<u>Introduction</u>

Visual communication, in the context of a marketplace at large, has little meaning or value except in relation to a client. Nonetheless, the two components, "visual" and "communication" denote that it is more than a business exercise. Primarily associated with two-dimensional images, the interdisciplinary field of visual communication engages different subject areas which converge to create communicational objects. For visual communicators, part of the challenge in a creative process has to do with working through the restrictions geared towards the reality of a marketplace. The designer creates a message or a solution for the client, who in turn, intends it for a specific audience. Critical to communicating is the need to make sense in a marketplace context. If the solution is predicated on satisfying a set of objectives, then the act of designing also implies some amount of control in creating aesthetical solutions.

Working within these constraints is a struggle in and of itself. In addition, expectations for a creative and aesthetically pleasing design solution must be met. Compromises are sometimes necessary. The result often fails to satisfy all stakeholders because it is chained to communicative interests, whether they function within economic, political, propagandist, or selfless agendas. Negotiating the various influences involved in the design process can be daunting for an untrained designer. Therefore, there is a need to develop an objective framework that captures both business and creative interests, which in turn, will help students of design. The extreme opposite model developed in this paper acts as a framework for students to perceptively generate visual ideas.

<u>The theory</u>

Depending on our purpose, a visual presentation is presented in relation to an intended audience. A designer is able to create many objects, interior spaces, exterior structures and visual messages by arranging and manipulating the component in

elements, characteristics, and interactions. We can create different forms to represent "literal," "abstract," and "symbolic" concepts (Bowers, 1999, p. 34). In presenting an object or idea in a literal way without ornamentation and exaggeration, the audience can understand the form in a simplistic manner. In an abstract representation, where "deliberate simplification [and] often with exaggeration" are utilized, difficult concepts or ideas can be depicted (Ibid, p. 34). A symbolic representation calls for the usage of symbols in translating complex technical information and highly abstract concepts.

As our society becomes more visual-oriented, imagery has become a powerful communication tool. However, the relationship between images and written words still exists. Mark Oldach (1995) agrees when he writes "the words within a creative communications solution are perfectly married to the image... In some cases the words lead the creative solution. In other cases, the images lead the message. Sometimes words and images are equal partners." (Oldach, 1995, p. 63). Words are used to verbalize our experience and the visual portion compliments the verbal message. In television and motion pictures, verbal and visual images are used in various sight, sound and motion-based platforms to gain our attention.

In the absence of pictures, words are used to conjure up images. Ingram (2005) suggests that humans have the ability to create visual pictures through words. If the brain is the theatre, consciousness is the play, he suggests. Because certain words can generate feelings as well as sensations of smell, taste, touch and related sounds, images are created in the "mind's eye." Images generated by verbal suggestions seem to carry with them more cross-sensory details than visual messages. This is evident in the aural medium of radio that strongly relies on the power of visual suggestions, where advertisers build commercials around interesting sound effects and voice-overs.

According to Bowers (1999), categorically, all visual form is comprised of three basic components: elements, characteristics, and interactions (see figure 1). The elements are comprised of dots, lines, planes and volumes with differing characteristics

2

of size, shape, texture and color. Elements and characteristics influence each other as they interact in position, direction, and space (Bowers, 1999).

In the discipline of visual communication, solutions to design problems involve collective efforts and interactions in many areas. As cultures evolve, it becomes increasingly difficult to master one or more domains of knowledge. If specialization is favored over generalized knowledge (Csikszentmihalyi, 1996), we need new and creative ways to confront our problems. Finding solutions requires more than just a good amount of attention and efforts. According to him, creativity is "an act, idea, or product that changes an existing domain or that transforms an existing domain into a new one" (Csikszentmihalyi 1996, p. 28). Creativity is influenced by three components: i) domain, which consists of a set of symbolic rules and procedures with its internal logics which exposes the individual in order to be creative; ii) field, which includes all the individuals who act as monitors may validate or repudiate a new idea or product; and iii) the individual person who has a new idea or sees a new pattern. To him, one's ability to create is the result of an interaction among person, product and environment.

If one's ability to express is governed by factorial and contextualized concerns, then the key to creating a truly, focused and appropriate idea is not singularly dependent on creativity alone. Innovative and effective work may result from controlling every step of the creative process because every internal and external domain can determine the outcome of the solution. Visual communicators establish a balance of presenting visual and technical information by using various media and technical know-how to develop visual ideas. The practice and process of design is oriented to reality within client acceptance which explains why the field corresponds to market demand. In this collaborative effort, a visual communicator is not just a producer of a body of works and ideas but also one that expresses their place in the marketplace. The client that commissioned the work is a component of the context for which the designer happened to be participating. From the clients' standpoint, the solution has to be perceived in

actuality as it cannot be guessed at. Design ability, business acumen, ethics, the ability to communicate effectively and deliverance were tested.

This paper demonstrates a framework for students to translate ideas via proposed models with components of composition, content, and context. The next section provides a basis for developing and evaluating visual ideas in a model of visualization that consists of composition, content, and context. Creative design aspects are maintained yet the model provides ways to stay connected and relevant for the contextual requirements of the marketplace.

<u>The visualization model</u>

This paper proposes a new model for visualization that builds on Bower's model of basic visual components (Bower, 1999) as one of the component in the proposed model for visualization. The relationships between each component are studied and identified.
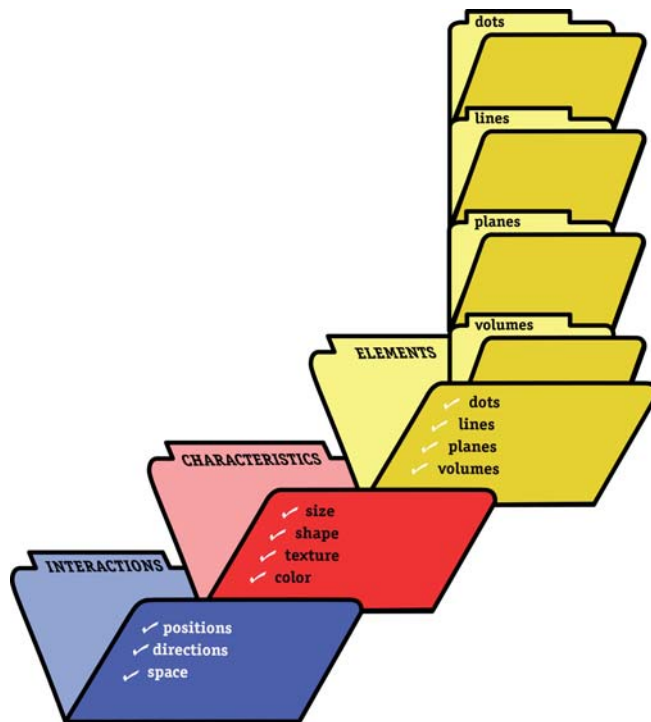
Figure 1. Bower's basic visual component reinterpreted into the model for visual form.

Composition

Composition is an arrangement of components, parts, or elements to reach a solution. In applying Bower's model to composing (Ibid, p. 33), it is a three-way causal effect between i) visual elements [dots, lines, planes, and volumes]; ii) characteristics [size, shape, texture, and color]; and iii) interactions [positions, directions, space] (See figure 1). They are interdependent to provide a deterministic understanding for effective communicational strategies. However, the measure of one's ability to present his/her idea relies on a continual process of assessment, refinement, elimination, selection, and production. Every interdependent step provides a deterministic understanding where visual skillfulness and technical proficiency are combined for effective communicational strategies.

Content

If elements in design can be understood as visual ingredients where dots, lines, planes, volumes, with different characteristics in size, shape, texture, and color, interacting in different positions, directions, and space, "content" is basically what and how things are put together. In choosing the things combined to produce a message, students have four options: i) image only; ii) text only; iii) dominantly text and submissively image; and iv) dominantly image and submissively text.

Context

Formation of ideas generally manifest in our minds. While it is possible to explore many options as we visualize, focusing on the objective is important to give the campaign a sense of direction. When making a conscious design decision, the purpose or why it is done the way it is done must be answered. Ambiguity and expansiveness in design possibilities can be made clear if we follow a path that provides insights into the function and purpose of a campaign. Such parameters are not limiting, but liberating because the students are aware of what is expected. Within this limitation, they are encouraged to expand with some set parameters that consciously guide their every decision. Because visual communication profession is a complex blend of functions and objectives, the "context" becomes a decisive factor in determining the outcome of a design.
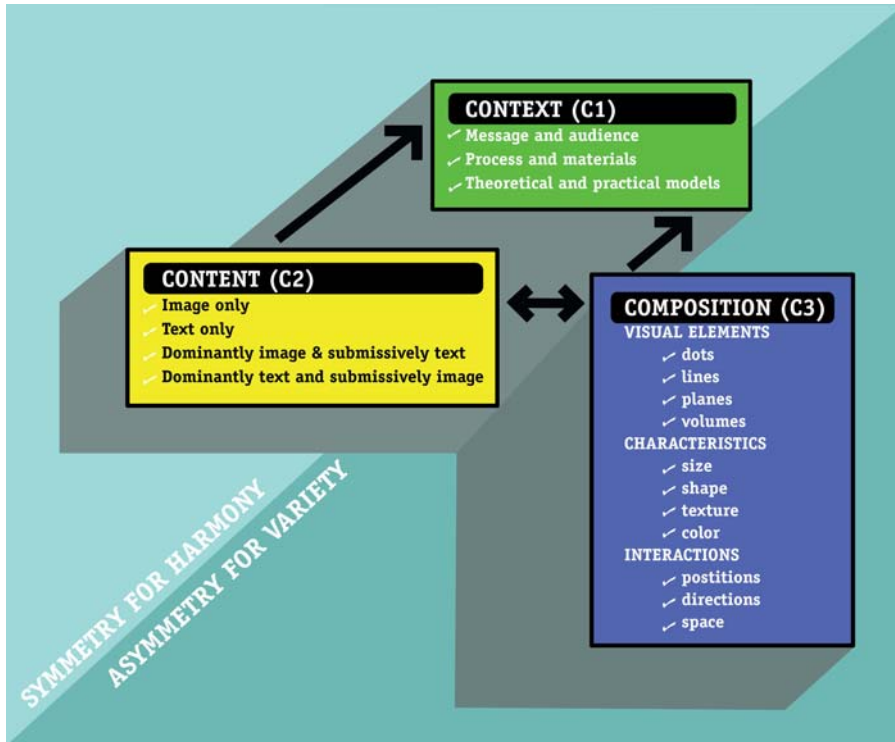
Figure 2. The visualization model.

The model for visualization has three interdependent domains: Context (C1); Content (C2); and Composition (C3). There are four options in visualizing the Content (C2): i) image only; ii) text only; iii) dominantly image & submissively text; and iv) dominantly text & submissively image. The choice for one of these four in turn, iteratively depends on manipulations in the various components found in Composition (C3): Visual elements; Characteristics; and Interactions to provide a sense of direction for a solution to appear.

Both Content (C2) and Composition (C3) are interdependent, as indicated by the arrow in the model, to serve the Context (C1) where: i) message and audience; ii) process and materials; iii) theoretical and practical models are considered. The

relationship between Content (C2) and Composition (C3) is iterative but the relationship between Context (C1) and the other two (C2 and C3) is linear. In considering the requirements of a marketplace, the Context is not changeable but within Content and Composition, there are many exploration possibilities. Therefore, by focusing on Content and Composition, many design ideas may be discovered. However, by concentrating on Context (C1) alone, the focus is clear as an objective or as a direction for generating ideas.

To illustrate how the visualization model works, it is best described by using the visual element of "lines" in "Composition." Lines can be derived from the nature, geometry as well as abstract forms. It is one of the most basic elements of art, made of many dots (C3's visual elements) closely positioned together that extend in two directions (C3's Interactions: positions and directions). Lines can be vertical, horizontal, diagonal, curved, or zigzagged (C3's Characteristics). In applying the extreme opposite model on lines, any of the three components in C3 can be manipulated, for example, long versus short lines, enclosed versus open space, rough versus smooth texture, curved or straight visuals in a wide open space with textured planes of a layout surface.

Another describable example is when color is used with the extreme opposite model. Colors can create the mood in a composition. Apart from the three primary colors of yellow, red and blue, second and tertiary colors form a color palette. Analogous colors are defined as three to five colors that are adjacent to each other in the color wheel. When complementary colors, defined as opposite from one another on the color wheel, are used, contrast is created. They do not share common colors but they provide high contrast for emphasis. From light-dependent additive system of coloring found in television screens and monitor displays, to the subtractive system based on mixing of color pigments, the "eye of the beholder" depends on how they are presented, from cool colors in contrast with warm colors, to safe and neutral colors such as beige and white. Depending on the Context (C1), colors used in art and design are often inspired by

popular culture and consumerism, found in advertisements, product packaging, comics and mass-produced decorative objects.

<u>Symmetry for harmony and Asymmetry for variety</u>

The extreme opposite model of "Symmetry for harmony" and "Asymmetry for variety" exists independently outside of the model as a reference point for Context (C1), Content (C2), and Composition (C3) as two differing but co-existing factors in creating visual forms.

Symmetry for harmony

 Figure 3. Symmetrical balance.
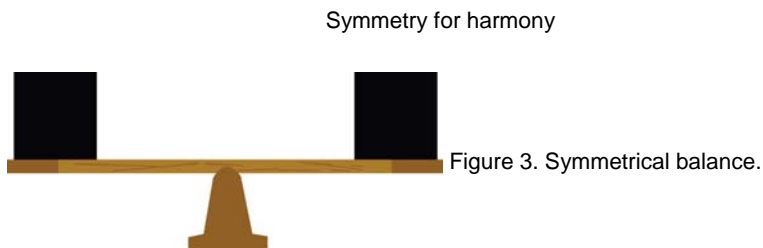
In creating "Symmetry for harmony," various elements in a composition can be organized in distinct and predictable rhythms by means of repetition which can result in a balanced and formal presentation. Due to the centrality in symmetry, this form of presentation can be predictable, dull and uninspiring. As an observed example, notice the continuous floor tiles in the "Peranakan" (Straits Chinese) architectural style commonly found in traditional buildings in Malacca, Malaysia (see appendix A).

Asymmetry for variety

 Figure 4. Asymmetrical balance.
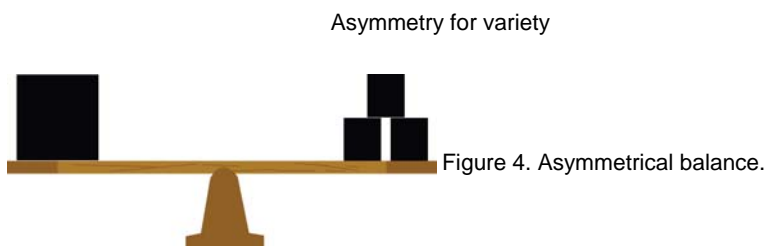
This option is best used for creating contrast. Asymmetrical compositions tend to suggest "drama" and "tension" as they are dynamic. A sense of movement is created by misbalancing object placements. Though unequally weighed, both sides are balanced, resulting in a dynamic and dramatic presentation. This is demonstrated by the collection of iPod posters in a picture shot on Market Street in San Francisco (see appendix B). By varying the directions of the silhouettes and the blue-colored shapes in the background, a sense of movement is suggested. These human forms are further fashioned into two identifiable genders, dressed to suggest a certain lifestyle. Similar to the tiles in appendix A, repetitions of identifiable elements in a design composition result in a traceable pattern which ensures recognizability.

This research seeks to understand how junior advertising students understand and apply visual skillfulness in translating their verbal ideas into visuals where apart from aesthetically-pleasing and creative requirements, the solution is inherently bound by the requirements of a marketplace. It serves the purpose of this research to find out to what extent has the proposed model of visualization with two co-existing factors of "symmetry for harmony" and "asymmetry for variety" helped the students in realizing their two-dimensional media campaigns. This is particularly important in integrated marketing communication (IMC) because inconsistencies can lead to misunderstanding and ambiguity can tarnish the effectiveness of a designed message.

Methodology

Junior Advertising majors in a communication school from a major Singapore university were tested in a course entitled "Advertising Creativity and Copywriting." The objectives of the course include learning visualization skills and creative writing for advertising as well as for other aspects of integrated marketing communications. For the past two years, these students were exposed to communicational models in public relations, marketing, issues management and media planning. This course prepares them

for creative processes such as designing advertisements for print, broadcast, outdoor, and other media with focus on how to develop creative thinking skills, copywriting, design, layout, and production methods.

The study concentrates on classroom observations with the research taking place in classroom settings where the students and professor meet weekly. The campaigns require them to consider a wide range of alternatives to reach a desired and effective end result. Depending on projects assigned to them, the time frame can last anywhere from three to four weeks. Due to the size of the class (n=34), smaller discussion groups of five students per group are formed. The interactions become necessary for them to observe other peers' ideas as well as self-reflection as they look inward to find their own strength and weaknesses. A smaller and livelier group may help to develop interpersonal skills which can influence the way they function in a larger context.

Mock projects with relevance to visual forms and economic contexts are considered in order to help them understand and develop visual skillfulness where looking at a design problem comes from a client's perspective, not just their own, Students were handed a brief which basically outlines the background of the project, the tone of voice, target audience, assessment components, deadlines, deliverable formats, etc. While they can freely explore ideas, they are required to fulfill an objective with predetermined conditions and rules that fulfill the demands and standards of a market-driven field. In developing and honing the knowledge and skills necessary for the creative aspects of communication campaigns, it became necessary for them to understand the role of design as a manageable process. There are mainly two obvious divisions in the process of design: idea generation and idea execution.

They are required to conceptualize, develop, and complete projects that require development, articulation and implementation of ideas in the following three areas that will contribute to the design process: i) the first category deals directly with the

formulation of concept, composition, goals and design direction; ii) articulation and translation of those constituents; and iii) relevant ways to implement articulated ideas into visual imageries. Overall, they deal with: i) the processes involved to achieve the end result; ii) the message that needs to be communicated; iii) the stakeholders in which the message is intended; and iv) the medium used to carry the message across.

There are two components to the 4-hour course that lasts for 13 weeks per semester. The class is structured into two separate sessions: lecture and tutorial. Each week, roughly two hours are sectioned for PowerPoint lectures where they are shown how advertisers create new levels of engagement in crafting their messages with focus on the manipulation of the elements and principles of design. The remaining time for tutorials, a hands-on mode of guiding the students through their learning from the second week onwards. In further fostering the idea of creativity, the students are encouraged to create many ideas during their tutorial sessions where their ideas undergo explorations, refinements, elimination, selection, and execution. From weeks 1 – 3, compositional skills are instilled via lectures, starting with the introduction to the idea of "creativity," with its relations to advertising.

Weeks 4 – 8 are about content development. As a dialog with the audience, advertising messages must be able to attract, inform and induce a change in attitude. In designing to communicate, they visualize their ideas for radio, TV and print campaigns through thumbnails. The likelihood to accurately convey a message from a sender to the receiver is increased if the appearance of their ideas is taken into consideration. This is where the functions of elements and principles of design are discussed in both lectures and tutorial sessions. Visual components for crafting the look and feel of a campaign are stressed in relations to advertising. Typographical elements necessary for print medium are shown through software programs such as Adobe InDesign and Photoshop. Lectures about agency structure, market research, and campaign planning cycle as well as various media options are also discussed. In preparing them to face the realities and

expectations in advertising, they are exposed to client and creative briefs that contain objectives, target audience, tone of voice, deliverables, and other requirements as a basis to plan, develop and execute their campaigns. These are describable as "context" in the model of visualization.

Understanding the design process is critical since verbal messages are made clear through a visualization process. From weeks 4 – 8, these students focus on content development with exposures through lectures for different approaches to radio, television commercial scripting as well as writing for the print medium. The relationship between text and image is discussed and assessed through campaigns found in design reference books and relevant websites. In television-writing, the engaging power of sight, sound and motion are highlighted in presenting a contrast to the two-dimensional aspect of the print medium. Organizational structuring such as hierarchy through headlines, subheads, body copy and tagline are realized in a magazine advertisement. Aspects of IMC such as guerrilla advertising, ambient media, poster, newspapers and the internet are also discussed.

In raising the awareness of social responsibility in an ever-changing marketplace, the students are exposed to case studies from weeks 9 – 11. The remaining two weeks, 12 and 13, are slated for portfolio preparation where the students are expected to package their documented design process from the beginning of their campaign to the final product into a presentable portfolio case. As an applied field, it is the intention of the course to provide students with skills that prepare them for graduate employment.

<u>Findings</u>

During the initial stage, their conceptual sketches or ideas evolve into further refinements. They visualize their ideas through thumbnails as very quick, loose drawings. Thumbnail sketches should be drawn small and quickly as it is a form of tentative drawing that represents their ideas. By recording what they "see" mentally, they can work through

ideas without worrying about making mistakes. While they may appear messy, the idea is to help the students to record, plan, and remember their ideas. The goal is to explore as many options as possible before narrowing it down to a selected few. Throughout the semester, they have been advised to keep a process notebook so that they can visually document their thoughts and learn to appreciate the design process.

The students find it helpful in narrowing their options due to the dualistic approach of "Symmetry for harmony" and "Asymmetry for variety". Because the outcome is dependent on the interactions between the three C's, many possibilities can be explored by means of manipulating two of the three C's, namely Content (C2) and Composition (C3). With the extreme opposite model, although the options are dictated by the requirements in C1, the students are able to verbalize their ideas. Producing the visuals, however, is a different situation all together for most of them. Hence, to tackle problems associated with visualizing their ideas, they are encouraged to begin with simple geometrical and organic shapes, as well as stick figures, where applicable in their initial sketches. As they continue to refine their ideas, more details such as form, color, and texture are added and refined. Unexpectedly, the visualization model has become a reference point for those who are not able to visualize their ideas as the students find it helpful to relate to the elements, characteristics, and interations necessary within a composition.

To maximize the "Symmetry for harmony" and "Asymmetry for variety" models, chosen campaigns are oriented towards answering a single-minded proposition (SMP). Their first campaign's SMP is about changing the public's perception: How to overcome the psychological barriers of consuming reclaimed water aptly named Newater? They need to demonstrate through an outdoor poster campaign how Newater can be incorporated into Singaporeans' daily lives as a reliable source. The target audience is primarily, the general public across all age ranges who are skeptical about consuming reclaimed water. Their poster campaign is a good match for the study due to the fact that

this is the first advertising class where text and images come together as a tabula rasa in exposing the students to visualize within the contextual requirements of a marketplace.

How they approach and apply appropriate methodologies in crafting the message become their main concerns. Table 1 shows the four different visual options in content development pursued by 34 students enrolled for the course. Only four students managed to create image-based posters without any text to get the message across. Refer to appendix C for "Image only" visual solution. Alphabet-based logos and trademarks are not considered text in this study. The brief explicitly dictates that the appearance of text, if any, such as a call to actions to a website or phone number should be minimally used. Nonetheless, the majority of them, 28 students or 82% of the sampling relied on some form of text in the design (see appendix D for dominantly image and submissively text and appendix E for dominantly text and submissively image). Together with images that dominate the layout and varying degrees in the size of text that appear as headlines, sub-headlines, and slogans, they tried to show that "a picture is worth a thousand words."

Table 1. The four different visual options in content development.

CONTENT	NUMBER OF STUDENTS
Image only	4 (12%)
Text only	0 (0%)
Dominantly text & submissively image	2 (6%)
Dominantly image & submissively text	28 (82%)

Visual skillfulness is not the only challenge as the students expressed their concerns of not having relevant or professional equipment and the proper technical know-how to carry their idea through. Collaborations are allowed as most of the students are inexperienced with rendering images. For those who opted for digital photography, the

convenience of image manipulation through Photoshop was a clear motivational factor whereby they experimented with filters, layering, coloring, size manipulation, and so forth. Although they had been exposed to photojournalism ethics where the cropping of pictures is discouraged because it may alter the content of a story, visually communicating these altered images presented them with new possibilities to bend the rules when necessary. In order to grab a viewer's attention, exaggerated, absurd, eye-fooling and mind-bending visuals are allowed, as long as the manipulation effectually serves the context. Others find that stylized illustrations can evoke sentiments as well as presenting complex information that is otherwise not as feasible and effective with photography. Others find issues of personal management of time and the ability to adapt to changes and uncertainty as issues to overcome.

<u>Discussion</u>

When imagination is combined with knowledge and technical capacity, students are stimulated to support free play and manipulation of objects and ideas. They produce tangible advertising campaigns based on models of visual form and visualization. In general, during brainstorming and presentation sessions, most of these undergraduate students are reserved in expressing their opinions publicly. When asked, non-committal terms like "I like it" or "interesting" are commonly heard. Such terms truly rely on how it can be further extracted into more objective comments.

In training the students to be visual thinkers, it is imperative that they face visualization as a visual grammar, much in the spirit of academic writing. As the class progressed, the capacity to conjure up imagined characters, plots and storyline verbally is an easier task in writing but largely inhibiting in visualizing. If academic writing has been a key concern in academia, more so in a communication school, what the course revealed was a lack of prior practice and adequate guidance in expressing ideas visually.

Communicating visually can feel like a strait-jacket for most of them. Designing is likened to the experience of walking a tightrope between presenting an aesthetical and viable solution. The class would as with my previous students in the United States, skip visualizing on paper and head directly for the screen, missing the entire possibility to freely explore without any restrictions. Visualizing one's ideas quickly and easily with a pencil or marker is preferred but a situation arises in the classroom when a number of students worry about the later production process. Instead of the message being driven by the solution, they are more concerned with the means of production to achieve the end result. This is due to the lack of confidence and motivation as well as ill-acquaintance with design conventions and software knowledge. A viable solution is to have an early kick-start of assignments.

They are not entirely to be blamed. The computer has a tendency to expediently produce an end result and students who worry about the later production create an interesting approach because in their struggle to achieve the most effective solution for their design problems, they think with the final product in mind. This mode of problem finding (Starko, 2001; Wake, 2000) is probably due to the fact that by realizing that problems do exist and by thinking with the end in mind, some form of solution can be achieved. However, the design process is not just a simplistic two-phase idea generation and production stage, but within it lays many facets, obstacles, and factors that transcend the surface value of a design process.

Success and failure will be judged, at least in part of the students' abilities to provide a solution. Although the campaign is based on existing companies, it is, nonetheless, an artificial problem created for students to base their learning on how to turn their ideas into a visual solution. In the absence of a real project the essence of context may be elusive. Newbury (1997) discovered in his case study that the National Diploma photography students faced the same question and were focused on the technicality that students find it difficult to engage in critical practice.

As researchers, we have been trained to live with uncertainty but as I discovered, the grade-driven educational culture in Singapore caused university students to focus on attaining good grades instead of acquiring knowledge. Students discovered that communicating visually was so technically mediated that they find it challenging when asked to consider issues of socio-economic context. If so, it behooves us to acquire not just educational knowledge, but also knowledge of ourselves, of other people and the society in which we function. These interdependent frameworks require the students to be aware of not just the proposed solutions, but also perceptions and discoveries that can work creatively in a wider context.

Strauss and Corbin (1990) claim that one can draw from his or her professional experience which can result in a richer knowledge base and insight to draw upon. However, they warn that the same experience can also block one from things that have become habitual. It is entirely possible that some students operate in a different thinking mode that does not fit into the models offered. The models are by no means conclusive as they are made out of frameworks in which the design processes are closely tied to service-oriented and market-driven contexts.

This study does not involve analyzing or predicting specific tasks of computing technology nor does it seek to analyze or predict human mentality on creativity. This paper seeks to implement objectivity through distance and limited involvement. This research depends on an uninterrupted design development process where students have accessibility to both computer software and hardware within or outside of the university campus. It is important to report that I cannot document what exactly goes on in the students' minds as they think of ideas during the ideation stage, but their ideas are documented in the process notebook which is a collection of ideas from initial sketches to final visuals.

The information itself is characteristically derived from participants and their interpretations are reflective in nature. Furthermore, the field of visual communication is

constantly changing. Therefore, theory itself is subjected to modification and reformulation.

As practice will always be undermined by theory, this paper proposes a conjectural knowledge to a practical problem faced in a communication design-related classroom. Conducting this research with only one class is a small sample. Future research should aim to develop and refine a model with students in multiple classes. It should also include the expansion on how creativity can be used to enhance a visual message, different models of teaching visual skills, and cross-disciplinarian studies that include marketing, history, science, sociology, and contemporary issues can be used to enhance visual learning. Cottrell (2001) suggests that in addition to ongoing learning developmental needs, skills modules, and peer support, a culture of mutual responsibility for learning needs to be established. It is important to understand the students' perspective in terms of what they think is learning. Conceptual visualization while investigating one's personal approach coupled with the principles and elements of design to develop visual vocabulary can build one's critical, analytical and perceptual skills. The extreme opposite model acts as a framework for the students to compare and contrast.

This suggests that educators have to take on a role that fosters the growth of strong personalities with self development and independence to cope with change. As an active participant observer, I am immersed in a "live" teaching and learning environment to understand how the design process takes place. The concept of duality is intertwined as it creates an intimate relationship between the seeker and the knowledge. I seek refinement and adjustment to the models as I continue in assessing them as communicable devices which enable the students to visualize their ideas.

The challenge to encourage class participation is evident. In developing self-reliance for those who are not ready to take on autonomous roles, an unconventional way of delivering the curriculum must be developed. It is important to provide a supportive environment that rewards the students for making mistakes instead of punishing them.

The model has interdependent frameworks which require the students to be aware of not just the proposed solutions, but also perceptions and discoveries. In the end, it is about the student being presented with different options in assisting them to make an informed choice for themselves.

A learning environment that promotes skills and personal development can be enhanced if the teacher-student ratio is kept to a manageable size. In widening the curriculum to include cross-disciplinary design knowledge of human factors, students can see the relevance of advertising in serving a wider context. With the benefit of hindsight, might another solution have been preferred, one may ask. From my perspective, it is between what works and what does not.

<div align="center">Conclusion</div>

In the absence of real clients with issues, doubts, budget and time constraints, students are unable to see a larger picture in a hypothetical classroom situation that mimics a professional studio. By incorporating personal experiences, alongside functional approaches in teaching, a more holistic learning experience can be achieved. In allowing students to reflect on their own by using the extreme opposite model as a way to supplement their problem-solving skills, 82% of them are able to communicate visually and this is achieved through guidance in tutorials, brainstorming, as well as remedial and prolonged supplementary support. When searching for a design solution, part of the exploration involves uncertainty in the process but what guides us is a collection of our beliefs and values.

The extreme opposite model is a way for students to reflect inwards by pulling resources from research and their experiences in life. By allowing the students to delve internally by seeking their intuition and experience, they formulate a perspective for their own conceptual-theoretical framework. Students are not just producers and consumers; they are also learning how to visually present their ideas as they recognize it by taking on

the role of researchers in their own right. Academically, it constitutes an educational method in which learning takes place through critically examining and rationalization of thinking.
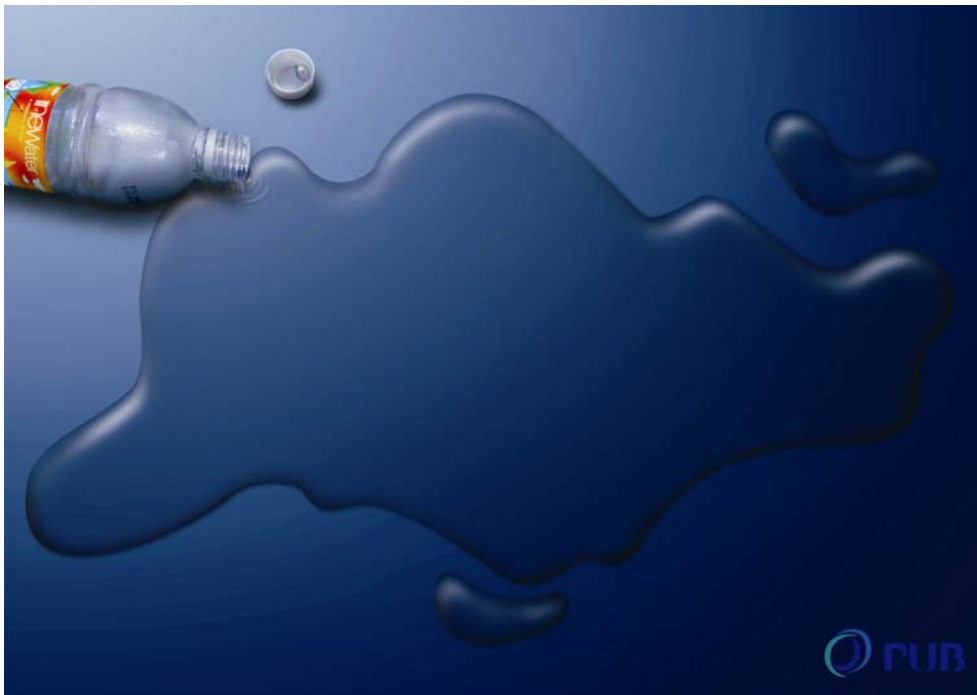
APPENDIX

A. Floor tiles in the "Peranakan" architectural style.

B. A collection of iPod posters from Market Street in San Francisco.

C. An example of image-only visual solution.

D. An example of dominantly image and submissively text visual solution.

E. An example of dominantly text and submissively image solution.

Most people don't think much of recycling. But we've done all the work so you can enjoy clean, crystal clear water wherever you are. Using advanced purification technologies, NEWater is now a part of Singapore's daily water consumption. So the next time you visit the restroom, think of all the water you'll be saving.

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