

How to Create the Value of a Concept through Formulating the Inter-Dependant Variables (IDV) and the Dependant Variables (DV)

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Abstract: While teaching the students, I familiar that the students are generating a concept based on analyzing the researched information. But there is no effective method to characterize the value of a concept for connecting the receivers and the message. Therefore, I created this design methodology for formulating the value of a concept. The designers consciously create a tangible property with an appropriate concept and visual attributes so that ultimately its message can communicate clearly to the viewers and affect them either attribute their decision or remember the intension of a message. The concept is expressed with the visual information and the verbal information through the visual forms. If the concept is not related to the target's needs and desires, then it is considered a weak concept. Therefore, this design methodology defines the values that the viewers could respond. This design methodology is based on the statement, "The Dependant Variables are interchangeable variables that support the Inter-Dependant Variables and the Inter-dependant Variables are co-dependable variables that closely relate to the topic and the concept." The Dependant Variable (DV) is a variable that describes the feeling and/or action. The Inter-Dependant Variable (IDV) is a variable that describes the qualified issues of a message. To create an appropriate concept, first, decide the target and subject matter for the design. Second, generate the IDV and DV then correlate and learn a variety of IDV and DV relationships. Third, based on the second step, determine possible concept directions. Fourth, define the purpose of design, design effects, and concept. Fifth, finalize a concept and design direction.

Key words: Inter-dependant Variable (IDV), Dependant Variable (DV), Topic, Design Concept, Design Direction

1. Introduction

As a professor in the Graphic & Package Design at the Hanyang University, I teach design theory and methodology associated with making appropriate design for the appropriate target and client. Graphic design is always explained in a physical property that images and words are working together within a frame or boundary, but there is less opportunity to explain the process of concept.

To understand the design theory means one can consciously control the visual language appropriately. The visual language can be learned through implicit and explicit design education.

I always strived to develop a teaching methodology that can help the students to understand how experimental design and practical design are related and how to utilize them in their creative juice. Based on my professional experience, I provided what doesn't work and what does work to students during critiques. American designer

Zuzana Licko says, “However new meanings must be linked to existing ones. Even that design which “pushes the envelope” must build upon existing preconception.”[1] This design methodology examines links between a subject matter and other existing ones. But without my guideline, they will be lost due to their limited design experience and knowledge. I always try to formulate a design methodology and process so the students can have clear instruction.

Design programs are the interface between the aspirant and the profession [2]. Students begin their university education with no knowledge about graphic design. All students are infants in our profession, graphic design. Like infants need special care and direction, I nurture them until they become mature enough for making own decisions. They all have a dream to be a professional designer, even a great designer like Saul Bass or Paul Rand. To be a designer, they must achieve the basic design and technology skills. To be a long term designer, they should know how to find a strong concept and portrait that concept into an influential design work. To educate these infants, I estimate their design skill level and compare them to the professional design standard. I never give them negative feedback first but rather I encourage them first then show them how they can improve their design skill. As always I believe inspiring their creativity will benefit their design education.

This design methodology assisted their conceptual skill and how to translate it to the visual form. There are many ways to develop a concept. This is one more effective way to developing a concept and I believe it is never enough to know more ways to solve the problem.

2. Assignment Overview

The following assignment was given to senior level graphic design students at the University of North Texas in summer 2001 and to graduate students at the Hanyang University in fall 2002. At the University of North Texas (UNT), I taught this design methodology in a class called “Experimental Design.” Figure 1 shows some of students’ works from UNT. It was publication design assignment based on my design methodology, “Creating the Value of a Concept.” The examples shown in this paper to demonstrate the student process are done by the graduate students from Hanyang University. Class is called “Communication Design Workshop.” It is a poster assignment based on same design methodology. (See Fig.2) This shows that “Creating the Value of a Concept” design methodology can be utilized on different types of design.



Fig.1 Students’ works from UNT

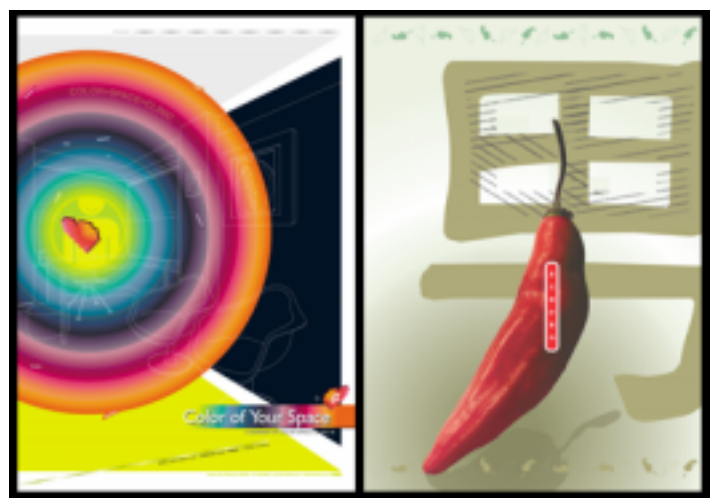


Fig.2 Students’ works from Hanyang University

During intense 16 week semester, students will learn to explore concept and design. First five weeks, they researched information for the related topic and formulated design directions. Week 6 thru 10, they translated the concept to an appropriate design solution. Week 11 thru 15, they organized a poster exhibition and finalized poster design.

The format for this assignment is 594mm x 841mm (A1 size). The final poster design is produced using CMYK inkjet output method. All posters are printed vertically. Then mounted on a panel and framed with aluminum frames. The final poster design should be ready to be hung in the exhibition. There were 22 posters shown in the exhibition “22 Conscious Poster Designs.”

3. Assignment Objectives

The following assignment has two pedagogic objectives.

1. The study of the concept as a major influential element within a design process that the students understand the concept is based on relating other human qualities.
2. The study of selecting and controlling the visual elements and words within the frame of a concept that the students understand the individual visual element should convey the intended message.

4. Methodology

Years of teaching experience, I found that students are having more fun doing experimental designs and fun can be lead to knowledge. But they must know the rules, practical design before this. Therefore, I introduce this methodology to upper-level students only.

This design methodology is based on the statement, “The Dependant Variables are interchangeable variables that support the Inter-Dependant Variables and the Inter-dependant Variables are co-dependable variables that closely relate to the topic and the concept.” There are no single design element, verbal and non-verbal, works by itself in the given layout system, therefore this methodology does not include Independent Variables. All variables should contain the intended message, and Independent Variables interrupt transmitting the message to the target.

The methodology of this assignment is divided into two major levels. The first major level, called “Connection” has two phases, “The Dependant Variables (DV) are Interchangeable Variables that support the Inter-Dependant Variables (IDV)” and “The Inter-dependant Variables (IDV) are Co-Dependable Variables that closely relate to the Topic and the Concept”, and the second level, “Design Direction,” has one phase. (See Fig.3)

In the first level of this assignment, I established the definitions that the students should closely acknowledge the key words for the design methodology. I overviewed class requirements and assignment objectives so that they

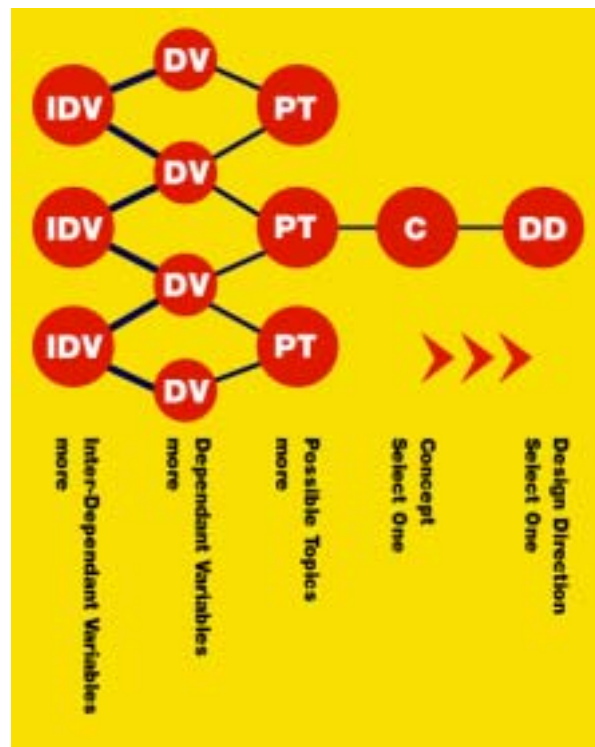


Fig.3 Design Methodology Procedure

can have clear understanding of what they will achieve by the end of semester. Also, I showed a guideline about the assignment. In the second level of this assignment, formulate ingredients for the design and create strategic plan. This leads to analyzing own work with the semiotic means.

5. Level 1: Connection

The design theory is a formula that helps to layout visuals in meaningful and intelligent manner. Most effective way to utilize how one can layout the visuals is Gestalt theory that began in Europe in the early 1900s, led by Swiss psychologist Max Wertheimer. There are four aspects of Gestalt that explain how we perceive visual form: Closure, Continuance, Proximity, and Similarity.

If Gestalt theory introduced how we create visual to relate whole parts within a frame, then Semiotic theory introduced how we understand visuals. The Semiotic theory was first introduced by Ferdinand de Saussure (1857-1913). He suggested any sign has the signified (mental concept) and the signifier (material aspect) that leads transferring a mental concept. But Charles Morris (1901-1979) first outlined Semiotic theory that he believed effective communication is based on analyzing visual and verbal signs. Morris had divided semiotics into three discrete areas: Syntactic, Semantic, and Pragmatic.

Both Gestalt theory and Semiotic theory are associated with forms. This methodology is not about making a form but rather it is about finding the meaning of message. If you spend enough time analyzing, questioning, clarifying and researching the message and objectives, the ideas flow without effort [3]. To be able to connect human qualities and issues will lead to finding an appropriate visual expression.

5.1 Phase 1: The Dependant Variables are interchangeable variables that support the Inter-Dependant Variables

In this phase, understanding the definitions of Inter-Dependant Variable and Dependant Variable then writing possible topics is an essential step. The message is established and maintained throughout the process therefore one must determine subject matter and the target audience in the beginning of the process. A subject matter is a content of a design that the target audience must need to know. Throughout the creative process, one should find and design what information the target audience needs to be informed and how to persuade them. If a design enlightens the target audience's needs and desires, then it will persuade their action. Simply, the needs of the target are fulfilled if a design can help the target audience's life and goal. The desires of the target audience can be achieved through triggering what the target audience likes to be.



Fig.4 UCLA Summer Sessions 1994 Poster

Inter-dependant Variable (IDV) is mutually interacting with the subject matter and topic. The subject matter is an underlying matter that the design must consider. The topic is how the subject matter is treated in the design. For example, “UCLA Summer Sessions 1994” poster shows the subject matter is “UCLA Summer Session”, and the topic is “The UCLA Summer Sessions is a fun place for the education.” (See Fig.4) This poster design is shown as to demonstrate this design methodology and it is designed by John Coy and Inyoung Choi. The IDVs are selected to realize the value of the subject matter. In this design example, the IDVs are social issue, cultural issue, educational issue, and historical issue which will be further invested through finding words that related to the IDV. The possible IDVs are ethical issue, social issue, cultural issue, educational issue, philosophical issue, business issue, scientific issue, traditional issue, political issue, historical issue, international issue, psychological issue, and personal experience. One IDV cannot function as a major issue but rather two or more IDVs are functioned as a unity because one IDV cannot define the subject matter. It is hard to comprehend more than two IDVs at same time. One ball is easy to catch, two balls are easy to handle, but three balls are hard to juggle. Not everyone can juggle three balls. I recommend try to comprehend two IDVs first. One should utilize three IDV when utilizing two IDV in a design is complement.

Dependent Variable (DV) is a variable restricted to one or more set of inter-dependent variable for the topic. Words that associate with DV are expressible words: for example, strain, tension, control, life, action, impact, confusion, disorder, nebulosity, happiness, fortune, despair, hopeless, disappointment, aid, relief, support, touch, revolution, growth, expansion, prosperity, logic, emotion, sentiment, and passion. DV can be added according to the IDV. There is no limitation on how many DVs for an IDV. But some DVs are overlapped with more than two IDVs. “UCLA Summer Sessions 1994” poster has social issue, cultural issue, educational issue, and historical issue as IDVs and they associate with DVs such as life, impact, happiness, support, growth, logic, and emotion. (See Fig.5) Some of these words are shared by more than one IDVs. This incidence is acceptable. Matter of fact, it shows that the word is important.

The possible topics are related to a set of IDV and DV. One determines IDV and DV sets according to the subject matter. Again, utilize

two sets for the beginners. Once sets are established, write out words and phrases that are closely relate to each IDV and DV set. These words and phrases will be used for writing the concept and choosing visual elements. “UCLA Summer Sessions 1994” poster established two possible topics: “The UCLA Summer Sessions is a fun place for the education,” and “The UCLA Summer Sessions is where you can have outstanding educational experience.” (See Fig.5)

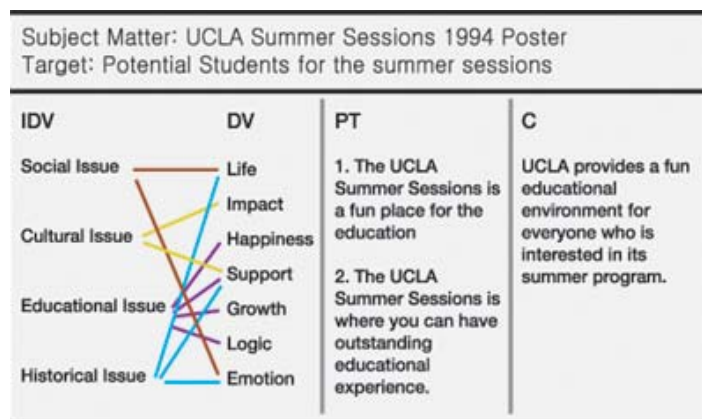


Fig.5 Design Concept Building Process for the UCLA Poster

5.2 Phase 2: The Inter-dependant Variables (IDV) are Co-Dependable Variables that closely relate to the Topic and the Concept

Purpose of design explains how design affects on the target. Write a sentence about how his or her design effect on people. As always the purpose of design is human, we cannot separate design from human. We design

objects and concepts for comforting our lives. I stress that know how your design effects on own lives. Does it make people understand better? Does it make people participate more? Does it make people happy? And more questions. These are the questions one should ask why one designs that. Without purpose there is no life, it becomes an eye candy. For example, “UCLA Summer Sessions 1994” poster’s target audience is potential students from all over the world. With this in the mind, the designer chooses a topic “The UCLA Summer Session is a fun place for the education” from two possible topics, because the target would look for an educational environment where they can have fun. The reputation of UCLA is well accomplished so emphasizing the outstanding educational experience is not new to the target and it will get boring.

Design concept is delivering the purpose of design with a particular and appropriate message through recognizing the topic. At this phase, write a design concept realizing the purpose of design, topic, IDV, and DVs. The design concept for “UCLA Summer Sessions 1994” poster is “UCLA provides a fun educational environment for everyone who is interested in its summer program.” It would be difficult to write a concept from the scratch but with this method it becomes very easy process.

6. Level 2: Design Direction

Design direction is a method use to express the design concept with visual form based on the verbal and visual language. Other than writing explanation on the purpose of design, it can be established by utilizing visual element. People tend to like things they familiar with and things that are totally new so they intrigue by its function. There two ways to select visual elements: select recognizable or/and unrecognizable visual elements. These elements are supporting the selected topic. In this phase, one should consciously decide a topic from a list of possible topics then relate IDV to the topic.

When we cook for a dinner for special guests, first we decide what kind of food I like to cook. Then we buy best ingredients for the selected food and prepare them carefully. Design is same way. There is a target and designers design for the target. The designers gather information and think about appropriate concept. In this level, one should gather all ingredients for the design. The ingredients are verbal and visual elements. Words, images, type, color, composition, and minor graphic elements are elements that needed to prepare for the design. For example, “UCLA Summer Sessions 1994” poster’s running figures were collaged to portrait the spirit of the school and painted effects and colors show summer season. The figures suggested different disciplines and races. The background of the figures shows the environment of UCLA. (See Fig.4)

7. Student Process

The creative process is the process of change, of development, of evolution, in the organization of subjective life. The inventive minds through whose activity that evolution has been initiated and in large part accomplished have usually been the only ones much concerned with it [4]. This section of the paper demonstrates how students create the value of a concept through formulating the Inter-Dependant Variables (IDV) and the Dependant Variables (DV). There are many phases in the creative process, but this design methodology concentrates on developing a concept, so I will emphasize on how students develop a concept and less emphasize on the making of a form.

7.1. Student Process: Level 1. Connection

I say “order to break the law, you must understand the law” to students often. It means students must learn the basic design rules then breaking the rules by experimenting possibilities. If more experiences one required then one can store more knowledge in the storage (the brain). When one works on a particular project, then one opens storage to utilize the knowledge for the particular project. Therefore, I always show the rules then demonstrate how to break them, even let them go free. At the beginning of the class, I introduce the frame work of this poster design assignment, and they decide the target and subject matter for the poster design. This is done by own personal preference. The example I show in this section is done by Jaehee Yang, a graduate student from Hanyang University. Her work demonstrates the student process. She decided “Beauty” as her subject matter and the target is “contemporary people.”

Next, generate the IDV and DV then correlate and learn a variety of IDV and DV relationships. She picked cultural issue and traditional issue as IDV from a long list of the issues. These two IDVs are needed to evaluate the beauty that the target, contemporary Korean, needs to aware Korean spirituality in the modern setting. Within cultural issue and traditional issue frame work, she decided “comfort”, “harmony”, “strong”,

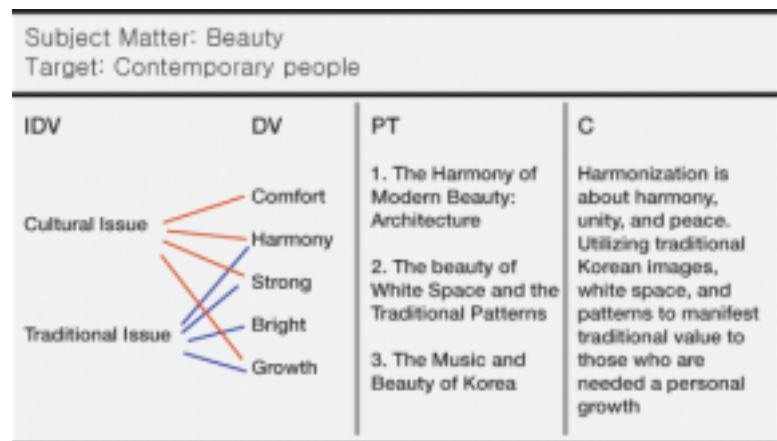


Fig.6 Design Concept Building Process for the student’s work

“bright”, and “growth” as DV. “Harmony”, “Strong”, and “Growth” are shared DVs for the cultural issue and the traditional issue. These IDV and DV relationships led to find words to describe the possible topics: “white space and music”, “past and present”, “Taeguk, tiger, and map of Korea”, “happy face, Hahee Mask, and smile”, “Taeguk and flower patterns”, and “energy, palace, succession, and maintaining.” Utilizing these words, she developed three possible topics: “The Harmony of Modern Beauty: Architecture”, “The beauty of White Space and the Traditional Patterns”, and “The Music and Beauty of Korea.” Finally she decided the title of poster will be “Harmonization.” (See Fig.6)

Based on the last step, define the purpose of design, design effect, and concept. The purpose of design is “to feel Korean sentiments in promoting life and life abundance.” Design effect is reminding modern Koreans that meaning of tradition is within us so we should have calmness in our lives. The concept is “Harmonization is about harmony, unity, and peace. Utilizing traditional Korean images (such as Taeguk, Hahee Mask, and Palace), white space, and pattern to manifest traditional value to those who are needed a personal growth.” (See Fig.6)

7.2. Student Process: Level 2. Design Direction

In the design direction level, she planned design elements: typeface selections, appropriate images (both patterns and photography), color composition, layout composition, and minor graphic elements. (See Fig.7) She decided that typeface should be modern but classic and the typography should not be a major influential visual element within the poster layout. She decided “Garamond” typeface is perfect for the design because “Garamond” is one of “Old typeface” family that widely used today. The images are based on the traditional patterns and brush

strokes to communicate traditional cultural issue. She utilized some of the traditional patterns that are geometric, because its simple form that seem like a contemporary pattern design, she chooses more ornate like design. Color should portrait harmony between past and present. 3 warm colors and 4 cool colors are selected for the design. Minor graphic elements are brush strokes and traditional roof tiles. Minor graphic elements are supplementary visual elements that are not functioning as dominant parts of design but they are supportive visual elements for the other dominant visual elements.



Fig.7 Design Elements

Her final poster design shows the traditional Korean colors randomly build vertical rectangle like building columns to portrait barcodes. The bottom of the poster is the foreground of the poster where the landscape of the Korea and the geometric form symbolizes the modern entity, a machine. An organic form from the roof of a traditional Korean architecture is placed on the background in a distance to portrait our past. All these symbolic visual elements are organized in an asymmetrical manner, and the size of the color bars and the color density give perspective dimension to the design. “Harmonization: Jo-Hwa refers to harmony with nature, mankind, and machine; north, south, east, and west; and past, present, and future.” is placed on the upper right hand corner to explain the intention of the poster. (See Fig.8)



Fig. 8 Final Poster Design

8. Conclusions

This pedagogic methodology can benefit teaching the process of concept. To be able to create the value of concept using Inter-Dependant Variables (IDV) and Dependant Variables (DV) relationship, the students understand the every form has its intent, message. And through the process, the students realized that the concept is not just a flash idea, but rather it is based on how the concept must closely related to the other areas of human quality that fortifies the needs and desires of the target audience. Most important of all, design is about human being, not used as a personal expression.

Also, I established definitions such as Inter-Dependant Variable (IDV), Dependant Variable (DV), Topic, Design Direction (DD), and Minor Graphic Element in this paper to add academic terms for the design discipline.

These terms can be utilized in many different design applications without following this methodology. For example, if a design's intension deals with cultural issues then now we have a name for the "cultural issue", an Inter-Dependant Variable (IDV). If you want to know the Inter-Dependant Variables for a particular design, we can distinguish it deals with social issue and religious issue.

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