Plato's divided line as an educational model for a graphic design curriculum

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Plato's divided line as an educational model for a graphic design curriculum

by

Tiffanie Marie Temple

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF FINE ARTS

Major: Graphic Design

Program of Study Committee:
Lisa Fontaine, Major Professor
Debra Satterfield
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Iowa State University
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This is to certify that the master's thesis of

Tiffanie Marie Temple

has met the thesis requirements of Iowa State University
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INTRODUCTION

“To design is to create images which communicate specific ideas in purely visual terms and utter statements whose form graphically embodies or enhances the essential nature of the notions communicated,” – John Commander

Many graphic design educators are beginning to re-evaluate the structure of their graphic design programs. Some believe that the advancements in technology and concerns about social responsibility require a shift in graphic design education from the Bauhaus traditions of formal investigation to audience-driven design problems. Graphic design educator Katherine McCoy, a senior lecturer at the Institute of Design in Chicago, supports this shift. In her lecture Speaking in Tongues: Audience-Centered Communications and Cultural Sustainability, she states, “As designers, we happily spread our monoculture when we impose our high culture rarified training on audiences unaccustomed to our languages. Might not we look to our audiences for new sources of rich ideas?” McCoy speaks from a postmodern viewpoint that questions the process of design and rejects the universal language of modern. “Audience-driven design” correlates with McCoy’s argument that design must be targeted to specific audience groups, not universally applied. Other terms have been used to describe this process of looking to the cultural diversity for inspiration.

In opposition some believe that teaching form-building in foundation courses is still an important step necessary for understanding visual communications, believing content should be supplemented later in the curriculum. This is consistent with the modernist viewpoint.

There is evidence that graphic design education is under investigation by educators. In Ellen Shapiro’s review of the American Institute of Graphic Design (AIGA) Revolutions conference in Philadelphia in the summer of 2005, Changing Course, she poses and answers the question, “Is there a revolution going on in graphic design education? Yes there is.” She describes this change as “a morphing of classic genres into inventive new ones.” She goes on to say that the change is slowly approaching, but we should prepare ourselves when we
realize that the change has occurred. As graphic design education changes, the foundation courses are likely to bear the greatest impact. The foundation courses are the basis of a curriculum that challenges students to develop skills unique to graphic design. One of the arguments against teaching the design principles through formal studies is that it is too rigid and the student work looks the same. Rob Roy Kelly refutes that by stating:

“For each class of students, the problem and objectives are new and challenging, so it is immaterial of this years work looks like what was done last year. Experienced foundation teachers vary the imagery, but seldom do they change the educational objectives. It is my observation that students in strong programs, whether at the beginning or end acquire a style while they are in school. However, when they graduate and progress in their careers, styles usually change or dissipate, but values and visual acuity do not.”

If the foundation courses fail to prepare the student for subsequent years, the student will proceed with bewilderment. For many years, these foundation courses have built on formalist traditions that originated in the Bauhaus.

The Bauhaus tradition provides formal investigation with attention to the intricate details of abstract forms in design and visual communication. Most of what we know today about graphic design originated from the Bauhaus. The curriculum was built from various influences from past educators and social circumstances. Existing educational models from educators as far back as Plato, a Greek philosopher, can be seen to support the approach of beginning with formal investigation.

Plato, who brought us the book The Republic, devised a learning model called the **Divided Line.** Educators have used this educational model for thousands of years as a template to develop their own educational models, including influential educators such as Aristotle, Jean Jacob Rousseau, Georg Wilhelm Hegel, Alfred Whitehead and most recently, John Dewey. Plato’s influence can be seen in the philosophies of politics, law, education, art and religion.

In The Republic, Plato states that it is necessary to understand the intelligible or the
most abstract form of thinking to achieve enlightenment, as seen at the top of the Divided Line in Figure 1. This refers to the total immersion of knowledge and understanding. The Divided Line provides the framework through which the student can view the whole or purest most abstract form. According to Plato, the comprehension of these ideas is necessary for later understanding of the particulars produced by images that incorporate culture and environment. He believes in the universal truth of form, which relates directly to a belief in the universality of the design principles.

Graphic design educators would be wise to step back and examine their traditional model before making drastic changes to it. Plato’s Divided Line can be used as a guideline to evaluate graphic design education and build a strong graphic design curriculum. The Divided Line will support the traditions of graphic design education by showing the necessity of a solid foundation course, and demonstrating the relevance of formal studies at the earliest stages of a graphic design curriculum. In fact, the Divided Line can provide a framework for the progression of all four years of a graphic design curriculum. With this model, it becomes clear that complex audience-driven design problems can only effectively be introduced after students understand form.
The Divided Line

World of Appearances

Visible
- Material World

World of Ideas

Intelligible
- Reality

Figure 1. The Divided Line
LITERATURE REVIEW

A Debate in the Foundation of Graphic Design Education

In recent years, opposing ideas on graphic design pedagogical approaches have become clear, proving that graphic design education is indeed changing. Is this change better or worse for design education? Specifically, why is this change taking place, and how will it influence form studies in the education of our students in foundation courses? Graphic design educators who want change believe that the design principles are important, but are not always necessary in good design. These educators want to begin foundation studies by making the student first evaluate the world we live in. Also in debate is the necessity for change to fit the needs of an audience. There are three distinct positions on the graphic design education debate:

1. Graphic design education needs to integrate social awareness into the foundation courses emphasizing time and space as design elements. This relates to the moment in time with technological capabilities, social structure and culture differences within the space of observation.

2. Graphic design education needs to merge the principles of design with audience-driven design without depending on either of the extreme positions. This involves looking at abstract form and combining conceptual elements to a composition.

3. Graphic design education needs to keep with its traditions and continue to incorporate the principles of design into form studies in the foundation courses, supporting a universal language.

The first two positions attack the traditional framework of graphic design education. The traditions referred to here are those of the Bauhaus method, which is defended in this thesis. The Bauhaus method has been tested, has scientific support and has years of thought behind it. The original Bauhaus curricular structure embraced a long-standing educational model, first introduced by Plato.
Marilyn Smith, a professor of art at Appalachian State University where she teaches graphic design and holds a Ph.D. in communication, acknowledges the tradition of graphic design. However, she also believes we should redirect theoretical approaches away from the design object toward “alternative cultural studies perspectives” by saying,

“Graphic designers’ preoccupation with aesthetic and perceptual responses to their products has also meant an over-reliance on formalist principles, including those derived from Gestalt psychology. Sophisticated means for interpretive approaches have been provided by contemporary theorists employing a range of perspectives, among them cultural studies, critical communication theory, feminist criticism, semiotics and/or structuralism. Restricting graphic design practice and criticism of meaning is a more productive avenue to follow if we are to understand the means of symbolic production and expression, the relationships between graphic design practice and cultural meaning systems (including the production of commonsense knowledge), and how audiences ‘produce’ meaning.”

Katherine McCoy supports audience-driven design in graphic design education by stating that,

“Abstraction is predictable in application- polite, inoffensive, and not too meaningful—thereby providing a safe vocabulary for corporate materials. Imagery, on the other hand, is richly loaded with symbolic, encoded meaning, often ambiguous and capable of arousing the entire range of human emotions. Imagery is difficult to control, even dangerous and controversial—often leading to unintended personal interpretations on the part of the audience— but also poetic, powerful and potentially eloquent.”

Another complaint made by McCoy about formal studies is that it “disengages the designer from compassionate concerns.”

It has been suggested by graphic design educators such as McCoy and Meredith Davis, a professor at North Carolina State University (NCSU), that the design principles are no longer necessary to be taught at the foundation level because of the rise of new technologies, such as the advent of the Internet and international accessibility, and the evolution of social and economic change. The concentration of graphic design education, in their opinion, should focus on the environment and cultural differences, leaving less time to formal investigation. It is also suggested that the design principles are not needed to describe these changes. These issues change the circumstances and experiences of the students. The
student now (compared to those from the early 1900s) understands computer technology and uses it in their everyday activities, and understands diversity within our environment as a blatant evolution of social change. Some of the leading design educators want to emphasize social and economic issues as a way to solve design problems instead of relying on form.

For example, Meredith Davis stated "it is increasingly difficult to justify the relevance of moving around black squares as a way to begin the study of visual communication in today’s world." This seems to suggest that design should solely depend on culture elements, investigations and images, and that traditional pedagogy interferes with communication and builds limitations to the students’ visual language. Yet NCSU has made very little change in their foundation classes. The philosophy stated on their website is that they are interested in cultural exchange of discussion and translation to begin defining what design is and how it must be done from the various types of audiences. In discussion the students will consider part of the social structure and design thinking about these parts. The student foundation work is evidence of this, by the interactions of type forms and objects from our environment. For example, the student takes random letterforms and creates ligatures with random objects such as a paperclip. They have to consider the shape of the paperclip as well as the purpose and integrate it with the letterform.

An example of audience-driven design is the work of David Carson. His style and philosophy was built from pure social context and purposefully tore through the boundaries of formal design. Carson catapulted an aesthetic trend in response to “grunge” culture of the early 1990s. Audience instinctively drove Carson’s design, and his design attracted the generation X audience through his groundbreaking typographic treatment and radical imagery. In Figure 2, his layout is nearly impossible to read and does not communicate clearly. The lack of readability is caused by the overlap of text, and image, the absence of a solid grid, color contrast, and the position of the paragraphs and headings. Figure 3 is an example of an underground magazine called Raygun that fronted the “beach” scene. This
That is probably why I resent it when people sample the old stuff. Why not sample yourself, or try something new? I feel that experimentation is endangered in today's climate.
magazine followed the rise and fall of the 1990’s popular culture, after which Carson had to find other outlets to mesmerize the reader with confusing images. Carson openly admits to breaking the rules of traditional or classical design, but makes no apologies to those whom it might offend. Carson, who influenced many designers to experiment with type and layout, had no formal education. While people looked at Carson’s design as “cool” and refreshingly inventive, he also made way for novice designers to appropriate his style and apply it to multiple forms of media and audiences. Although his intentions were to design only to particular sub-cultures of the west coast, the popularity of his style led to widespread appropriation by designers. They do not realize that this design had a purpose to attract a certain audience. Instead this design was translated to visual communication not directed toward the grunge community.

Carson’s design is stylistically similar to that produced by Cranbrook designers, who claim that the designs are audience driven. Looking at Figure 4 it seems that the “style” that Carson used is not in fact unique to a particular audience, since the same “style” is used to communicate to the range of audiences Cranbrook is trying to reach in these posters. These posters prioritize imagery so much over communication that people often have difficulty in understanding the message. Another contradiction is that while Cranbrook suggests that their designs are based on the target audience Figure 4 shows similarities in type treatment, colors and compositional organization. Perhaps audience-driven design as defined by Katherine McCoy is driven less by the actual audience but rather by personal “style.”

Roger Baer, department chair of the Art and Design Department at Iowa State University (ISU), has mixed feelings about this change in graphic design education. He believes that we “cannot throw out the design principles” because they provide the vocabulary needed in communicating concept and design. However, in the context of graphic design education at ISU, the program does provide professional practice, and according to Baer, when it comes to the “business aspect of design, the liaison to business and technology
Figure 4. Cranbrook Poster Design
is unnecessary to have specific formal studies because it ultimately accomplishes nothing.”
The professional pressure to know all and do all has pushed graphic design educators to provide students with all the information they need to know about the “real world.” This has influenced this need to teach professionalism and marketing strategies. This supports audience driven-design because the business of graphic design is marketing an idea or product for a client and persuading a particular audience of that idea. Learning the business aspect of design is typically done through internships and freelance projects but now is expected to be taught in the actual design curriculum itself.

While Baer personally found it interesting to think about shape and pure form studies and how they moved around a surface in his own experiences in graphic design education, he believes it is not necessary in communicating an idea. When discussing the pure aesthetics of design he says that it does not hold up to scrutiny in communication. He states, we need to understand that there are three types of designers: the “worker bees” that are educated from a purely aesthetic foundation: the form solvers who have been greatly influenced by formalistic studies: and the problem solvers who can design for culture, still thinking about the visual composition they communicate as a whole. He feels that it is the university’s responsibility to prepare these students for the work force and is sometimes necessary to make changes to contend with society’s needs.9

Judith and Richard Wilde have converged the two extremes by creating problem statements that merge form and concept together in their book Design Literacy: A Conceptual Approach to Graphic Problem Solving. Judith Wilde teaches at Kingsborough Community College, a division of the City University of New York, and Richard Wilde is the chair at the School of Visual Arts. The couple developed a number of studio projects encompassing form studies with concept, as seen in Figures 5, 6, and 7. These projects were given to first-year students in a graphic design foundation class. Figure 5 implements the study of squares with communicative verbs such as tension, order, playful, bold and increase.
Figure 5. Black Square Problem
Figure 6. Circle, Square, Triangle Problem

Figure 7. Road Sign Problem
This study integrates concept with compositional understanding. It is possible the student could have created these same variations without the verbs, but this method gives the student an opportunity to begin working with concepts and contextual objects. This is also evident in the project laid out in Figures 6 and 7. Figure 6 shows the study of a square, a triangle and a circle used to create symbolic representations of the student’s experience. Figure 7 is the “Road Sign Problem,” introducing students to simple symbolic communication. Both Figures 6 and 7 contain conceptual concerns and show how these shapes and symbols are integral to an environment. The overall project objectives wanted to “re-evaluate a problem in personal terms: creating conditions for self-questioning by moving away from the known to the unknown: encouraging the use of concepts to dictate techniques: discovering design principles: and discovering personal conceptual methods of problem solving.”

Rob Dewey in his article, Facing Up to the Reality of Change, published in *Eye* in 1994, is concerned that graphic design education has changed in such a way that it no longer concerns itself with the “traditional models of discovery and knowledge.” In his opinion, graphic design lacks in

“... all but the most basic mechanisms for disseminating new ideas within its professional community. Little formal analytical, descriptive or historical research is conducted, and there are few journals or other vehicles in which to make available what research does take place. Instead, new ideas are typically generated from experimentation and the development of a personal voice: they travel through the field primarily via professional publications, competitions, and ultimately, style appropriation. Their prescriptions have lacked specificity and substance- social identity dealt with in a superficial way.”

The question remains as to what impact audience-driven design will have on graphic design education. Steven Heller talks about this in his article, The Cult of the Ugly. He challenges schools such as Cranbrook and CalArts, known for their experimental and postmodern investigations, to define what beauty is as it pertains to design. Heller wonders if they might define it as “unharmonious graphic forms in a way that results in confusing messages.” Heller says the problem is that “while Cranbrook alumni such as Edward Fella,
Jeffery Keedy and Allen Hori are promoting new ways of making and seeing typography which challenge contemporary aesthetics much the way Paul Rand did in the 1930s, the difference is that “Rand’s method was based on ideas of balance and harmony which hold up to close scrutiny even today.” In contrast, the Cranbrook alumni “reject such verities in favor of imposed discordance and disharmony, which might be rationalized as personal expression, but not as viable visual communication, and so in the end it will be a blip in the continuum of graphic design history.”

Heller argues that design teachers should teach basic design principles of form and communication. On the other hand, he says, “teaching what is currently taught would result in teaching the graphic designers of the twenty-first century how to be mid-twentieth century graphic designers. Instead, educators should examine trends ...and try to prepare themselves and their students for the future. There is only one thing, however, that we really know with precision about the future — it will be different from today. Therefore the best thing we can do for design students is to make them adaptable.”

Ellen Lupton, a graphic design educator and author and editor of over 20 books on graphic design, believes we should retain the Bauhaus tradition. She suggests that we have strayed too far from the formal approach to design education. According to Lupton, “students are thus ill-equipped to deal with design on a formal basis. They are well attuned to design as a culturally-specific vocabulary, but they are less aware of how to manipulate structural conditions to generate meaning.” Her argument against “design culture,” which is supported by Gwynn Keathly at Parsons, is that it promotes appropriation of design rather than creating new and unique design. Lupton says design is not necessarily about finding inspiration from the things that exist around us but what does exist within us.
Plato’s Theory of the Divided Line

Plato is an influential philosopher known for his writings, theories and educational models, and for the philosophies discussed in his book *The Republic*. These strategies or philosophies were used to explain the concept of a “just man.” A just man is one who thrives to maintain harmony. Plato’s philosophy is explained through the Divided Line, which explains a progression of reality toward enlightenment. This line is an unequal division between the World of Appearances and the World of Ideas. The World of Appearances is the materialistic value of objects: it is a representation of what we see manifested by a particular environment or culture. The World of Ideas is a process of the mental activity of existence. Ideas are the language of thought, and thought is an intellectual contemplation of reasoning and rationality. The line further separates into four sequential segments:

1. **Imagining**: produces **images**, an assumption made prior to having knowledge, an invention of the creative power of the mind, an unrealistic idea or notion, **images** respond to desires

2. **Believing**: produces **things**, a declaration of opinion and truth which often displays factual conformity

3. **Thinking**: produces **hypothesis**, a way of reasoning and formulation in the mind

4. **Knowing**: produces **forms**, to perceive directly with clarity and certainty

The Divided Line explains how a person can achieve enlightenment of ultimate knowledge. Plato refers to this as **knowing**. Here, a general understanding creates a framework that details and particulars can rest in. According to Plato, **knowing** is the comprehension of abstract **forms** independent of the outward appearance and sensational values. Abstraction of form is a true representation of our environment by simplifying the **things** we see. This level of thought is considered to be the most elite level. Figure 1 shows the stages of the line from the lowest levels of reality, **images**, to the highest level of reality, **knowing**. The Divided Line can be understood through Plato’s example, referred to as
Plato's Cave shown in Figure 8. Plato's Cave is a story about the journey of a prisoner that describes the affect of the *Divided Line* and its definition of reality. Plato's Cave will help us realize the importance of *knowing* and understanding what comes before us.

The cave houses a number of "prisoners" restrained to a wall by chains, restricting any movement including their heads. The prisoners are secluded from society and all social interactions. They are forced to stare at the cave wall, as shadows of objects appear to dance across the surface. At the first stage of reality —*images*— the shadows in Plato's Cave suggest the idea of seeing, but not necessarily *knowing*. The prisoners see the shadows, but are unsure of what the shadows are and perceive them as being real. This creates a false sense of reality. These *images* are distorted optical duplications of the actual objects.

It is not until the next stage —*things*— that the prisoners are released from the chains, and are permitted to see the physical object that cast the shadow. The object is being carried by a guard in front of a fire on a walkway, above where the prisoners were located. The prisoners become confused and disillusioned by what is real, and ponder the connection between the object and the fire that illuminates the object the guards are carrying. This object has been taken out of its context and put into the unnatural environment of the cave.

At the third level —*hypothesis*— prisoners are escorted outside of the cave by a guard. The outside is dimly illuminated by moonlight, so only a glimpse of how the object interacts with its environment can be seen. The prisoners begin to understand the biology and structure of how the object exists within it, but still have an unclear vision of the actual objects. In the last phase of Plato's cave —*forms*— the prisoners can begin to fully comprehend the nature of the shadows because of the presence of the sunlight (enlightenment). The prisoners can see the whole and begin to recognize the particulars of the objects in the environment. This enlightenment creates the framework of the whole and the parts within the frame. When the prisoners return to the cave, their sense of reality becomes clear. The prisoners sees the fire, investigate the properties of the fire and how it can exist in
Figure 8. Allegory of the Cave
nature, and see the illuminating qualities that echo the objects as images that are portrayed by the shadows.

The prisoners are then able to see the shadow and understand what it represents. It is here that the abstract form becomes the knowable or the intelligible. There are some theories that are not knowable, such as culture and environment. Culture and environment can be defined as the beliefs, social norms and material traits of race and religion within any social group, and the complex circumstances of external physical conditions that one exists in. Culture and environment control what we see as well as the fluctuating trends that form the aesthetic or the values and opinions we impose on our environment. These things are contingent upon time, place and the opinions of the whole. However, abstract form is universal and is truth regardless of the influences of culture.

It is important to note that in order to understand the images, the prisoners must work their way back into the cave with new knowledge of how the images can exist. For the sake of this thesis, the highest, most valuable level of thought will be equated with the foundation of the students' learning. As stated before, without this knowledge of forms or the knowable, images cannot be understood and will be mistaken as reality, which will lead the students to superficial solutions.

Another renowned philosopher who studied Plato and developed theories that show evidence of the Divided Line is Georg Wilhelm Hegel. Although his theories may appear different from that of Plato's, they all achieve the same goal of understanding knowledge and truth through progression. Hegel was a known Platonist, and taught on his philosophies in the 1800s. Hegel wanted to create a rational unity of comprehension that he calls the absolute idea or absolute knowledge. Hegel wanted to preserve a rational unity that included phases of a larger, evolutionary whole. This whole is the process of phases in comprehending knowledge. According to Hegel, it is rational because the same underlying logical development in the process underlies every domain of reality and is the order of
rational thought. Certainly it is likely that Hegel influenced German education. Since German rationalism was the driving force of the Bauhaus curriculum, Plato’s teachings can be seen to have inadvertently influenced the schools’ teachings. This is especially evident in the Bauhaus’ underlying belief in the universal “truths” of the design principles.

The original structure of the Bauhaus curriculum started its students with a rigorous form studies course and added more complex materials as the students progressed. Figure 9 illustrates the Bauhaus curriculum in 1923 designed by Johannes Itten. This curriculum is illustrated in a circular pattern, with the outer-most edges as the basic course that the students would take upon entering the college, then finishing with more practical classes such as testing building structures. Figures 10 and 11 show subsequent basic course curricula the New Bauhaus in Chicago appropriated from the original in Germany. It continues to follow a similar structure, whether illustrated in a circular pattern or in horizontal/vertical progression. Each diagram follows a sequential pattern that includes:

1. Basic Course
2. Study of Materials
3. Application
4. Professional Application

Figure 12 shows similarities in the Bauhaus curriculum and Plato’s Divided Line. The four circles progressing toward the center can be seen to represent what Plato introduced into the Western conversation in the Divided Line where he established a progression from forms, hypothesis, things, and finally to images.
Figure 9. Bauhaus Curriculum 1923
Figure 10. New Bauhaus Curriculum 1937

Figure 11. New Bauhaus Curriculum 1948
Figure 12. Bauhaus Curriculum/Plato’s Divided Line
The Bauhaus Philosophies

Early in the 1800s, formal educational theories began to emerge in design, incorporating simple form with drawing. Heinrich Pestalozzi, a Swiss educational reformer, influenced later Bauhaus structure with his interest in drawing pedagogy. He believed that "the square was the foundation of all forms, and that the drawing method should be based upon the division of squares and curves into parts." Then through a series of repetitive exercises, the teacher would demonstrate the figure to be drawn, name it, and then question the student about its form.18 This is similar to Plato's journey of the prisoner in that the prisoner was given an image when chained to the wall, learned its biological makeup in his discovery of the outside world, then re-entered into the cave to further his understanding of the image. Fredrick Froebel, a German educator, used the Pestalozzi ideals to develop a drawing method that isolated the fundamental, constructive elements as a subject, and built successively on each newly-acquired skill. Wassily Kandinski, an instructor at the Bauhaus, was taught using the Froebelian method, and the Bauhaus curriculum is proof of this method's impact onto design education.19

Starting around the 1920s, the Bauhaus School in Weimar, Germany designed a visual language curriculum based on the fundamentals of simplified abstract form. Bauhaus education was developed out of its particular context: from its time and place, types of students, faculty expertise and other circumstances with which they were confronted. The Bauhaus philosophy was built from a group of people who sought an appropriate educational strategy for using design to rebuild the German economy and the social conditions of working citizens. The teachings of the Bauhaus followed along with Plato's notion of the Divided Line (perhaps unwittingly), as its students took the journey through the "cave" to knowledge.

Walter Gropius, a German architect best known for his work at the Bauhaus, was the first to design a curriculum for graphic design majors. He elevated the visual status of
communication by using the study of formalism as a means to understand communication and enhance creativity. During this time in the early 1900s, German politics had influenced a formalist philosophy producing an industrialized and structural design. The advent of machines to support the war influenced a straight-line structural aesthetic. This time was also the height of the Industrial Revolution, and the design reflected this through its gridded space, simplified abstract forms and machine-like construction. The student projects at Bauhaus were influenced by working with linguistics, philosophy, psychology, social theory, the reorganization of work and growing nationalism— all conditions of their particular time. The need for simplification allowed Gropius to begin instituting design principles during a time when machine and constructivist theory influenced the aesthetic. Gropius developed a series of principles that would be used in design to help the student understand composition, balance and harmony, known later as the principles of design. All these principles were an outgrowth of the Gestalt theory, discussed later in the thesis, which was used in psychology to help explain visual perception.

The Bauhaus core program utilized simplified abstract forms such as the circle, the square and the triangle, and applied the design principles though experimentation. Later educational stages of the Bauhaus began to add particular issues of environment and culture, such as political and socio-economical changes, to communicate an idea through posters and other printed materials. Figure 13 reflects the Bauhaus method through the combination of geometric and machine-like forms. The machine provided a straight-lined angular aesthetic that complimented simple geometric shapes. The Bauhaus Core program shows evidence of Plato’s Divided Line model, following the same sequence of starting with what you can know with abstract form (the generals), then integrating imagery and environment that is possible because of an increased understanding of form (the particulars).

The Bauhaus wanted to develop a logical and theoretical framework in the education of a designer. Geometric shapes were used abstractly to build a better understanding of
form. Form is the basic function of the visual language. The Bauhaus “sought the basic origin in basic geometries, pure colors and abstraction” \(^{20}\) to analyze form, color and materials for imaginary scenarios in design. “The Bauhaus attempted to organize and codify the revolutionary ideas of the early 20th century” into an educational method for the new industrial era.

“The name Bauhaus is commonly associated today with ‘functionalism,’ the theory that an object’s use, material, and means of production should dictate its form. Functionalism however, rarely worked as an objective, value free design method, or as a self-contained formula for decision-making. Design strategies such as simplified form, exposed structure, and standardized elements were weighted with philosophical ideals and cultural connotations. Criteria such as faithfulness to materials and fitness to purpose rarely dictated every aspect of a design, but were supplemented with taste and intuition.”\(^{21}\)

The Bauhaus course was the first in design education to declare that basic principles underlie all design disciplines, and that primary design education should begin with abstract problems to introduce these universal elements before students proceed to tackle pragmatic design problems applied to specific scales, needs and media.\(^{22}\) The Bauhaus was also the first to introduce Gestalt theory into a design curriculum.

![Figure 13. Bauhaus Exhibition Poster](image-url)
**Gestalt Psychology**

“a theory of mind and brain that proposes that the operational principle of the brain is holistic, parallel, and analog, with self-organizing tendencies.”

“Gestalt psychology became central to modern design theory after WWII, which promoted an ideology of vision as an autonomous and rational faculty.” The Gestalt theory explains the psychological process of how people see compositional elements as a whole rather than a group of parts.

Around 1900, German and Austrian psychologists began to formulate concepts based on “pattern seeking” in human behavior. They developed theories particularly valuable to designers. Gestalt psychology is useful to designers because it gives concrete evidence of how the eye organizes visual experiences. In Figure 14 you can see some examples of how the Gestalt principles work. In Figure 14a there are 10 dots randomly placed on the page with no reason or set pattern. All we see are 10 basic dots set before us. By contrast there are 10 dots in Figure 14b that have been purposefully placed into a visual configuration of a recognizable symbol. In Figure 14a the dots are random, but we still connect them within its shape as a whole. In Figure 14b the human mind makes the connection of the symbol that is inherently

![Figure 14. Gestalt Principles of visual organization](image)
there. "The beholder searches for the form with the most stable unity. Due to the laws of
visual organization, no visual unit can exist by itself on the picture plane." The design prin-
ciples then, are used to achieve this unity to help create a stronger visual composition. The
design principles have varied over the years in terminology, but with only slight variations.

Wassily Kandinsky and Paul Klee, instructors at the Bauhaus, supported this idea be-
cause of its scientific basis for universal visual script. We see with our eyes, but we perceive
with our brain. Therefore, our perception of images is greatly influenced by our knowledge
and past experience. Visual communication exists in a frequently stimulating field of negative
space, also known as the 'empty' or white space. One cannot perceive isolated visual enti-
ties, but instead must react to them as related units. As related units, the space in which these
objects exist is just as important as the objects themselves.

"When representational units within the same picture contain statements which seem
counter to the accepted logic of events, the spectators attention is forced to seek out
the possible relationships until a central idea is found which weaves the meaningful
signs together into a meaningful whole. We compare them and contrast them,
discovering differences and similarities."

In Design Writing Research, Ellen Lupton refers to Gyorgy Kepes, Donis Dondis, and
Rudolf Arnheim as having "employed 'gestalt psychology,' a theory developed by German
scientists during the 1920s. For all three writers, as for numerous others working in this
tradition, design is at bottom, an abstract, formal activity, and text is secondary, added only
after the mastery of form." Gestalt perceptual factors build a visual frame of reference that
can provide the designer with a reliable psychological basis for the spatial organization of
graphic information.
The Basel Influence

In the 1950s, Switzerland emerged as a center of modern graphic design theory. The Basel School of Design came to represent “Swiss design,” a visual approach known for its minimalism, “radical shift in scale, precisionist type arrangements, and stark symbolism.” According to Steven Heller in Poster Collection: Armin Hofmann, the Basel School’s philosophy was derived from the Bauhaus approach, but with applied modifications to a more fine art solution to graphic design.

Fundamental to the program at the Basel School of Design was the use of an iterative process, or repeating a visual experiment over and over again. This method was strongly supported by instructors Wolfgang Weingart, Armin Hofmann and Emil Ruder.

Armin Hofmann admired the Bauhaus teachings he learned in Zurich, with mentors such as Johannes Itten who had taught at the Bauhaus years earlier. Hofmann translated his knowledge of the fundamental design principles from the Bauhaus to the Basel School where he began to teach and develop the graphic design curriculum in 1947. The philosophies of Basel incorporated the need to understand form before color because of its illusionary qualities. Emil Ruder, who also began teaching in 1947, believed that “type loses its purpose when it loses its communicative meaning.” Ruder wanted typography to be gridded and organized so that the composition can be best understood. Ruder’s strict use of the grid can be seen in Figure 15. In later years Wolfgang Weingart, who appreciated what Hofmann and Ruder had taught him, began questioning the “right-angle” organization as a way to design with type. Weingart’s experimentation was driven by his desire to rethink typography and its purpose on the page. Figure 16 shows Weingart’s experimentation through a space of form exploration that relates dots to letterforms. Weingart began teaching in 1968 at the Basel School of Design, focused on the intuitive side of the modernist theory, rejecting the objectivity and supporting inventive self-expression through formalistic studies.

The faculty at Basel believed that “abstract structure is the vehicle for
Figure 15. Basel Museum of Arts and Crafts/Books on East Asian miniatures

Figure 16. Wolfgang Weingart: Type Experiment
communication” and that communication was itself structural. The Basel approach relied on an “analysis that rigorously questions and accounts for all parts of a message.” The abstract communicative form can be analyzed by the relationship between size, number, value and shape. The Basel School took the Bauhaus design principles and pushed them to a more experimental stage, isolating the primary essence of communication from any consideration of surface style.

Many of the pioneers who taught at the Bauhaus and Basel Schools brought their ideas over to the rapidly expanding American schools. These ideas made way for a unique hybrid of theory and practice in America. Even though the ideals of Basel eventually supported the more experimental designs, many of the American curricular integrated this with a Bauhaus foundation using the design principles. The teachings of Basel and Bauhaus are evident in American education through curricular structure, pedigree, philosophy and student outcomes. Basel produced many well-known American graphic design educators such as April Greiman, Kenneth Hiebert and Rob Roy Kelly, along with influential Swiss educators such as Armin Hoffman, Wolfgang Weingart, Hans Alleman and Inge Druckery. Bauhaus has also influenced American pedagogy with its development of the New Bauhaus in Chicago, bringing over German educators such as Moholy Nagy, Herbert Bayer, Gyorgy Kepes, Walter Gropius and Johannes Itten.
Coming to America: The Bauhaus and Basel Influence

Many American design instructors believe there are basically “two steps in teaching graphic design: theory and inquiry, based on universal design principles: practice, based on the practical information of facts and specifics.” This is similar to the two divisions of the Divided Line of the World of Intellect (theory and inquiry) and the World of Appearances (practice). We can see this method being used quite frequently in some of the top graphic design schools. Most design curricula start their students on the fundamentals of design and gradually progress to practicing graphic design. In theory the first part of their education focused on developing the students’ understanding of visual communication. The students begin to think using abstraction so the manipulation of forms and shapes in a space becomes understood.

To support Plato even further, Tom Ockerse, professor at Rhode Island School of Design, states,

“Theory de-mystifies the complex: and this is essential to education, because to understand means to simplify. And when we are aware and understand, knowledge becomes powerful and generative! Specifics, on the other hand, are limited information and lack generative power. Understanding principles and relations offers new insights and forms the very stimulus for creativity and innovation. Theory simply means to get the essence of something.”

The Bauhaus traditions are evident in graphic design, demonstrated by the vocabulary we use and from the elements that are derived from the design curriculum of the Bauhaus. The influences of design educators such as the Bauhaus group that included Walter Gropius, Mies Van der Rohe, Moholy Nagy, and Basel educators such as Armin Hofmann, Rob Roy Kelly and Wolfgang Weingart have been significant to design education.

Many schools in the 21st century still use the design principles as a way to develop student understanding in design programs. These are commonly taught in the foundation courses to provide the basics of communication through abstract form. These principles lay the groundwork for understanding form and composition as well as developing a vocabulary.
This vocabulary is useful when discussing design with other designers.

Rob Roy Kelly was one of the first Americans to attend Basel and bring the theories firsthand back to America, where he taught at the Kansas City Art Institute for a number of years. Kelly devised a plan for An Effective Graphic Design Program, published in 2001. He sets out by stating what objectives should be followed in a basic design program:

1. “Visual literacy is defined as an ability to view nature, objects or any imagery as abstractions for purposes of making visual judgments.
2. Students should be familiar with a variety of visual elements such as line, shape, scale, texture, point, plane and others.
3. Students should understand visual principles and all various interpretations for each. Visual principles describe tension, figure ground or activation of space, spatial definitions, configurations, color interactions, rhythm, pattern or interrupted pattern or others.”

Other schools where former Basel students became design educators shared his pedagogical methods.

“...during the 1960s and 70s, Yale, Basel and Philadelphia College of Art placed emphasis on visual theory and design fields, and their success is overwhelming testimony to the value of this educational approach. Students from our programs that spent two years doing theoretical problems, with only one year of professional work, did not suffer when it came to finding employment or achieving future success.”

Kenneth Hiebert, another Basel alumni and retired Emeritus professor of the University of the Arts (formerly Philadelphia College of Art), believes that everything we learn starts with nature. When Hiebert was appointed chair of the Graphic Design Department at Philadelphia College of Art, he asked Steff Geissbuhler, a classmate of his at Basel, for help in developing the program.

“We introduced a completely new thing there,” recalls Geissbuhler, who served as chair of the department from 1973 to 1975. Geissbuhler and Hiebert recruited colleagues such as Inge Druckery, Keith Godard and Hans Alleman, and began to move things away from a prevailing advertising bias. “We imported the whole Swiss design philosophy, ‘less is more,’ and the importance of typography, color and drawing.”

Nature is the reality that people can understand because it is universal. It translates our
reality in the truest sense. Hiebert suggests that, “Elements or aspects of the natural world visible to the naked eye seem eminently useful for communication. History or specialized knowledge is not required. A general, shared, overwhelming sense of the natural, of the earth and our belonging to it, makes nature an ideal basis for common understanding.” Hiebert thrives on and advocates universality. He believes that once you know this shared language, meaning and concept come out of it as a “natural process” to seeing other people’s worlds. Hiebert’s beliefs and philosophies follow so closely with the Divided Line, the connection to graphic design seems undeniable. In Graphic Design Process, Hiebert defines the basic vocabulary in graphic design as:

**Form** — the characteristics that distinguish one visual mark from another, including shape, size, color and texture.

**Content** — the underlying thought that provides the criterion and stimulus for a form. Content is the permission for the form of the message. As content changes through cultural evolution, formal renewal is the natural consequence. Because it requires an open, listening mind to engage any new content and present it in a new form, the tendency is to appropriate old content to avoid the challenge.

**Context** — the environment—cultural or physical—in which a message or form is perceived and by which it is conditioned. Recognizing, responding to and changing content and context are the best deterrent to merely decorative, nostalgic, stylistic or aesthetic design.

**Concept** — the structuring of a relationship among forms and messages to achieve a specific expression within a given context.

In these terms a pattern has begun to emerge that follows the same structure as the Divided Line (Figure 1). Hiebert created a diagram of two divided categories, as seen in Figure 17, that “shows the relationship of Real World 1, with its emphasis on context often at the expense of form to Real World 2, where the elements of form and meaning are preeminent.” He has two divisions of this diagram that can easily be considered as parallel to that of Plato’s World of Intellection (Real World 2) and the World of Appearances (Real World 1). Hiebert believes that “form gives graphic design buoyancy and context brings
Figure 17. Real World Diagram
it down to earth.” As with Plato, Hiebert’s lower category (real world 1) produces only “monetary gain, audience gain, formal exploitation, and deception” while the higher category (real world 2) creates “insight, synthesis, self identity, and formal integrity.” He introduces strategies of theories that support this diagram even further along with Plato’s Divided Line as “understanding and deception.” In Figure 18, Hiebert also mimics the Divided Line through a visual representation of the evolution of meaning, looking at the most abstract representation of a butterfly to an image of an actual butterfly. Hiebert stresses that it is important to understand meaning this way by separating the symbolism of nature and its meaning into four categories which include the abstract level, iconic level, concrete level and literal level. As evident in Figure 18, these categories exhibit remarkable correlations to Plato’s Divided Line. Hiebert’s diagrams, with their reinforcement of the Divided Line, support the use of the principles of design and create a purpose for them by clarifying their profound role as the basis for deeper-level solutions.
Abstract Level
maximum nonliteral expression using invented language through metaphor, analogy, or other more imaginative means.

Iconic Level
greatly simplified graphic translation with fidelity to the object as a class, based on essentials.

Concrete Level
routine and factual translation in reduced visual language, as in technical illustration.

Literal Level
documentary photographic or photo-realistic reproduction; identifies the specimen by exact simulation.

Figure 18. Hiebert’s Evolution of Meaning
The Principles of Design

According to Paul Zelanski, who has taught the basic design principles in art for over 40 years, the principles of design can be summed up into six categories with the goal of creating unity through repetition, emphasis, scale, balance, economy and rhythm. Unity is the degree of agreement existing among the elements in a design. Unity is important to the viewer because it helps to identify the message quickly. To use unity effectively the viewer must see the composition as a whole rather than in pieces. If the page is not unified, this can lead to confusion and failed communication. Unity can be achieved by employing the principles of Gestalt theory. “The designer’s job in creating visual unity is made easier by the fact that the viewer is actually looking for some sort of organization, something to relate the various elements.”

The principles of design, which have been referred to previously, include an array of terms interrelated with one another. This vocabulary includes the principles of repetition, direction, anomaly, gradation, radiation and contrast. Contrasts include such contradictions as large/small, organic/geometric, line/mass, curvilinear/rectilinear, few/many and positive/negative. The principles can be used to organize a two-dimensional space into a unified composition. Figure 19 is a diagram of the multitude of ways the principles of design have been organized by various educators. Paul Zelanski, Wucious Wong and Donis Dondis are design educators who have written in length about these particular terms as necessary for a generalized design education. Armin Hofmann, Robin Landa and Bryan Peterson have laid out similar terms that directly relate to graphic design.

Starting in 1966, Wucious Wong taught two-dimensional design in Hong Kong, using the principles of design. He has written about the elements of visual communication as crucial to building a visual vocabulary. He believes that emotion and intuition are not needed to “tackle the principles in precise and concrete terms with maximum objectivity and minimum ambiguity.” Wong uses the triangle, circle and the square as the primary elements
<table>
<thead>
<tr>
<th>Elements of Design</th>
<th>Principles of Design</th>
</tr>
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<tbody>
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<td>▲</td>
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</table>

Figure 19. Principles of Design Chart
creating a visual language because these geometric shapes are clearly defined and can be readily identified.

Exercises are devised with the application of the principles of design to practice variations of moving the shapes around to create compositions that will later become innate in the student. Figure 20 shows compositions by a student of Armin Hofmann's that explore compositions with varying tones, inclusion, exclusion, proximity, grouping and overlapping. Another exercise might look at similar shapes of a square or rectangle, which are static when their sides are parallel to the edges of the frame of reference. In order to increase the activity of the shapes in a composition, however, we frequently tilt the shapes or distort them so that the sides become active. An example of static/active composition shown in Figure 21, from An Alphabet of Visual Experience, can make this clearer. Simple exercises can get the student to think about form and composition.

Rudolf Arnheim believed that the Gestalt perception is "a psychological discipline ... that has been applied since the beginning of our century to scientific principles that were derived mainly from experiments in sensory perception." Arnheim is most notable for his investigation of the Gestalt theories to the visual arts. Donis Dondis recognized this interpretation as brilliant and decidedly used this "visual stimuli" to develop a series of principles.

Dondis wrote and taught the basic design principles at Boston University School of Public Communication for many years. She presented the basic principles as a "native language the student 'knows' but cannot yet 'read.'" Dondis considered these principles as a "tool box" of basic elements. These include the dot, line, shape, direction, tone, color, texture, scale, proportion, dimension and motion. She goes on to say that "these are the visual elements: from them we draw the raw material of all levels of visual intelligence and from them all varieties of visual statements and objects and environments and experiences are planned and expressed."
Figure 20. Armin Hofmann: Squares

Figure 21. Static/Active
The following definitions of design principles have been synthesized from various writers to best illustrate their meaning. Repetition is the use of similar lines, shapes, forms, textures and values. So, the practice of employing this principle is understanding the boundaries of this term. Repetition is a way to emphasize important information: this can be accomplished by using texture, pattern and gradation (Figure 22).

Artists often unify their design by creating a single focal point or place of emphasis (Figure 23). This is the area toward which the viewer’s eye is most compellingly drawn. “The emphasized element initially can attract attention and encourage the viewer to look further.” This principle draws the viewer into the composition. The ways to achieve emphasis are by contrast, isolation, anomaly (Figure 24) or placement and gradation (Figure 25). “One cannot look at a static relationship for long without losing interest. For the image to remain a living organism, relationships in it must be constantly changing. The eye must be fed with changing visual relationships.” Using a variety of images and contrasting elements, the viewer is drawn into the composition by its attracting force.

Gradation is a principle that employs a gradual change over a series of unit forms in an orderly sequence, as seen in Figure 26. Gradation can be a change in shape, size and position.

Similarity shows resemblance of related objects that are not necessarily identical (Figure 27). Contrast challenges the viewer to compare the elements, actively connecting the contrasting parts by recognizing the relationships of their forms. Contrast is typically a comparison of contradictory characteristics such as few/many, large/small, curvilinear/rectilinear (Figure 28) and many others.

Scale or proportion is the size of elements measured against other elements or against a mental norm or standard (Figure 29). Historically people have used the human body as a measurement to create pleasing designs. Scale is used to emphasize a particular idea or concept. Through juxtaposition, scale and proportion can be used to add intrigue and
Figure 22. Repetition
Figure 23. Emphasis

Figure 24. Anomaly/Emphasis

Figure 25. Gradation/Emphasis
Figure 26. Gradation

Figure 27. Similarity

Figure 28. Contrast of Rectilinear/Curvilinear
Figure 29. Scale and Proportion

Figure 30. Balance

Figure 31. Rhythm

Figure 32. Music Poster
paradoxical themes.

Balance is the distribution of visual weight within a composition. "The sense of balance is innate, as children we develop a sense of balance in our bodies and observe balance in the world around us." Balance refers to both symmetry and asymmetry (Figure 30). With symmetrical balance, the designer will strive for distribution of the apparent weight of the elements so that the work does not appear heavier on one side than the other. Asymmetrical balance uses elements with different visual weights while still maintaining a sense of compositional balance. It is the equilibrium of opposing or interacting forces in a pictorial composition. The two sides of the composition appear equal in weight but the shapes are not necessarily identical.

The design principle of Rhythm can be best understood through an analogy of musical notes on a staff. In Figure 31 the beat of the notes is copied by the dots below the staff to create a feeling of pattern. Figure 32 is another example of rhythm applied to typography in a composition. This poster is about music, so the designer used the type to portray the sound of music. The directional pacing of elements can evoke some sense of sound or physical movement through the sequencing of objects. Rhythm is a particular system of movement that the viewer's eye follows through a piece of work. This is often established by repetition of design elements in some orderly system. When the viewer senses the beat or repetitive element, it helps in the experience of the design as an organized, unified whole. Although repetition can be a successful element in design, when it is done using identical intervals, the composition can become very dull. By adding unique rhythmic intervals, we can make the design active and create more visual interest.

These gestalt principles can all be used to manipulate abstract form to communicate through visual means. "When confronted with an image or form that has poor Gestalt or harmony, the viewer finds the visual effects unrelated, busy or disturbing. Consequently, the image will be ignored or rejected by the viewer."
Only after these principles are established at the foundation level in graphic design education can we then integrate concept into our designs to create meaning and purpose.

"Concepts are tools for defining relationships. At the root level as Hiebert suggests, relationships can be represented in the most primary visual terms. For graphic design these include the vocabulary of visual language: point, line, and plane: modules, sets, and rhythm: scale, dimensionality, and proportion: texture, pattern, and color: symbol and metaphor."\textsuperscript{59} Hiebert suggests that we build from these basic fundamentals because all theories stem from them. He validates this by explaining that most "professions go to the 'root particles' in research. Often in schools - and out of schools - come new discoveries and advances. This is true for medicine, physics, engineering, economics and music. It should be true for design. Paradoxically, the renewal of a profession often comes from a return to basics."\textsuperscript{50} Even in other academic fields there still remains a "root" or basic fundamental idea that each discipline relies on to support the structure of new ideas. The use of a universal language allows the study in a particular discipline to progress logically from the basic components to the particulars or complex systems of study.
An Appropriate Foundation in Graphic Design Education

Foundation classes are entry-level courses for incoming students that wish to pursue a career in design. These foundation courses typically promote an exploration of form, composition, balance and other principles discussed in this thesis. It is these beginning courses that teach basic fundamental design ideas that earlier are used to support more complex, contextual designs for professional applications. Gyorgy Kepes’ *Language of Vision*, written in 1944, states, “Before one begins to use the visual language for the communication of a concrete message, he should learn the greatest possible variety of spatial sensations inherent in the relationships of the forces acting on the picture surface. Just as the letters of the alphabet can be put together in innumerable ways to form words that convey meanings, so the optical measures and qualities can be brought together in innumerable ways, and each particular relationship generates a different sensation of space.”

There are two basic types of foundation courses. One is a class designed for a specific discipline with course work that directly relates to that particular discipline. This course will provide the student with skills and vocabulary unique to a particular discipline. There is also a more general or interdisciplinary foundation course that will prepare students for any art or design disciplines in a visual art program. This kind of course is expected to provide a foundation that is applicable to all visual art programs creating a universal language through all design disciplines. Michael Bierut, former instructor at Cooper Union, agrees with the need for a generalized foundation course that practices formal investigations because it is a “replicable process: they’re tried and true exercises that people seem to need to know.”

It is important to note that not everyone has the same idea of what makes a good foundation. The first year of college is the most essential year in a student’s life. It becomes the structure upon which all of the other years are built. In design there are sets of vocabulary terms and skills necessary for engineering creative and unique solutions. Some educators believe that this includes learning the principles of design. The principles of design provide
the language to help in the articulation of ideas between the student and the teacher. This vocabulary will also allow the student to think critically about their own work and that of others. The principles of design are crucial to understanding abstract form. This subject matter is investigated in foundation courses that explore simplified and isolated objects from our environment. When asked, “What are the advantages to starting students off from a blank, neutral point?” Patrick Whitney, director at the Institute of Design, says simply, “It’s easier to teach from.” Plato makes sense of this by showing us that abstraction is the simplest, most universal form of knowledge.
The Change in Foundation at Iowa State University

Iowa State University’s (ISU) College of Design used to emphasize the traditional Bauhaus pedagogy in its foundation courses, but recently changed their approach. ISU’s Core Program Director, Igor Marjanovic has research interests in theories of design education. Marjanovic asserts the need for change in design education, stating that the times call for it. He said that in order to see progress we must start something new: we must make radical changes and stop using the old methods. He believes that building formalistic skill is too prescribed and contains little creativity for design. While both pedagogical approaches—for and against design principles—are “valid options,” he ultimately believes that due to the context of today with social developments emphasizing ecology and technology, education must accommodate progression. It is suggested that there are various reasons for all the design disciplines to move away from the formalist principles by creating a united core program in an attempt to advance the student’s thinking skills and provide a shared learning process. He warned, however, that even though the times call for change, it is not a guarantee that it will make design better. He thinks that it will take five-ten years to see the effects of this change.54

Marjanovic has led the College of Design into a multidisciplinary foundation program encompassing all the design programs into one core program, hoping to make connections between the context of space and design. When asked about his thoughts on the Bauhaus theories, the vocabulary it attributed to design and its role in current design education, he agreed that this vocabulary is important. However, he does not see the principles of design as being sequentially important to build from. He thinks that through the process of a four-year program, the student will have the knowledge necessary to be critical and articulate in communicating their ideas clearly.

Iowa State University’s College of Design is an interesting case study because the college has drastically changed the foundation courses in the past three years, affecting how
graphic design education is currently being taught. Prior to 2004, the incoming freshman started out in a foundation class that lasted over two semesters with sequential classes specific to a design discipline. They learned the principles of design that relate to that discipline and formed studies and practiced creating unique solutions to compositions using simple forms and the principles of design. These courses developed the students’ vocabulary and prepared them for the next level of design education involving studies on typography and color. These foundation courses helped define the students’ technical skills, visual accuracy, work ethics and critical analytical skills through a number of form-based exercises.

Iowa State now offers an interdisciplinary design foundation class that combines all areas of design: Architecture, Landscape Architecture, Integrated Visual Arts, Interior Design, Graphic Design and Community Regional Planning (CRP). This foundation course is taken in conjunction with a one-semester drawing class that introduces many of the principles of design. Iowa State has developed projects that would encompass all of those fields in abstract ways. While abstraction is discussed in terms of space containment and interior spaces, this class primarily wants to build analytical skills with the practice of emphasizing context, situational circumstances and our interactions with our environments.

Iowa State’s new interdisciplinary course, while not representative of the aforementioned changes in graphic design education per se, is nonetheless similar in its emphasis of context over form. For example, the first project discusses culture and how design is influenced by it. John Heartfield, a designer most known for his culture-driven design, used a method called photomontage, which is a collage of photos and illustrations creating metaphoric imagery to hide his subversive messages (Figure 33). Heartfield’s work was designed in response to cultural problems and was intended to communicate political agendas. At the beginning of the studio project, the students are assigned a specific poster from Heartfield. Although Heartfield never focused his attention on the aesthetic aspects of his work, the students are asked to draw lines over the poster to understand
Schwarz, ob weiß
im Kampf vereinigt!
Wir kennen nur eine Rasse, nur einen Feind-
in Ausbeuterklasse.
spatial relationships of a composition (Figure 34). They analyze the poster through vertical, horizontal and diagonal lines. Once a week students attend lectures that show examples of composition, hierarchy and balance in various works. Eventually, they can begin connecting their studies to understanding composition. They take these line drawings and make abstract forms out of construction paper, emphasizing concentration and repetitive patterns of the poster. The lines provide a grid structure to begin thinking of placement and flow of objects on a page and how the pieces interact (Figure 35).

In the third part to this project, students design a postcard mimicking the method of John Heartfield (Figure 36). The students are given three images to use in a collage to communicate a critical message. Success in this part of the project is dependent on an understanding of social consciousness and conceptual development. The student develops a concept and then executes it using the given imagery. This project considers the multiple avenues to thinking abstractly about 2D composition.

When considered in the context of Plato's Divided Line the expected outcomes are too advanced. For instance, the level of thought from the student should be basic, elemental thinking. This project densely covers context in an abstract way. From the first day of class, the student’s understanding of abstraction is tested. Plato would recommend that the objects be simplified even further to non-representational objects before attempting to work with particular images. A major struggle some students have encountered with the second part of this project is separating their visual perception of the image and the image as an abstract form. This struggle can be seen in Figure 36 because even though geometric shapes represent the arms, the student still wants to carry out the concept of the poster by the color of the paper and close representation of the form’s structure. It was difficult for the student to remove himself from the meaning of the objects. The student failed to look at the negative space and the shapes it created, the diagonal of the compositional elements and less obvious verticals. Even though the student considered the verticals they literally came to represent
the “arms” rather than the directional emphasis. This became evident because the student added triangles to represent the fist, a thin line to represent the shadow of the muscles and rectangles for the thumbs. Also he used two large triangles for the heads, red paper for the arm and black paper for the black arm. He was greatly influenced by the images in the poster when attempting to look at the abstraction of the composition. He also wanted to maintain the look for the concept.

The “critical message” component of the first project is full of advanced analytical issues. With the limited time and materials given (John Heartfield Poster, Iowa Postcard, and one additional image of the student’s choosing), this project only begins to skim the surface of its intention. The large format, limited image and loaded concept made this project quite overwhelming for the student to focus on. As a result, the critical message is only dealt with in a superficial way. The research skills and thinking level of the student are immature and is topical at best. The success of communicative efforts from one student to another is “hit or miss.” Introducing images at such an early stage creates a false understanding much like the prisoner in the cave staring at the shadows and thinking that they represented reality. The images for the students become objects of an environment whose purpose they do not understand.
Other Schools and Their Philosophies

Over the past 75 years or so, many American schools have developed graphic design programs that were built on the traditions of Bauhaus and Basel. Beginning in the 1980s with the explosion of computer technology, schools began to integrate this new media and implement it into the design process. The computer changed how Graphic Design was taught. The one thing that remained constant was the foundation courses. Graduate schools such as CalArts and Cranbrook, which are nationally recognized for their innovative and experimental design, questioned the formal design investigations that most foundation courses would practice.

Starting as early as 1930 Cranbrook began the exploration of audience-centered design. Since its opening Cranbrook “would produce handsome objects to embellish and improve the American environment, and a community where art would be integrated with daily life to the benefit of all.” Cranbrook is a far departure of Bauhaus modernism because it wants to infuse “meaning into the production of a plethora of objects and graphics that have become mundane and boring.” Cranbrook was influenced by complex, eclectic and anthropomorphic plans. Katherine McCoy, former co-chair at Cranbrook, wanted to include “the subtleties of human interaction and ambiguity of the human condition.” Cranbrook’s philosophy has been a driving force for audience-driven design for years and has gradually spilled over into the undergraduate programs.

Many terms have come to represent audience-driven design to explain the use of a specific culture or audience, including design culture, social responsibility and culture exchange. Design culture is a term that Steve Heller uses in his book Design Culture, a collection of articles discussing the issues of graphic design education and the social responsibility of a designer.

Gwynn Keathley, core director at Parsons, defined the importance of this at the College Art Association (CAA) Annual Conference in 2006 by stating that the “design
culture introduces students to an intricate overlap of social, economic, political, historic and context to the application of any design projects,” allowing the students to think “critically about relationships” that shape the “identity, interaction, place and ritual.” Keathley has developed a class for the foundation level called the “Lab.” Here the students engage in design activities concentrated on culture and environmental criticism.

A smaller design program at Troy University in Alabama has recently shifted its design philosophy and has embraced design culture as the method of choice to educate their students. They have created a “techno-centric” program with complete submersion into the computer world. Troy’s concerns are first and foremost evaluating the medias in which we communicate by studying how society is influenced by it. They want to create a “hybridization of media” with traditional approaches to art such as photography, drawing and 2D and 3D foundations. Troy believes that the computer is a part of culture and needs to be focused in on graphic design education.

Guy Julier, professor at Glasgow University in London, claims that traditional design is being taught and not thought. By implementing design culture, we give our students the capabilities to “think” design. He also encourages the use of images because we live in an “artificial world” and technology is the relationship to culture for which we mediate. 

Victor Margolin, a professor at the University of Illinois in Chicago in art and design history, disagrees with these changes, arguing that the problem with using design culture to teach our students is that it requires them to learn a new language with which they are unaccustomed. Students will be forced to learn multitudes of languages in order to relate to others. Learning new languages to define design complicates their process of learning. Certain languages are circumstantial to an environment and will not support a universal language that the mass can comprehend, and thus will alienate certain individuals not familiar with a different culture. This newly-acquired language will also force the student to spend more time “thinking” than doing, creating new problems of inefficiency, time management
Schools such as Wisconsin Stevens Point want to de-emphasize the computer as part of a design element and reinforce the use of form and type to communicate universally. They believe the best way to teach graphic design is to support and continue the traditional pedagogy method of the Bauhaus. This school’s philosophy is similar to the University of Cincinnati and the Kansas City Art Institute (KCAI) that thrive on form-driven design approaches. The foundation program at KCAI continues to use the philosophies of Rob Roy Kelly from nearly thirty years ago, including “experimentation with visual language, form-making, project-based learning and a range of increasingly difficult exercises, the foundation experience leads to a deepening awareness and understanding of basic artistic and design-based principles. The student’s future life as an artist or creative professional is based upon these principles.”

Yale University has changed philosophy as a result of a change of faculty, as happens frequently with other schools. Before the leadership of Sheila de Brettville in 1990, a Yale alumnus from twenty years earlier, the school embraced the Basel and Bauhaus traditions through the teachings of such instructors as Alvin Lustig (Bauhaus), Josef Albers (Bauhaus), Rob Roy Kelly (Basel) and Armin Hofmann (Basel). Under de Brettville, the Yale program has changed from emphasizing only the principles of the visual organization to including the communication of a message to a particular audience. De Brettville brought this on in hopes of “integrating culture and personal experience into design.” Yale University introduces graphic design students to visual communication with an emphasis on the principles of the visual organization of design elements in order to communicate a message to a particular audience. The course includes shape, color, and communication: visual hierarchy: word/image relationships and integration: typography: symbol design: and persuasion. The aim of the course is to develop a general understanding and a verbal and visual vocabulary to describe, generate, and evaluate basic graphic design objects from a conceptual, visual, and technological point of view.”
Similarly, State University of New York at Buffalo integrates the “Material Culture” at the foundation level so the student can “make connections between the different disciplines and better contextualize their skills with concept development.”

This school’s philosophy supports audience-driven design through the integration of five studio courses offered at the freshman level, all integrating some sort of culturally-driven design. This includes course titles such as Art and the Everyday, Constructed Body, Public Space, Self and Ritual and Time-based Strategies. None of these emphasize formal investigative methods.

Some schools still feel that it is important to maintain the design principles in their program. Rhode Island School of Design (RISD) states on their course overview that the foundations will allow you to “discover the contradiction inherent in a two-dimensional visual plane, a flat surface that draws attention to its apparent spaciousness. You will be presented with a variety of problems that allow you to focus on formal issues of pattern, rhythm, figure-ground, effect, line, size, light, shade and texture.”

RISD is a school that has changed their foundations program to be more interdisciplinary, but still uses form studies as a base to think about design. Although it is less like the Bauhaus and Basel curriculum, its simple objectives using the principles of design are still being explored. Recently though, RISD has added a foundation class that focuses on design environments as a way to introduce audience-driven design. While many schools continue to use the traditional approach to teaching graphic design, it will only be a matter of time before they follow suit with the experimentation of audience driven-design courses.

While this thesis has not explored changes outside the U.S., it is likely that they are also occurring. The International Council of Graphic Design Associations (ICOGRADA) created the Design Education Manifesto of 2000, the international graphic design organization, appears to support the new philosophies arising. It states that the new program should include “image, text, movement, time, sound and interactivity.” These are all dimensions of design that show relevance to culture through media and technology and
the means of communication. The manifesto really wants to push the human factor into
design knowledge and seems to support less of the communication factors of form and
composition. The American Institute of Graphic Arts (AIGA) is less convinced of one single
way but provides a forum of collaboration and philosophies expressed. Rather than stating a
manifesto of design education they provide opportunities for educators to participate in the
debate. In addition to sponsoring conferences, they provide online topics that range from
traditional design education issues to incorporating culture-centric issues.⁶⁸
IDEATION

This thesis presents a prototype graphic design curricular structure based on Plato’s Divided Line and the prisoners’ journey back into the cave. This curriculum is a reorganization of a variety of approaches that already exist, with particular focus on the sequential structure so as to parallel Plato’s Divided Line. This prototype allows for each of the stages necessary to complete a four-year program at any university with a graphic design major. Using Plato’s Divided Line model will challenge the students with the highest level of thinking, driving the curriculum from general ideas using a set of exclusive graphic design vocabulary and rules, ending with more complex and specific criteria focusing on the particulars of graphic design. These stages can be considered as a representation of reality, similar to the way that Plato’s Divided Line separated learning into four sequential stages. As with the Divided Line, the prototype makes a distinction between two major divisions: the World of Ideas and the World of Appearances.

The students’ journey through a graphic design program is much like that of the journey of the prisoner back into the cave. Figure 37 is a diagram that connects the step-by-step process of a graphic design curriculum to Plato’s Divided Line. The World of Ideas is a process of mental activity of existence. Ideas are the language of thought and thought is an intellectual contemplation of reasoning and rationality. In the World of Ideas the first two years of the student’s education will be represented. The first year will be spent on developing ideas of form and abstraction, as these are the subjects we can know. It is important to start this year with abstractions because at the opposite end are the images. Images give a false sense of reality to the student because, like the prisoner, if given images now they will not understand the source or meaning of those images. The second year, the Hypothesis or thinking, is the explanation of our biology using representational forms. We will recognize forms in our environments and how they relate to one another.

The World of Appearances is a materialistic value of objects, and a representation
of what we see manifested by a particular environment or culture. In the last two years, the World of Appearances deals with context and conceptual design problems. The third year we begin to understand the things we believe to be in our environment, recognizing the source of the objects and how we use them to design a composition. This year will introduce simple concepts and pictorial elements in the development of meaningful design. This will act as the introduction to images. Lastly, the final year we will focus on images. This is the year the student integrates professional applications into the things learned in the previous years. This will teach them about culture, contextual evaluation and perspective. This is analogous to the “shadows” of Plato’s Cave. The prisoner is provided the knowledge of the whole when outside the cave illuminated by the sun, so that as the particular parts of the environment are introduced inside the cave the pieces can be comprehended.
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Figure 37. Graphic Design Curriculum/Plato’s Divided Line
World of Ideas  
First Year: Knowing

As the students enter the first year of design studies most design educators would agree that they need basic fundamental skills for their design discipline. Looking at Plato, the first stage of general knowledge is the development of an understanding of abstract form. The students will study the knowable aspects of graphic design using the knowable with certainty and clarity of a given objective. For example they will know the universal forms such as circle, square and triangle, and the principles associated with Gestalt psychology we know are vital in order to manipulate compositions in communication.

Working with basic elements and a universal vocabulary will allow the students to maintain a focus on the problem given without being distracted by opinion. The first year should prescribe problems that work on the students’ hand and eye skills using rudimentary design tools for maximum flexibility in manipulation and exploration of materials. These skills are built by repetitive exercises that consistently use cutting, building, rearranging, investigating, creating and formatting. All these can be encompassed by pure form studies, devoting concentration to the practice of using the tools. By creating strict objectives and limiting the materials the students will waste less time thinking about what to do and more time doing it. The student will then have room to develop unique and inventive solutions with otherwise static shapes.

Another important reason for formal studies is that they fine-tune the students’ visual acuity, allowing them to recognize structural shortcomings in a composition more accurately and quickly. Through the practice of moving simple forms around a composition, the students recognize harmony and balance through trial and error. Following are a few examples of the several tests or projects the students should be doing in the first year, which parallel with Plato’s Divided Line and the process of discovering knowledge.

The elements of design should be the first to be introduced, exploring all possibilities that can be achieved. The first elements to be addressed are point, line and plane. Figure 38
is an example of a point exploring its potential in a composition. The student can study its significance as it related to size, position, repetition and its interaction with other points. Any number of objectives can be assigned to gain further understanding of compositional space.

Figure 39 is an exploration of straight vertical lines. The student can explore line weight, repetition and varying intervals. This shows only one example of line studies: these can also include gestural, horizontal, diagonal, calligraphic and many other variables. A
variation of this project might include shorter lengths of lines staggered across the picture plan in fluid or staccato movements. The last of the three elements is plane. This element encompasses all planar surfaces that define the space of a picture plane. At this stage, only the three basic non-representational geometric shapes are manipulated. The three shapes are circle, square and triangle. We can begin to deal with confrontation, contrast and value change.

Figure 39. Lines Studies
Figure 40 is a good first study of the square. It is the deconstruction and reconstruction of a square. It brings in the principle of motion because the pieces begin to move in and out from the mass. It is interesting to see how the student dissects the square to create other geometric shapes whether rectilinear or curvilinear. This process introduces other abstract shapes that grew from one initial shape. The lower studies shown in Figure 40 explore positive and negative space as well as cropping and proximity. These principles build reasoning skills to articulate about visual phenomena for later, more complex problems. This occurs because the student can use these skills to show the dynamism of the image. They will see how cropping affects the composition to gain interests or focus on the desired concept. This same study could also use the triangle and circle for varying outcomes.

Figure 40. Planar Studies
Another set of projects could be assigned focusing on specific design principles such as symmetry and asymmetry. Figure 41 shows a series of parts examining this principle. Projects of this type could be repeated using different design principles as the objectives. This example shows a change in position of the geometric shapes moving about the surface, providing different reactions amongst the shapes themselves. The student can begin to evaluate balance, harmony and unity with a project like this. Given such selective constraints, the student can better understand each of these principles more precisely. It also helps build visual acuity.

![Symmetry/Asymmetry Studies](image-url)

Figure 41. Symmetry/Asymmetry Studies
At the end of the first year the student should begin exploring value and change of shapes. An exercise involving progression using slight modification as seen in Figure 42 could be assigned of any geometric shape. This example provides the practice of economy in a less obvious way: as the students can see morphing and mapping of forms in the individual shapes while attempting to simplify or add forms for various solutions. By doing this the student can see that only minor changes are needed to change the perception of a shape or image.

The materials used in this year should be basic black, white and gray paper or paints. This will force the student to really consider the materials and craft. By understanding the materials and the limitations they impose, the physical practice of using these materials strengthens the problem-solving skills needed for later applications. Simplifying materials and objectives will give the student a sense of accomplishment though the iterative process. After tackling such basic elements in a multitude of assignments, the student is now ready to move on, adding more complex forms and ideas.

Figure 42. Star Progression
Second Year: Thinking

The second level of the World of Ideas is thinking. This is the second year in graphic design education. In relation to the cave, the prisoners are outside of the cave in a dimly lit surrounding still in the presence of the abstract and general ideas. The student can begin to connect what they know from the first year of form building to the biological forms of our environment. This could be understood as the representational forms. For instance, a form could be simplification of a flower or a person, without the properties of the kind of flower it is or who the person is. Continued use of limited forms is important to clarify the objectives and maintain objectivity for as long as possible. The student will use representational forms to communicate ideas. In Plato’s cave the prisoner sees the external world and evaluates his surrounding, i.e. trees, sky and earth. These are objects that exist universally, regardless of opinion or imposed values.

Now we can begin to advance our ideas of abstractions by integrating forms and simple concepts. This would also be the ideal time to introduce typographic forms, color and abstract physical elements of our environment. This is just a simplified study of the parts students will use in the third year to help communicate actual messages. They can begin to communicate ideas, emotions and explanations. Emphasis can be given to the form of actual objects, becoming less abstract than in the first year. For example, exploration of how typographic forms interact with each other could serve as a precept to verbal investigations practiced in the third year. This will engage the student with slightly more complex issues of composition, and advance the students’ understanding of the principles of design. The principles will no longer be the focus, but the integration of them while understanding the complexities of new information and images will help in creating solid designs.

In Figure 43, typographic forms are being studied to learn how the letterforms affect both the negative and positive spaces. Another component to this project is the meaning of the letters brings awareness to its position. This brings in apparent structural investigations
Figure 43. Space/Counter-space
and involves more complexity than the basic circle, square or triangle. This same project can be done with color. Investigations of color can create focal points and hierarchy of space and value change.

Symbol design can be introduced this year for its simple conceptualization. Figure 44 shows the integration of “simplified graphic forms” and design principles with the intentions of communicating a message. This project is executed without text and with “minimal detail” and treated as representation forms. It connects general concepts such as “Agriculture” with simple forms using design principles to organize the shapes to communicate an appropriate meaning. Another project that might be implemented is the “Descriptive Pair” project, designed to explore methods for communicating the basic meaning of a word (Figure 45). Using descriptive representation, the student can explore meaning, but with “close observation of its formal elements and shapes.”

This project executes the use of the literal interpretation of the words. The most complex project to be introduced at this level is one that uses typography as the content in a composition. Figure 46 shows four layouts that experiment with grid, format, color, overlap, structure and principles such as texture, focal point, rhythm, repetition, similarity and contrast. This exploration of complex visual organization will act as a base for other media applications addressed in the third year.
Figure 45. Descriptive Pair

Figure 46. Type as Content
World of Appearances
Third Year: Believing

The third year is the transition into the visible world. The visible world is the things we can perceive: we can use opinion and experience to create our designs. The world around us provides images that we have imposed values on and interact with. For example, beyond the shape of a chair, we recognize and evaluate the chair through its function and style: the area in which it rests: and the feelings the chair evokes in a person. It begins to take on more than the aesthetic value that instinctively attracts our eye. Context can be established at this point. This stage can only be achieved successfully, however, if the student understands how to communicate effectively through the organization of the composition. Thus communication theory is introduced to help progress the understanding of how to communicate using context. This is possible at this level only because it builds from the knowable. By following Plato the knowable has become innate in the student so that the third-year student is now able to incorporate increasingly diverse factors while creating compositions.

Semiotics, typographic messages and visible things are subjects that should be enforced at this stage. Semiotics is the study of signs and symbols, especially as elements of language or other systems of communication. Typographic studies will push the student to experiment with the complexities of communicating visual/verbal messages. The visible things are the starting point to recognizing opinions but should be treated as pure physical objects with a given objective at this point in the development of the student education. In relation to Plato’s cave, the prisoner sees the fire and focuses on the means of which the images can be seen. The guard is holding the object in front of the fire, the fire transmits the shape of the object onto the cave wall to make the shadow and the prisoner sees the shadow. In graphic design this translates to the student gathering the information (object): applying it to the media (fire): the media transmitting the information to the public (cave wall): and the audience then viewing what the designer intended.
The third-year student is ready to design various applications of media such as advertisements, collateral, editorials, catalogs and package design. These projects can simulate "real life" issues while exploring issues of audience and context. In Figure 47 this project engages the student with cultural diversities. The student must recognize the elements in a culture that make it unique, such as the symbols seen in these stamps representing the Chinese culture. In addition to audience, the student must take into consideration new variables such as formatting, legibility, materials and the juxtaposition of type and image, all of which have not been dealt with before.
The student must make a conscience decision of the appropriateness of the image they use in a composition. The student must use their experience and understanding of the world to influence the audience and create meaningful designs with as little confusion as possible. In Figure 48 an advertisement entitled “Save the humans” has mixed messages. It creates complexities of accessibilities and the knowledge base of the audience. This advertisement is very complex in concept but simple in design. At first you see a sweet seal holding a sign stating "save the humans" evoking sympathy for the homeless. Then there is the question of what does the seal represent and why have an animal to communicate a problem for the homeless. Further investigation shows that the seal is an endangered species in Canada due to the bludgeoning of innocent animals for fur factories. Are the designer relying on the assumption that the general audience would know this fact or are they relying strictly on the use of a cute image? This is just one example of how powerful an image can be and the fact that it can be misinterpreted very easily. In this ad, visual metaphor is used in a way that obscures the clarity of its message.

Other applications will use basic principles of visual organization applied to sequential designs. Specific vocabulary should be introduced at this point, dealing with the particulars of each media. The student has to think about consistency through the pages as well as information hierarchy. At this level, the student is learning how different audiences view race, religion, technologies, and cultural factors diversely. Different media reaches different audiences, so it is important to make sure that the student knows how to use each of them effectively.
Figure 48. Save the Humans Poster
Fourth Year: Imagining

In the fourth year, everything comes together to build the students' understanding of professional issues. The students have the tools and insights to make sense of this final stage. In Plato's cave, the prisoner is returning to the shadows at the lowest level of the line, but now has the understanding and knowledge of how the world works. For the student, this equates with an understanding of how to communicate. Knowing what is real, the prisoner can make sense of the shadows and decipher what they represent. Before discovering the knowable ideas, shadows were naively defined as realities and images, but now the prisoner can distinguish between what is “real” and what is not. Similarly, the fourth-year student now has the ability to think and see without false belief. The student is ready to respond to culture, clients, market and audience. The student will be given “real” projects or simulated projects that deal with “real life” problems. They need to focus on the audience they are designing for.

This year will be a difficult year, because people's opinions are subjective variables that have not yet been dealt with. Communication only becomes one part of the solution. Students must communicate effectively to a specific audience. Style, trends, culture and many other variables that are driven by time and place produce images that are unpredictable and unstable manifestations. Images are powerful tools and should be used with careful understanding and respect. Plato suggests that this is the lowest level of reality because it is not conducive to science or hard evidence but rather opinion and imagination. While opinion and imagination are important, he thinks they are only helpful after achieving greater understanding. Knowing how to communicate is important because we want the viewer to “read” the message whether through words or visuals and not get lost or offended by what may be perceived. This is why the student must know “how” to communicate so that “why” we communicate becomes quintessential. Figure 49 is an example of the type of complex image students will create at this level. The DVD cover of a movie that is shocking and controversial in content. Many elements come into play when dealing with these topics. The
Drugs. They consume your body and soul. Even good people break; you're handling their lives. Four addicts. Four failures. Doing their part to succeed in the world. But falling miserably. Realizing their aspirations and ambitions, they succumb to their addictions. Watching the rundown spiral out of control, the camera witness to the darkness. Young addicts reside in it. It is grinding and eye-opening. The demands to be made by the addicts and non-addicts...
movie emphasized the impact of drugs, sex and abuse through its imagery and compositional methods. The student needed to translate this into the cover both to attract the customer and allow them to understand what happens in the movie. Principles of design were used to strengthen the images. For instance cropping the close up of the needle so that the picture would aggressively interrupt the space and bring emphasis to the particular contents of the photo. On the cover the student has created an image of a character who has lost his identity and is caught in a dimension of confusion. The student used similar treatments for the type and image, simulating motion. The high contrast of black and white with blue undertones denotes coldness and separation between the object and environment. Both images get right to the point of the movie’s concept. It even mimics the cinematographic style of the movie. These images have the potential for powerful interpretation, but if used incorrectly they could weaken the message. Using what we know to design will make these images meaningful. Knowing why a design works is better than assuming it does. Throughout the process of the four years the student knows how to design a composition so that the message comes across to the viewer, both through the use of the design principles and through the development of a keen eye to recognize the hierarchy of information.

During last year the students will refine their skill and take what they have learned and engage in monitored internships and professional projects. Developing a class that works with non-profit companies working on a pro-bono case is ideal because the student will have to consider all aspects of the design business. This is good practice for any future endeavors the student will undertake. This also gives them the practice of using different sources and images to communicate to various audiences. They learn what images are efficient and when to avoid using images if the audience is more ambiguous. Now they have the tools and the knowledge to be flexible with all the different variables of design.
CONCLUSION

It is evident here that American Graphic design education is shifting its focus. A debate has been identified between educators who want to ignore form-based design skills at the foundation level and jump directly into audience-driven design, and those who want to maintain the formal traditions of graphic design education. Audience-driven design has its place as an experiment because it reinforces the conscience analysis of design's place in history and culture. However, without the skills or terms basic design principles support, the students will not have gained the knowledge to think critically about design, nor will they understand the weaknesses that occur in visual communication. They need to draw and develop basic visual vocabularies in order to communicate so that others will understand.62

Some educators are skeptical of the necessity of change. As with any new initiative, the benefits of this move to audience-driven design are still unproven. While theoretically this change will allow the students to think critically about culture and society, in actuality their solutions will lack visual coherency, because they will be missing the skills and vocabulary necessary in understanding visual communication. By starting with images or audience-driven design they will find no solid reality, just as the prisoner could not build an accurate image before studying its source. An important factor not considered in this study is that while the student develops their understanding in design they are also developing life skills and academic exposure, each of which will better prepare them for complex problem-solving.

It is useful to return to the educational model of Plato's Divided Line to support this argument. By looking at Plato's Divided Line we can see that abstract form is needed in design education and that the formal traditions of the Bauhaus and Basel are still relevant, since form is universal and is not changed by culture, trend or circumstance. At this point the outcome of change away from traditional education has an unpredictable outcome. Considering the arguments laid out in this thesis, along with the guidelines set out by the Divided Line, experiments that prioritize context over form are inappropriate because
they do not follow sequentially from the general to the particular. While many educators are really pushing the need to change to audience-driven design education some part of the existing education will ultimately suffer as a result. Kenneth Hiebert summarizes these concerns by saying that “Establishing a deeply rooted discipline has to do with having time to contemplate things until they reveal their mystery and presence, being able to build from scratch without relying on stylistic patinas and trusting a process.”
IMPLICATIONS FOR FURTHER STUDY

Limiting this study to only Plato and American graphic design programs was a helpful way to focus on the particular problems in graphic design education. Certainly this study has the potential to be expanded upon but constraints were set for various reasons. If this thesis were to be expanded several directions could be researched. One of these would be using multiple or different philosophers and their models to compare curricula. Plato’s model supported a traditional curriculum but perhaps other models would match or even prove to go against the tradition. John Dewey’s philosophy is particularly relevant because he criticized the industrial revolution and its affect on education. Looking to him for further evaluation of graphic design might give some idea how to adjust to environmental, technological, and social changes.

Another research possibility might be the recognition of the smaller, less qualified programs. These schools are producing graphic designers at an exuberant speed and not providing a solid knowledge base to design. While a few of these students are graduating with the capacity to make pretty pictures, the rest are creating designs that are ugly and meaningless. These students are not prepared to communicate effectively through composition and have not learned the primary criteria of graphic design.

A larger study that might take place would include International graphic design programs. This topic is the most relevant as the international programs have different philosophies and different needs. Taking into consideration what the international programs do may strengthen graphic design education everywhere. It would be interesting to see how the international schools developed their curricula and discover where their inspirations lie.

Overall, this thesis affects all graphic design educators. Educators do not have to be in agreement in order to question how we teach students to communicate and what elements are important to stress in a graphic design program. All of these expansions of the study could be important when reviewing the positions of debate at a later date. Hopefully this
thesis will give educators a starting point to develop and strategize stronger graphic design curricula.
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