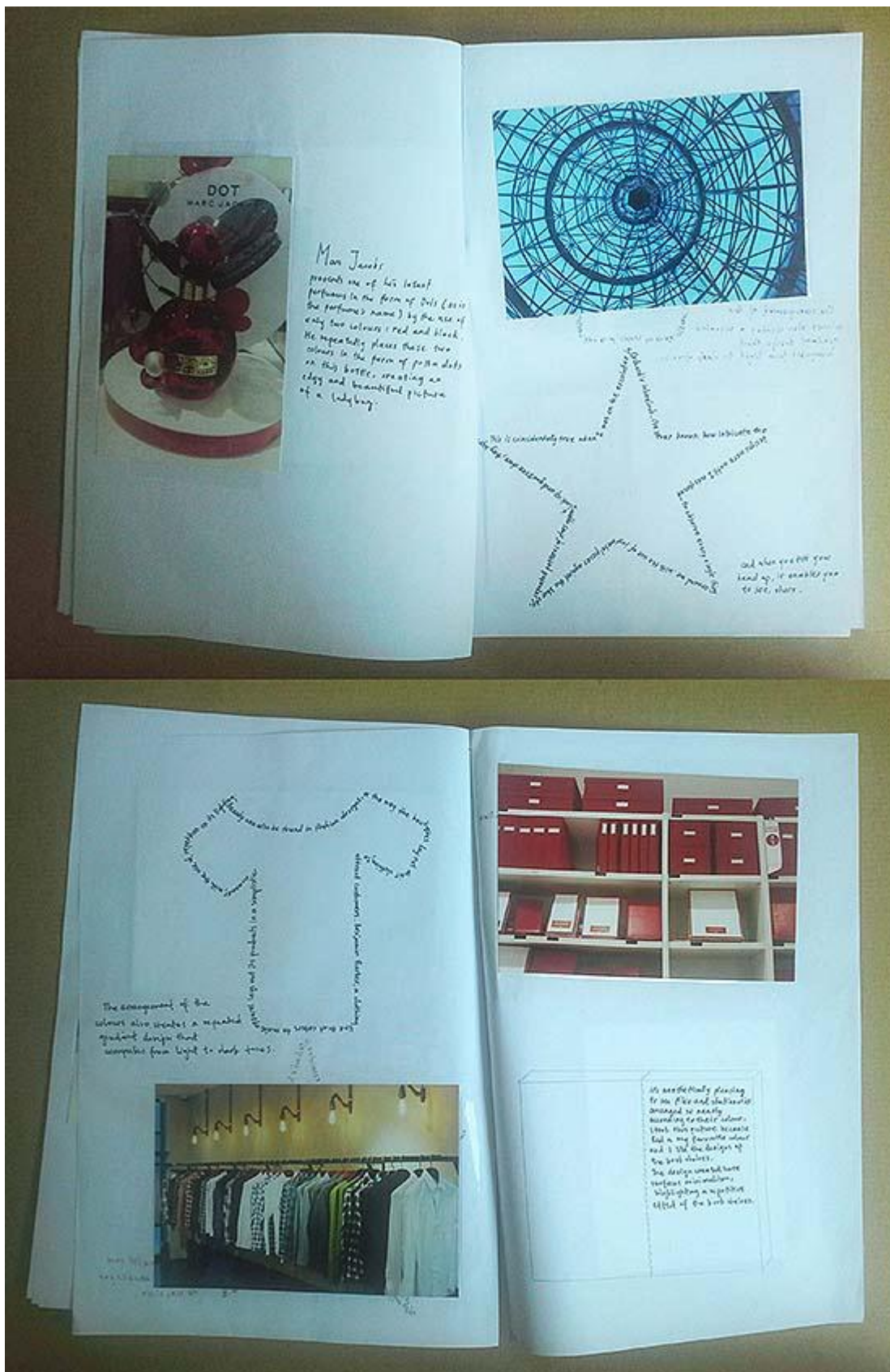


Figure 3.

Student's verbatim reflection:

“Marc Jacobs presents one of his latest perfumes in the form of Dots (as is the perfume's name) by the use of only two colors: red and black. He repeatedly places these two colors in the form of polka dots on this bottle,

creating an edgy and beautiful picture of a ladybug. I've never known how intricate the designs were until I was forced to observe every single thing around me. With the use of just metal pieces against the blue sky, repeated patterns of stars appear. Look up and you'll see stars, they say. This is coincidentally true when I was on the escalator in Orchard's Wheelock. It's aesthetically pleasing to see files and stationeries arranged so neatly according to their color. I took this picture because red is my favorite color and I like the designs of the bookshelves. The design created here surfaces minimalism, highlighting a repetitive effect of the bookshelves."

Analysis of the student's report:

A keen sense of observation is required and this assignment has provided an opportunity for the student to reflect. By her own admission, she has never noticed how intricate the design of a product (a perfume packaging that utilizes only two colors) as well as an architectural feature in a mall until she was "forced to observe every single thing around [her]." On a separate note, after being called an "experienter" as every student was addressed so in email correspondences, he decides to take a look at his living surroundings accordingly. According to Nathan Shedroff (n.d.), "while everything technically is an experience of some sort ... the elements that contribute to superior experiences are knowable and producible." This assignment has proven that one does not need "superior experiences" to experience an impactful experience. By relating "minimalism" and "a repetitive effect of the bookshelves," the student relates to her world by reflecting on objects around her which she has not paid much attention to in the past. By doing so, she has also related to a world created by others.

The following is a visual sample from a 2nd year communications studies major including her verbatim reflections.

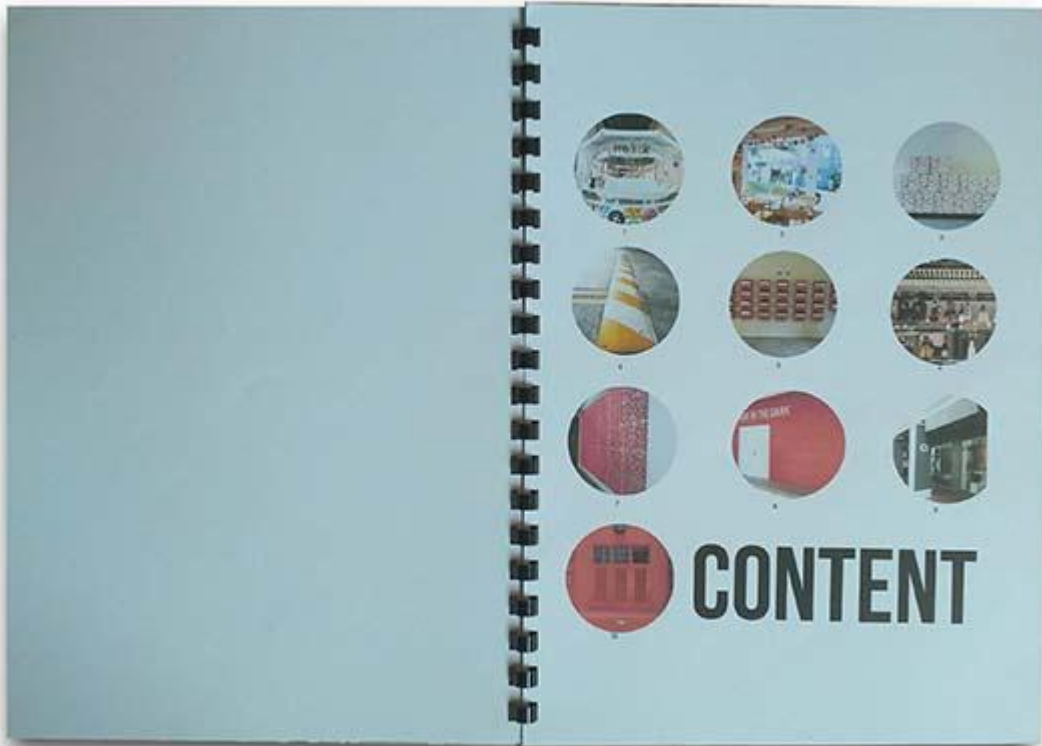


Figure 4.

In answering Where is MINIMALISM being BEAUTIFULLY REPEATED to create DESIGN in a COLORED manner?, a year 2 communication studies major presented her photos in a bound booklet as opposed to a totally handwritten report had the following to share in her report. Even from a presentation point of view, both formats are vastly different which mirror the individualized freedom afforded by the lack of top-down guidelines which can be strict and restrictive. Underneath each picture, her verbatim reflections are as follows:

Top left: "The above photograph shows the Frolick outlet at Bugis Junction. The circle shape can be observed repeated in this composition. A circle represents the "O" in Frolick, with polka dots within it, which are essentially repetition of circles. Circle with different graphics are also used in the bottom pane of the store. Lastly, the store structure is designed with circles as well, with 2 circular structures supported by three pillars. The minimal use of circular shapes creates an impactful design, along with the colors of the store. It's mainly white, and using colors only on areas where draw customers' attention is required."

Top right: "This is taken from the Little Drom Store, a quirky vintage store located in Ann Siang Hill. The main focus of this photograph is the decorations hung on the ceiling. Different shapes and colors are used and yet it is a minimal design, as it comprises of just simple shapes with clean lines. The shapes are repeated throughout the design and different colors are used to add a quirky feel to it, which complement the store's image. The decoration is also a minimal way to balance out the store design, preventing this area from being too bottom-heavy."

Bottom left: "This display of empty cake boxes is taken from KKI cafe located at Ann Siang Hill. Unlike how cake boxes are usually stored, they are constructed and repeatedly stacked on a shelf visible to the customers, instead of storing it folded and not within the customers' sight. KKI cafe uses their cake boxes as a form of product display and part of their store design. Functionality is minimally present in this way as they are able to present their brand name, create designed display and use the boxes conveniently when customers order cakes for takeaway, all at the same time."

Bottom right: "The above photograph shows a speed hump in a car park. It is designed minimally to serve its function of grabbing a driver's attention from far, informing them that there is a speed bump ahead. Diagonal stripes are repeated in yellow and white colors to form a simple yet striking design. Diagonal stripes how change from the straight lines on the roads and the colors present a great contrast from the dull cement roads. These minimal aspects of a speed bump increase the design effort for functionality. This concept is repeated and well educated across the country as well."

Analysis of student's reflection:

One of the main objectives of the course is for students to improve creative thinking that needs them to think "outside-the-box" as well as to encourage experimentation on topics related to their daily experiences. In comparison with the English major, the report by the Communication Studies student is more matter-of-factly and straight forward but more importantly, through these exposures, she discovers that her perception about a product, service or brand becomes impacted due to her daily interactions with them. While the assumption that everyone is innately creative and we just need the right environment, teaching or approach to unleash our creative potential is one of the driving forces behind the initial intention of the course, the only predictable outcome is that for experience to be part of learning, each student must be provided an environment encourage critical and flexible thinking, as well as having the right attitude. One has to be genuinely interested in "seeing" and to develop a sense of curiosity. When she commented on the decoration of the stores and shops she visited, especially how the different colors are used "to add a quirky feel" and how decorations with minimalistic "simple lines" which complement a store's image, she has started to see things and that is an important start to jumpstart the curiosity to notice even more things.

Discussion

It was observed that during class consultations, some students experience some difficulties in finding images that fit and answer all the categories (and the framework) accordingly because they do not necessarily understand how to make the connection between verbal and visual elements. Through consultation sessions, students learned that if they could let go their inhibitions and fears and to trust their intuitions to experience the unknown, they could see many possibilities. Their fear is liberated when students collaborated in groups and realized their individualized assignments. Collaborations are important, definable as a process of sharing knowledge and experience by interacting with others to maximize the results of an activity as well as expanding the knowledge of the individuals who were collaborating (Poggenpohl, 2004). Because the students are grouped into different categories, they also learn about various prescribed topics (A Colourful Experience, A Designed World, Repetitive Things, Things Beautiful and Minimalistic) that are purposefully kept generic. As a result, psychology majors present theoretical models adapted from their courses and shared them during their presentations to the whole class. Other schools such as Art, Design and Media students enlightened their fellow classmates with visual analysis of design principles.

The competition between groups especially those within the same category have contributed to the students' motivations as well as rivalry. Having multiple groups has allowed each group to interact with other groups for cross-checking purposes. This approach does have some unique advantages and costs. Perhaps the most significant advantage is that from sharing their group presentations, everyone learns from each other, which usually does not occur in a big class. Since the development of the course will extend over several semesters, any refinement and implementation shall be stand-alone phases for evaluation. This is a common approach used in businesses with large projects which means that the course will not be the same from semester to semester (Morrell, et al, 1993). However, the continuity from phase to phase will be closely guarded by the course lecturer to ensure consistency in achieving the objectives of the course, which essentially is about getting students to "experience." Students have at least, a general understanding of what the expectations will be and are very likely to assume that their concept of their finished assignments are based within the educational objectives of the course. Therefore, considerable emphasis must be on explaining the expectations and requirements which is based on continuous assessment in contrast with other courses that has a with a final examination component towards the end of the semester.

Conclusion

Catalysts for intellectual stimulation can come from a variety of sources and our daily experience is a valuable resource to tap into as a form of learning mechanism. Experience is a connection to all aspects of living as it simultaneously helps us to be in the moment. As we make connection and relationships with diverse elements, our experiences can act as a depository of "raw materials" that can contribute to the learning process in a personal and endearing way. The student's collective experience was interpreted and shared and as they change the perception of the world they live in, one experience at a time, they are also exposed to other learning outcomes--creativity, collaboration, team spirit, art appreciation, photography and crafting, just to name a few.

References:

- Barone, T. (2000). *Aesthetics, Politics, and Educational Inquiry: Essays and Examples*. New York: Peter Lang.
- Barry, A. M. 2005. "Perception theory". In *Handbook of visual communication: Theory, methods, and media*, Edited by: Smith, K. L., Moriarty, S., Barbatsis, G. and Kenney, K. 3–22. Mahwah, NJ: Erlbaum
- Csikszentmihalyi, M. (1991). *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial.
- Denzin, N. K. (1978). *The research act* (2nd ed.). New York: McGraw-Hill.
- Goldberg, V. 1991. *The power of photography*, New York, NY: Abbeville.
- Morrell, J. S., Freeman, J. L., Serrano, F., Mock, R (1993). *Journal of Applied Business Research* Vol 9, Issue 2, 141.
- Kim, Y.S. & Chung D.S. (2012). "Exploring the Current State of and Future Directions for Visual Communication Curriculum in the United States". In *Visual communication quarterly* volume 19, issue 3, 2012. Pages 134-147.
- Lester, P. M. (2010). *Visual communication: Images with messages*, 5th ed., Belmont, CA: Thomson Wadsworth.
- Moriarty, S. and Barbatsis, G. (2005). "Introduction, from an oak to a stand of aspen: Visual communication theory mapped as rhizome analysis". In *Handbook of visual communication: Theory, methods, and media*, Edited by: Smith, K. L., Moriarty, S., Barbatsis, G. and Kenney, K. xi–xxii. Mahwah, NJ: Erlbaum.
- O'Donnell, V. 2005. "Cultural studies theory". In *Handbook of visual communication: Theory, methods, and media*, Edited by: Smith, K. L., Moriarty, S., Barbatsis, G. and Kenney, K. 521–538. Mahwah, NJ: Erlbaum.
- Poggenpohl, S.H. (2004). *Practicing Collaboration in Design*. Visible Language. 38(2),
- Shedroff, N. (n.d.). Retrieved Sep 21, 2013, from <http://www.nathan.com/ed/>
- Shedroff, N. (2001). *Experience Design 1.1: A Manifesto for the Design of Experiences*. Experience Design Books.