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in candidacy for the degree of Master of Fine Arts

Philosophy made visual

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Special Thanks

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Project Definition

Everyone does not learn in the same way.

While some people are prone to learn best when presented with auditory information in the form of lectures, others learn better when presented with visual material. As a result, educators are faced with the problem of communicating in a manner that accommodates the needs of all of their students.

A challenge develops when educators teach abstract or non-concrete concepts such as those involved in philosophy. Some students have little to no difficulty reading pages of text which describe a philosopher's theories. Others are forced to struggle. Although those students who do struggle are able to learn by listening or reading, a tremendous effort is necessary by both the student and the teacher. Instead of forcing all students into one learning mold, educators must address the different strengths and learning styles of all their students. To achieve this goal, a variety of teaching strategies must be employed.

When faced with presenting written or aural material, one strategy a teacher can employ is to teach with the use of visuals. How can abstract, non-concrete concepts such as philosophical arguments be visually translated in an effort to address the visually-oriented learner? This question was the initial impetus for this thesis study.

Specifically, the study focused on how graphic design can be implemented as an educational tool to help visually-oriented college-aged students learn a particular philosophical concept. Several areas of philosophy were analyzed to determine the specific philosophical theory upon which the thesis would focus. Since most, if not all, introductory philosophy courses in college discuss Plato, Plato's *Divided Line* and *Allegory of the Cave* were chosen as the content for the thesis study.

Howard Gardner's Theory of Multiple Intelligences

After preliminary research on learning styles and learning theory, Howard Gardner's Theory of Multiple Intelligences was selected as the learning style theory on which to base the study. This decision was supported by various reasons, chief of which was Gardner's analysis and dismissal of earlier intelligence theories (Binet-Simon, Piaget) on the basis of limited or restricted domains (Gardner, 26). Another reason for selection of Gardner's Theory of Multiple Intelligences was the acknowledgment and acceptance of the theory by many educational institutions across America.

In 1983, after years of research, Howard Gardner published *Frames of Mind: The Theory of Multiple Intelligences* wherein he first discusses both the strengths and weaknesses of previous intelligence theories. The earlier intelligence theories were primarily language-based. Therefore, the tests favored a section of the human population such as those who have been assimilated into an educational system (16, 18). After the dismissal of these restricted theories, Gardner proposes an intelligence theory applicable to all of the human population. He then proceeds to offer his theory of, not one, but several intelligences all of which are possessed by everyone.

To determine what he would ultimately call an intelligence, Gardner tested the intelligence against a set of criteria. The intelligence must relate to a specific brain location and function. The intelligence must be capable of symbolic representation. The intelligence must be valued by the culture. Finally, the intelligence must be of biological origin.

Howard Gardner's Theory of Multiple Intelligences (continued)

With these criteria firmly in place, Gardner selected the following seven intelligences:

Linguistic Intelligence
the ability to use language to express emotions, thoughts, or ideas and to understand others

Logical-Mathematical Intelligence
the ability to think conceptually and to understand the underlying principles of a causal system
or the ability to manipulate numbers, quantities, and operations

Spatial Intelligence
the ability to perceive the world accurately, to see or visualize the spatial world internally in the
mind, and to represent two-dimensional information in a three-dimensional form

Bodily Kinesthetic Intelligence
the ability to use the whole body or parts of the body to solve a problem, to make something,
or to put on some kind of a production

Musical Intelligence
the ability to think in music, to be able to hear patterns, recognize them, remember them,
and manipulate them

Interpersonal Intelligence
the ability to understand others

Intrapersonal Intelligence
the ability to understand one's self with a focus on self-reflection

As a result of his continued research and study of intelligences, Gardner recently added
an eighth intelligence, the naturalistic intelligence.

Naturalistic Intelligence
the ability to discriminate among living things (plants, animals), as well as sensitivity
to other features of the natural world (clouds, rock configurations)

Spatial Intelligence

The elemental characteristics of the spatial intelligence are the ability to navigate within an environment, the ability to change or modify perceptions, and the ability to visually recreate experiences. Gardner writes, "Spatial intelligence remains fundamentally tied to the concrete world, to the world of objects and their location in the world" (204). The area in the brain where the spatial intelligence lies is the posterior region of the right hemisphere. The development of spatial intelligence in humans can be traced back to the cave drawings and sculptures of the Paleolithic era.

Thomas Armstrong, a former student of Gardner, writes in his own book entitled *Multiple Intelligences in the Classroom* that visually oriented learners need "art, LEGOs, video, movies, slides, imagination games, mazes, puzzles, illustrated books, [and] trips to art museums" in order to address their specific needs (27). Further in the book, Armstrong lists several teaching strategies educators can utilize to address their students' needs. These activities include "visual presentations, art activities, imagination games, mind mapping, metaphor, [and] visualization" (52).

Precedent: Key School

In September of 1987, the Key School in Indianapolis became the first school to implement Gardner's theories into its curriculum. Students are exposed to physical education, art, music, foreign language, and computers every school day. Three times a year the entire school's curriculum revolves around a central theme, such as Renaissance – Then and Now. The students present to their teachers ideas for projects reflecting the current theme. Students are also able to become a member of a particular "pod" or group of students with a particular interest. The pod is led by a teacher knowledgeable about the specific interest (Armstrong, 111-13).

The success of the Key School gives credibility to Gardner's theories. Essentially, the Key School demonstrated that, through the implementation of Gardner's learning theory, students can learn more effectively and efficiently.

Plato's Levels of Cognition

This thesis study applies spatial intelligence teaching strategies to Plato's theory of different levels of cognition which he puts forth in *The Republic*. Plato wrote *The Republic* as a collection of the ideas of his teacher Socrates. The thesis of *The Republic* is to determine what justice is and how it can be implemented in society. Socrates begins by looking at what makes a state just and whether or not these same principles are applicable to individuals. Socrates believes that this idyllic state can be achieved if the philosopher rules. The philosophers are the only ones truly fit to rule because they know "the Good itself, the final cause of all that is good in the universe and of its very existence" (quoted in Cornford, 175). The rest of society then becomes educated by the philosophers in "virtue, based not on immediate knowledge, but on correct belief" (quoted in Cornford, 175).

The Divided Line

In order for philosophers to know "the Good" so they may create a just state, they must pass through four levels of cognition symbolized by a line. The line is unequally divided into two parts – the smaller World of Appearances and the larger World of Ideas which contains a greater degree of reality than the World of Appearances. The two worlds are then divided in the same proportion as the whole line is divided. The line is now divided into four segments, each representing a way to know reality. Each segment is closer to reality than the preceding segment.

The first segment of the World of Appearances is *imagining*, wherein images and morals are accepted blindly without questioning or judging them.

The second segment is *believing*, wherein physical objects are understood, and "correct beliefs without knowledge" are characteristic (Cornford, 222). It involves movement away from impressions or images of an object towards the actual physical object itself. Correct morals and values are only recognized, but not supported by thought or knowledge.

The third segment, *thinking*, is the bridge between appearances and intelligible reality. The bridge is aided with the help of diagrams and models. In this segment, deductive reasoning, as utilized in the physical sciences and geometry, is used as a tool of abstraction. Thus, a move away from the physical world towards the World of Ideas is possible. Within the World of Ideas, Forms or the "ideals or patterns, which have a real existence independent of our minds" are discovered (Cornford, 180). The logic which provides support for the Forms is questionable until the underlying principle is known.

The fourth segment represents *knowing* (i.e., true knowing, as opposed to merely believing), which tries first to discover the essence of an object (Form) and then the underlying principle ("the Good"). Finally through the use of induction and the examination of each preceding premise, the "self-evident and unconditional principle" is known (Cornford, 251). Plato says knowing "makes no use of the images employed in the other sections, but only of Forms and conducts its inquiry only by their means" (Cornford, 251). Plato calls the primal Form "the Good." Only through knowledge of "the Good" can an individual know morality and ethics.

Allegory of the Cave

To further explain the concepts within the "Divided Line," Plato tells a story of a prisoner who, when released from his chains, leaves the World of Appearances symbolized by the cave and comes to know the World of Ideas symbolized as the world outside the cave.

Deep within a cave, prisoners are chained so they may look only straight ahead at the cave wall in front of them. Behind and above the prisoners is a fire. Standing between the fire and the prisoners is a wall behind which people walk carrying objects on poles. The fire casts its light upon the objects thereby producing shadows on the cave wall in front of the prisoners. The shadows and the noises made by the people carrying the objects are the only things the prisoners know; it is their reality.

If a prisoner were released from his chains and were then able to turn around, he would at first be blinded by the light of the fire. After his vision adjusted, the prisoner would then be able to climb the incline to the wall. When shown the objects which had cast the shadows on the cave wall, he would at first swear these objects were not real because he had no prior knowledge of these objects. Eventually, these objects would become the basis for the prisoner's new concept of reality.

If the prisoner were then dragged the rest of the way out of the cave, he would again be blinded by lights, this time by the light of the sun. He would take comfort in things he knew — reflections and shadows. Over time the prisoner would be able to look up and view the stars and the light reflected from the moon. As his eyes continued to adjust, he would know the world around him.

Next, the prisoner would begin to question the cause of the light which illuminates the objects he sees. Unable to look at the sun directly, he would look at the sun reflected in water. Then he would be able to look at the sun around objects such as trees. Finally, the prisoner would be able to look in the sky towards the sun and know it is responsible for the light he sees around him.

If the prisoner were to go back down into the cave, he would need time for his vision to become accustomed to the lack of light. Given his new knowledge, he would not recognize the shadows in front of him as he was able to before his journey. His fellow prisoners would ridicule him for traveling outside their reality.

Plato believes only philosophers can undertake the journey to the surface and come to know the sun or "the Good." Unfortunately, the philosophers tend to remain outside the cave and, thus, do not return to aid their fellow countrymen. The philosophers must return to the cave and govern society because they have a better understanding of reality and of the pure forms. They are able to "recognize every object for what it is and what it represents" (quoted in Cornford, 234).

It is the goal of this thesis study to communicate Plato's Levels of Cognition to visually-oriented college-age students.

Synthesis

An audit or sampling of existing materials was taken to examine how graphic design has been used to communicate the abstract to the visually-oriented. In order to get an idea of how graphic design has accomplished this task, twenty examples covering a range of applications (publication design, logo design, wayfinding, film, exhibition design, among others), content (military, science, math, travel, philosophy, among others) and complexity of information (train stops, rules for various sports, perception and the brain, postmodernism, among others), were gathered and analyzed.

Analysis of the examples in Appendix A revealed the following:

Communication Vehicles
Diagrams were the most frequently used format – 11 times.
Photographs were used 5 times.
Maps were used 4 times.
Typography was used 3 times.
Participation, movement, and visual metaphor were used 2 times each.
Sound, space, and light were used 1 time each.
Combinations of two or more formats occurred 12 times.

Type of Imagery
All the examples used flat, two-dimensional imagery except *Brain Exhibit* which incorporated three-dimensional objects.
Illustrations were used 15 times.
Photographs were used 9 times.
Combinations of photographs and illustrations occurred 5 times.

Image or Text Dominance
The examples were primarily image dominant (12 examples).
Three examples were text dominant.
Five examples showed a text-image split dominance.

Language
Headlines were composed primarily of keywords (12 examples).
Phrases were used in 8 examples.
A combination of keywords and phrases was used by 4 examples.
Four examples did not have headlines.

Typically, body text was written in sentences (13 examples).
One example used both sentences and keywords.
Six of the examples did not have body text.

Analysis of the examples in Appendix A (continued)

Sequencing
Eleven of the examples used a form of sequencing.

Interaction
Six of the examples used a form of interaction.

In summary, the analysis showed a trend toward communicating abstract or complex information primarily through diagrams or a combination of two or more formats. A small tendency to depict the information as an illustration rather than a photograph also existed. Although a majority of the examples were image dominant, all incorporated text, most of which appeared in the form of keyword or phrase headlines and sentence body text. Half the examples possessed a form of sequencing such as skills building or directions. A plan was developed to use these reoccurring communication methods to begin the translation of Plato's written words into a visual form.

Ideation

Initially, the form of design application for this thesis study was a non-traditional book, but the results from the analysis of existing materials (pages 7-8 and Appendix A) offered alternative forms for the design application. During the ideation stage, the idea of the non-traditional book was placed aside to explore other options which might prove more appropriate for the topic. Several communication formats were discovered as a result of the external audit performed in the synthesis stage. Exploration of these approaches appears below.

Diagram

The first direction was to explore the topic through a diagram (see below). Although brief, the diagram exploration proved beneficial because it not only was a simple way to translate the written material into a visual form, but it also helped to explain the relationship between the "Divided Line" and the "Allegory of the Cave" to the thesis committee members and any students unfamiliar with Plato's Levels of Cognition.
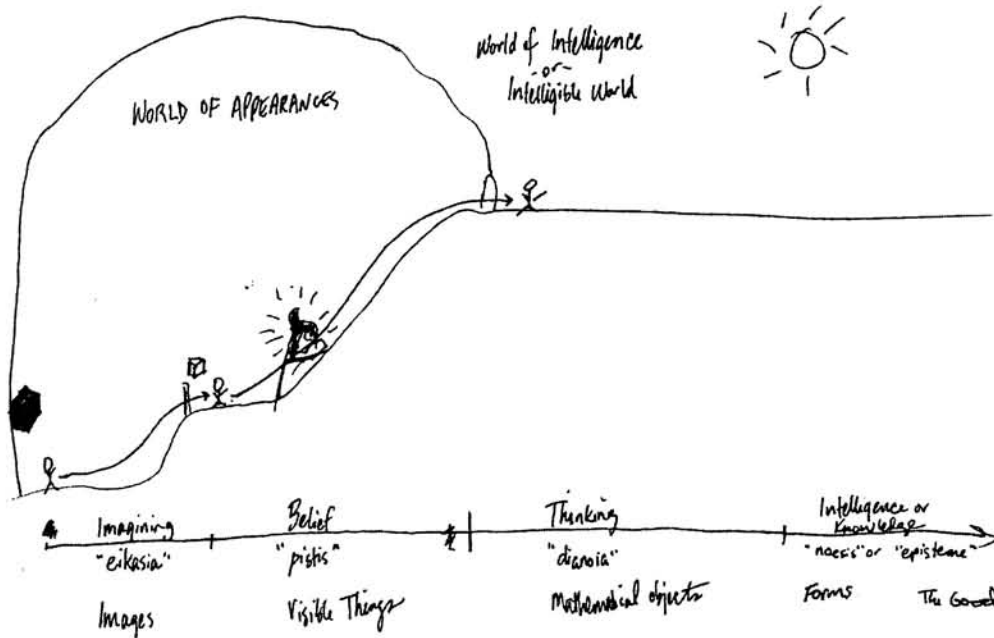
Photographs

The second exploration involved the use of photographs. A series of photographs was placed edge to edge to form one long continuous image. The resultant image depicted the prisoner's journey from deep within the cave to outside the cave where he is first blinded by the light before his eyes adjust. The image ends with a depiction of the prisoner's return to the cave where he tells the other prisoners of his newly acquired knowledge. As the prisoner gains knowledge, the width of the individual images (shown below) and the number of images within each area on the path towards knowledge increases.

The prisoner sees a shadow.
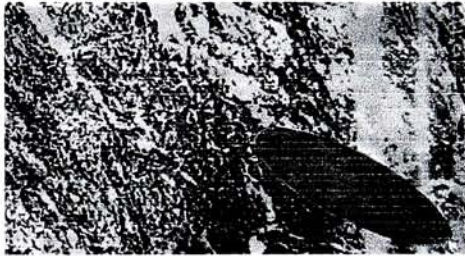
The prisoner is released and sees the object casting the shadow and the fire.

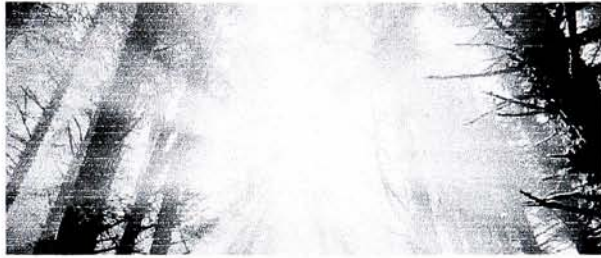The prisoner leaves the cave and is blinded by the light outside the cave.
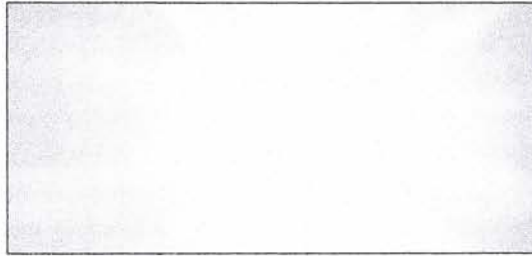
The prisoner finds security in shadows and at night.

The prisoner looks at the world around him.

The prisoner begins to look toward the sun.
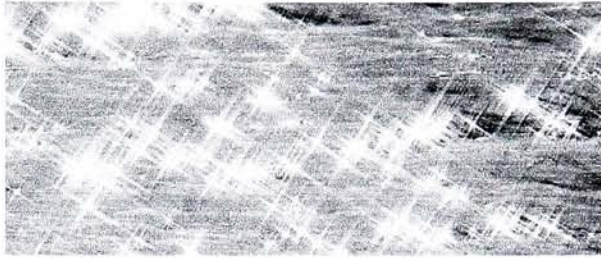
The prisoner recognizes that the sun is the source of the light he sees.
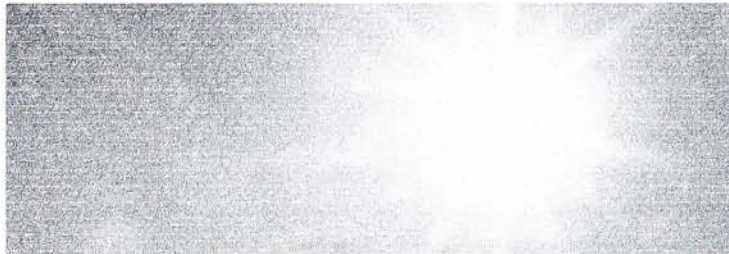
The prisoner returns to the cave.
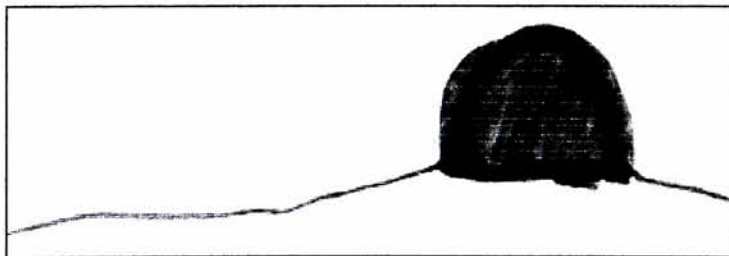
The prisoner becomes reaccustomed to the lack of light.

The prisoner tells his fellow prisoners what they are actually seeing on the cave wall.

Evaluation of this exploration revealed the photographs could not stand alone. The intended audience, college-aged students, is not expected to know Plato's "Allegory of the Cave" or the "Divided Line." Therefore, the photographs need accompaniment of text and/or spoken explanation in order for the viewer to completely understand the philosophical content. This revelation was important because the viewer is not expected to possess knowledge of the story and its meaning prior to viewing the photographs.

Visual Metaphors

Visual metaphors (symbolic images used to compare an unfamiliar concept to a familiar concept) were also explored to translate the content into terms or experiences of which college-aged students possess prior knowledge. Initial thoughts were simple and eventually became more complex. One example applied Plato's Levels of Cognition to an example of a mountain.

imagining	seeing an image of mountain on TV or in a magazine
believing	seeing the actual mountain
thinking	comparing the mountain to other mountains
knowing	knowing the essence of the mountain

The *thinking* phase would involve the use of diagrams, while a pictogram would comprise the *knowing* phase. Upon evaluation of this example, thesis committee members raised concerns about the logic and reasoning behind the example. One concern was to ensure that the example is universal and not specific to one particular group's idea of the essence of a mountain.

The subsequent re-examination showed the necessity of two different sets of examples to adequately address the content of both the "Divided Line" and the "Allegory of the Cave." One set of examples would parallel the Cave while the other set parallels the Divided Line. Application of the mountain example using the new criteria yielded the following:

Allegory of the Cave

image	photograph of the mountain
model	model of the mountain
diagram	icon or pictogram of the mountain
3-D object	the actual mountain

Divided Line

imagining	photograph of the mountain
believing	the actual mountain
thinking	scientific diagrams of how the mountain formed, etc.
knowing	"the Good"

Several problems became apparent during the evaluation of these two sets of examples. First, it would be impossible to place an actual mountain or any three-dimensional object into a two-dimensional format such as a book, brochure, or poster. Second, due to size constraints, any example chosen to be further developed must be smaller than a mountain. Last, how will "the Good" be represented? Plato states that "the Good" cannot be represented in the form of an object, nor can it be given to anyone — the individual must work to understand and grasp it (Cornford, 262).

Viewer Participation

One idea (shown below) involving viewer participation also incorporated the use of visual metaphors. A wall is divided into four levels. Each level is taller than the level below. The levels are then equally divided by the number of metaphors. Some of the columns have all four levels filled with either an image, a word, or a phrase. Examples in the columns relate Plato's four levels of cognition to objects and activities common to daily life. One possible metaphor is athletics. On the lowest level of the wall (the imagining cognitive level), the viewer sees images of various sporting activities. Above on the next level (the believing cognitive level), the viewer sees the sports equipment. The third level (the thinking cognitive level) consists of an icon representing athletics. The knowing cognitive level is represented in the fourth level as a bright light to symbolize the overlying principle or "the Good." In some of the columns, one section remains unfilled. With images missing, the wall becomes a fill-in-the-blank game. Viewers are given clues but each viewer has to solve the puzzle individually. A visually oriented person can look at the complete metaphors and visualize what might appear in the wall's empty sections.

example wall

photos of decent to cave

walk-way + wall slopes upward

photos of the ascent from cave

Divided line on walk way

SHADOW CASTED

Background, Explan. material here
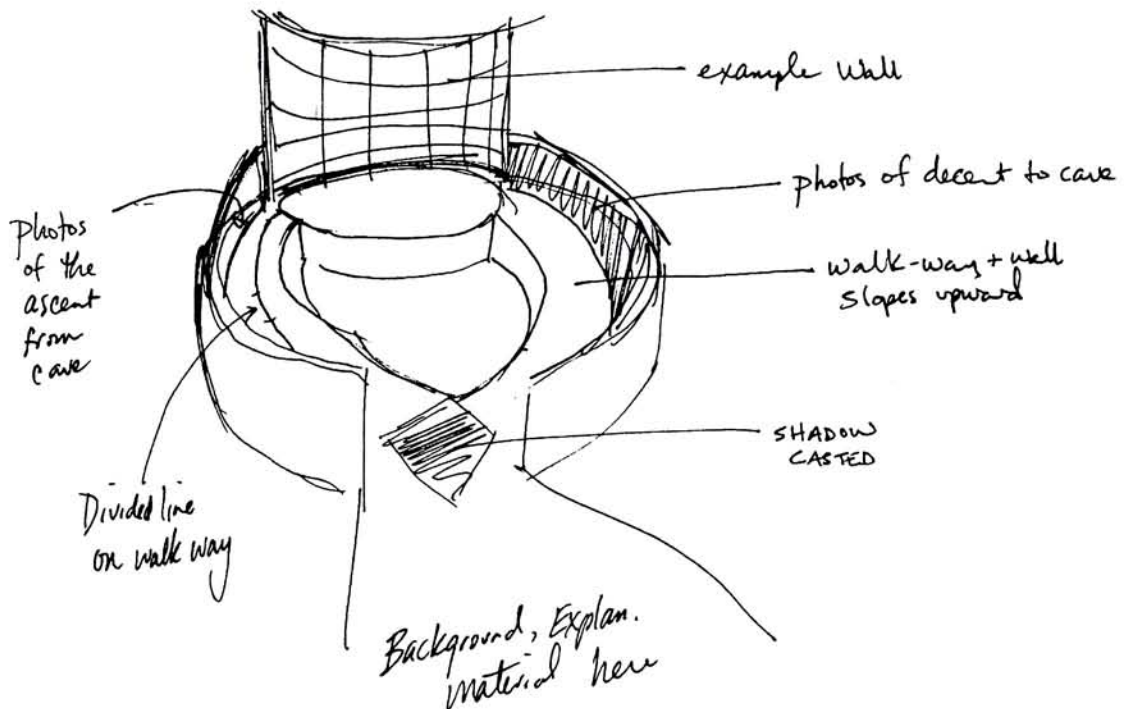
Viewer participation was also addressed in a three-dimensional exploration of Plato's theories. Initial studies involved building an exhibition with four stages to represent the four levels of cognition. Each stage would visually depict shadows, objects, reflections, among others corresponding with a particular cognitive level. The viewer would encounter inclines and declines while journeying out of the cave to find knowledge and then back into the cave to tell his fellow prisoners what he learned. (Sketches of the studies appear below.)
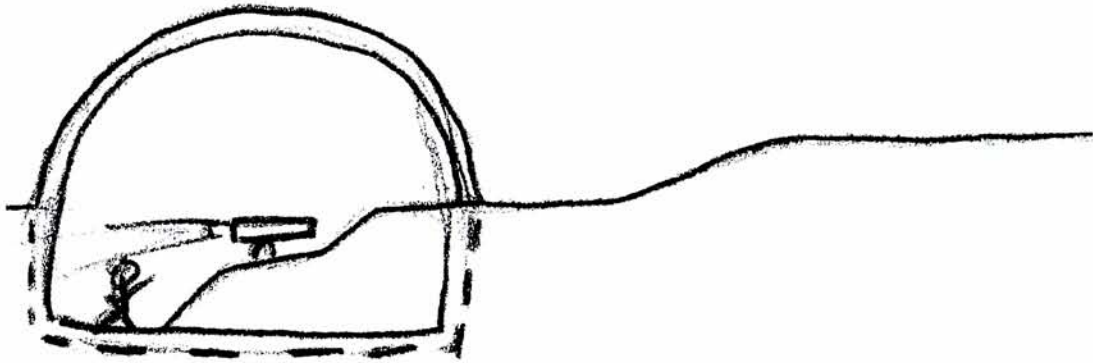
Preliminary sketch for an exhibition with four different elevations to represent the four Levels of Cognition.

LIGHT ILLUMINATES OBJECTS OVERHEAD

objects on poles

charts/diagrams comparing

pure form hung over head
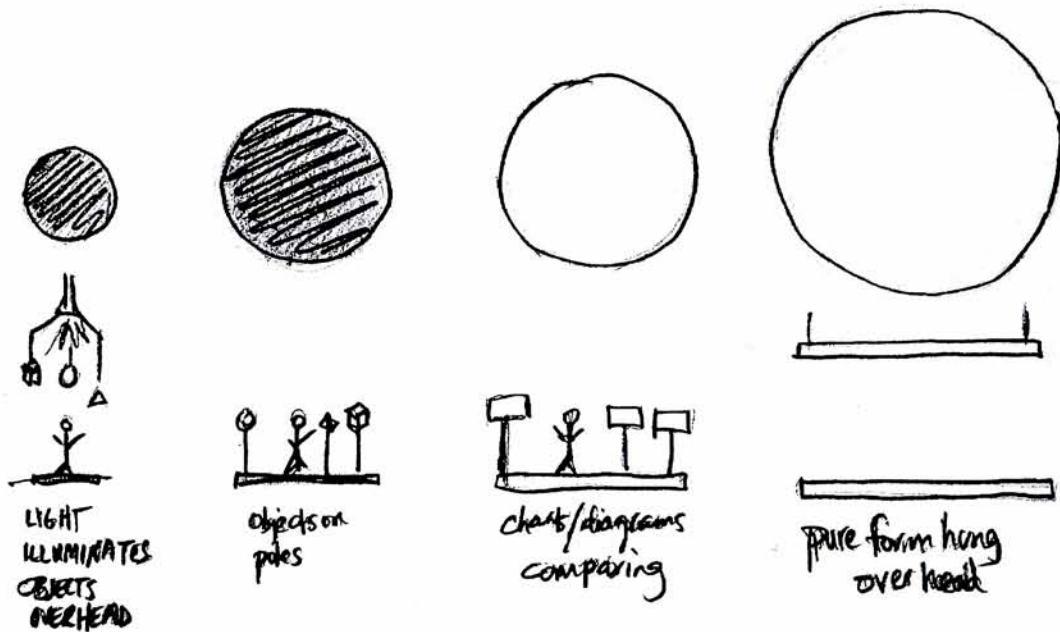
Preliminary sketch for an exhibition with four size circles to represent the four Levels of Cognition.

Upon evaluation of the initial concepts, the best solution involved a combination of various aspects of each approach. While each concept by itself was conceptually strong, if combined, the resulting whole is much greater than any individual part. The final form of the application was decided to be an exhibition design incorporating viewer participation, diagrams, visual metaphors and photographs.

Exhibition Design Development

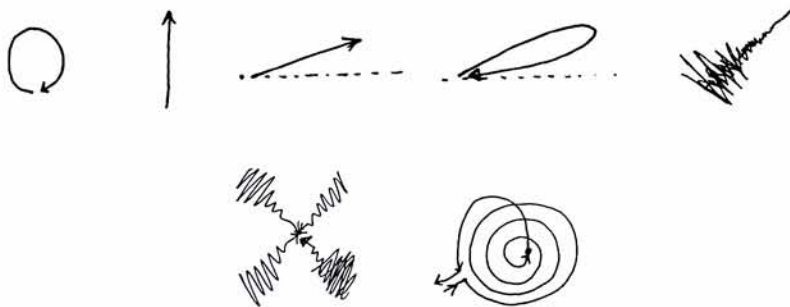With exhibition design chosen as the final form of the thesis application, refinement of the concepts began. Since viewer movement in an exhibition is important, diagrammatic studies (shown below) were completed to explore movement patterns.

Based upon this exploration, the spiralling ascent followed by a descent communicated best the prisoner's journey. The diagram was further refined to include a cross-hatched area depicting an enclosed area.
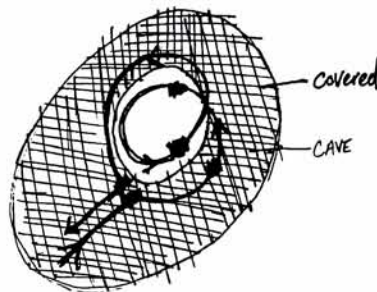
With preliminary plans for movement patterns through the exhibition begun, the type of exhibition – artifact or narrative – needed to be decided before the development of an exhibition content outline could begin. An artifact exhibition is similar to most art museum and historical/cultural institution exhibitions. The paintings, ceramics, ruins, and other artifacts are displayed, and a viewer walks from one display case or gallery to the next. Narrative exhibitions lead the viewer through a story. In contrast to artifact museums where the path of movement is somewhat random and left for the viewer to decide, the viewer walks a pre-established path of movement in a narrative museum, such as the Holocaust Museum in Washington D.C. Therefore, since the narrative format offered the ability to lead the viewer through a story step-by-step, the exhibition developed for this thesis study is narrative-based.

Since the exhibition is narrative, a content outline was necessary to structure the exhibition. The content outline divided the exhibition into three main sections: the "Divided Line," the "Allegory of the Cave," and the Media Cave — a larger example which applies the knowledge learned in the first two sections. The outline will be used as a measuring stick with which to evaluate the effectiveness of each section and the exhibition as a whole.

Areas in the exhibit	Communication goal	Method
Section 1: Allegory of the Cave		
background material	introduce Plato introduce his objectives in *The Republic*	text image timeline for historical information group experience open area passive experience
explanation	communicate the passage of the prisoner to enlightenment	bridges images (moving and static) circles, cyclical light sound movement through space time elevation (move upward and return downward) increase in size of physical space decline in the number of viewers in same area diagram active experience (movement, participation)
example	provide redundancy give applicable example(s)	movement upward increase in space (l,w,d) time (transition from one area to another) participation group experience changes to individual experience active experience
transition	move from allegory to divided line	movement upward to a higher level of knowledge increase in group size active experience

Areas in the exhibit	Communication goal	Method
Section 2: Divided Line		
explanation	communicate a level of reality higher than cave example	elevation diagram of the line group experience passive experience (reading) active experience (information unfolds as viewer walks)
example	apply the Divided Line to applicable example(s)	group experience changes to individual experience images (moving and static) light sound movement time elevation (move upward) increase in size of physical space as knowledge is gained progressive decline in the number of viewers in same area diagrams active experience (movement, participation)
transition	introduce the media cave and its goals	movement downward less light increase in intensity of experience text combination of active and passive experiences

Areas in the exhibit	Communication goal	Method
Section 3: Media Cave	apply Plato's levels of cognition to how teenagers develop their concept of reality	active, visual experience
imagining	communicate how media parallel the cave's shadows	video and slides projected on the walls, ceiling, floor sound dark large group experience various viewing angles short length of experience
transition	journey from *imagining* to *believing*	short journey through space upward motion narrowing of corridor same darkness as *imagining* increase in height of corridor view of the fire (projection of a fire or a "fire" wall)
believing	show the media transmitters	media objects dark, but lighter than *imagining* medium group experience longer length of experience larger space (l,w,d)
transition	communicate the change from the World of Appearances to the World of Ideas	little longer journey through space move upward light upon exiting the cave increase in height narrowing of corridor
thinking	communicate the science behind media	light diagrams, charts small group scrims with diagrams, etc. elevated position of elements spoken explanation of principles longer length of experience larger space (l,w,d)

Areas in the exhibit	Communication goal	Method
Section 3: Media Cave (continued)		
transition	journey from *thinking* to *knowing*	longer journey through space upward motion increase in intensity of light narrowest corridor
knowing	communicate an experience "the Good"	largest space intense light individual experience area of reflection elevated position silence circle / center longest length of experience
transition	journey to *imagining*	long descent back to the cave where viewer rejoins group narrow corridor
exit		ascent

Unlike in *The Republic* where Plato discusses the Divided Line before the cave allegory, the exhibition presents the cave allegory first and then the Divided Line. The rationale behind this decision was to gradually move the viewer from simple concepts towards complex concepts.

It is important to include an example after both the cave and divided line sub-sections. The example needed to be chosen carefully so it was not only applicable and understandable for all students, but that every student had an experience or some knowledge of the example. With these criteria in mind, two possible examples emerged for further development: humans and transportation — specifically automobiles.

The human example would parallel the cave and divided line content in the following way:

Allegory of the Cave

image	reflection in mirrors, shadows, photographs
model	anatomical model
diagram	icon or pictogram of human
3-D object	the viewer (standing on a pedestal)

Divided Line

imagining	reflection in mirrors, shadows, photographs
believing	the viewer (standing on a pedestal)
thinking	scientific diagrams of DNA, molecules, etc.
knowing	"the Good"

The automobile example would parallel the cave and Divided Line content in the following way:

Allegory of the Cave

|	
image	reflection in mirrors, shadows, photographs
model	scale model
diagram	diagram of automobile
3-D object	an automobile

Divided Line

|	
imagining	reflection in mirrors, shadows, photographs
believing	an automobile
thinking	scientific diagrams of combustion, etc.
knowing	"the Good"

The second main part of the exhibit involves an application of the knowledge gained in the first two sections. Since both the "Allegory of the Cave" and the "Divided Line" are concerned with reality (what is real and how society comes to know reality), an examination was undertaken into how students come to know reality. Due to many factors, a majority of young people turn to the media as a substitute for actual experience and knowledge. Unfortunately, some view and accept the media at face value (*imagining*) without delving deeper by asking themselves what it is they are really viewing. In this sense, the media become the shadows on their cave wall. For example, they are not really seeing an African culture, they are seeing two-dimensional images on a television screen or a computer monitor (*believing*). Further and closer scientific examination of reality (*thinking*) reveals each image to be comprised of tiny dots of light or, in the case of printed photographs in magazines, tiny dots of cyan, magenta, yellow, and black inks. Finally the comprehension of the primary principle (*knowing*) from which all other principles come is within reach. Since knowledge of "The Good" cannot be given, an area of thought will allow the viewer to contemplate what "the Good" might be and, if the viewer can make the necessary, intellectual leap, know "The Good."

After the content outline was completed, development of floor plans for the exhibition began. Because it seemed best suited for the flow of the media cave section's narrative, the flow diagram which was developed earlier in the implementation stage (see page 23) was selected for the media cave section. Next came the process of exploring how the first part of the exhibit would be composed spatially. These explorations varied from an ascending spiral to an ascending linear path.

Exploration 1: Preliminary Exhibition Design Floorplan
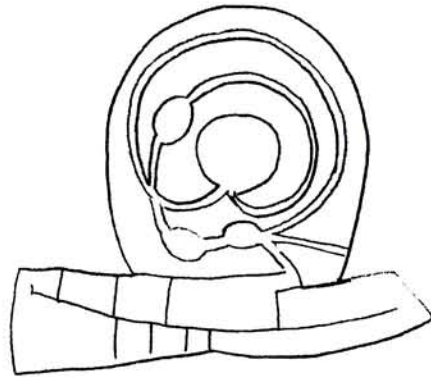
Exploration 2: Preliminary Exhibition Design Floorplan
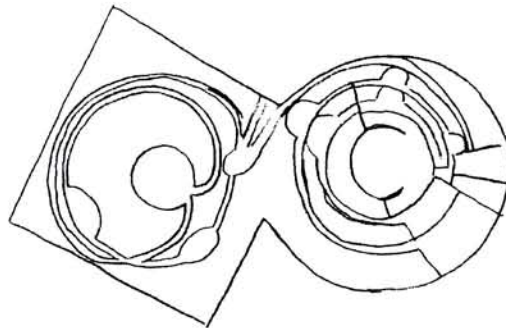
Exploration 3: Preliminary Exhibition Design Floorplan
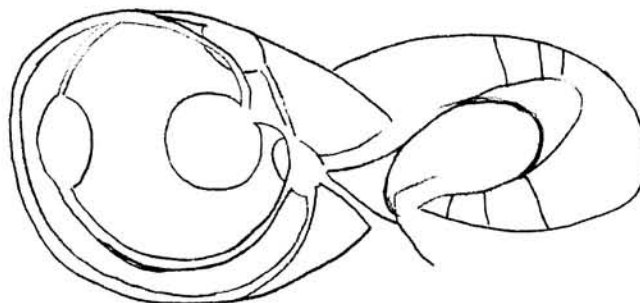
Analysis and evaluation of these particular floorplans revealed that their complexity might hinder or confuse the learning process. To avoid viewer confusion, the plan was simplified and made more linear. A preliminary floorplan and concept drawings of the interior spaces of the Media Cave are shown below.

Divided Line section
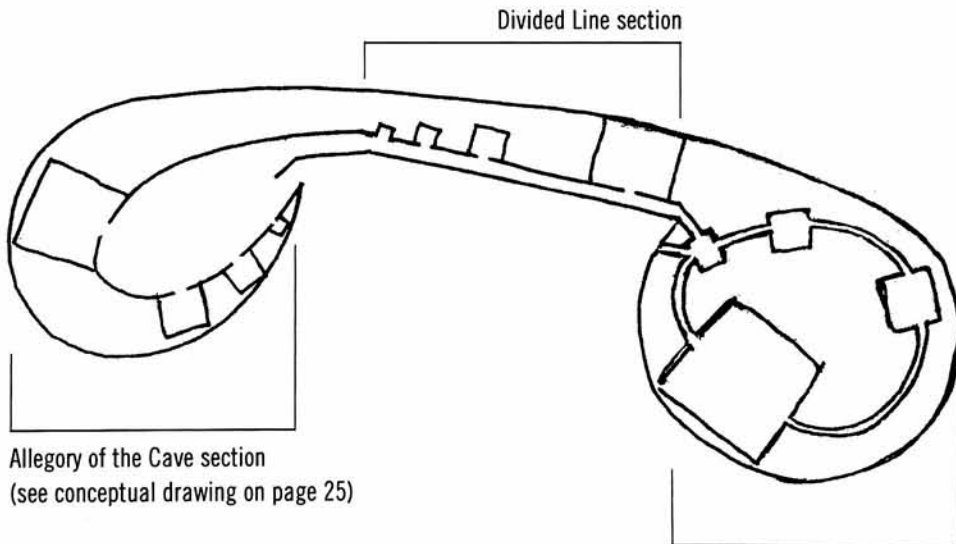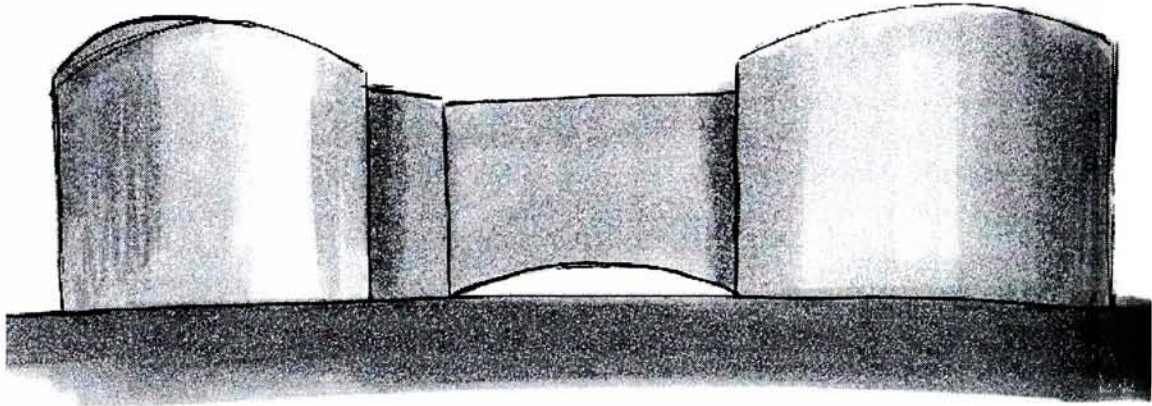
Allegory of the Cave section
(see conceptual drawing on page 25)

Media Cave section
(see conceptual drawings on pages 26-27)
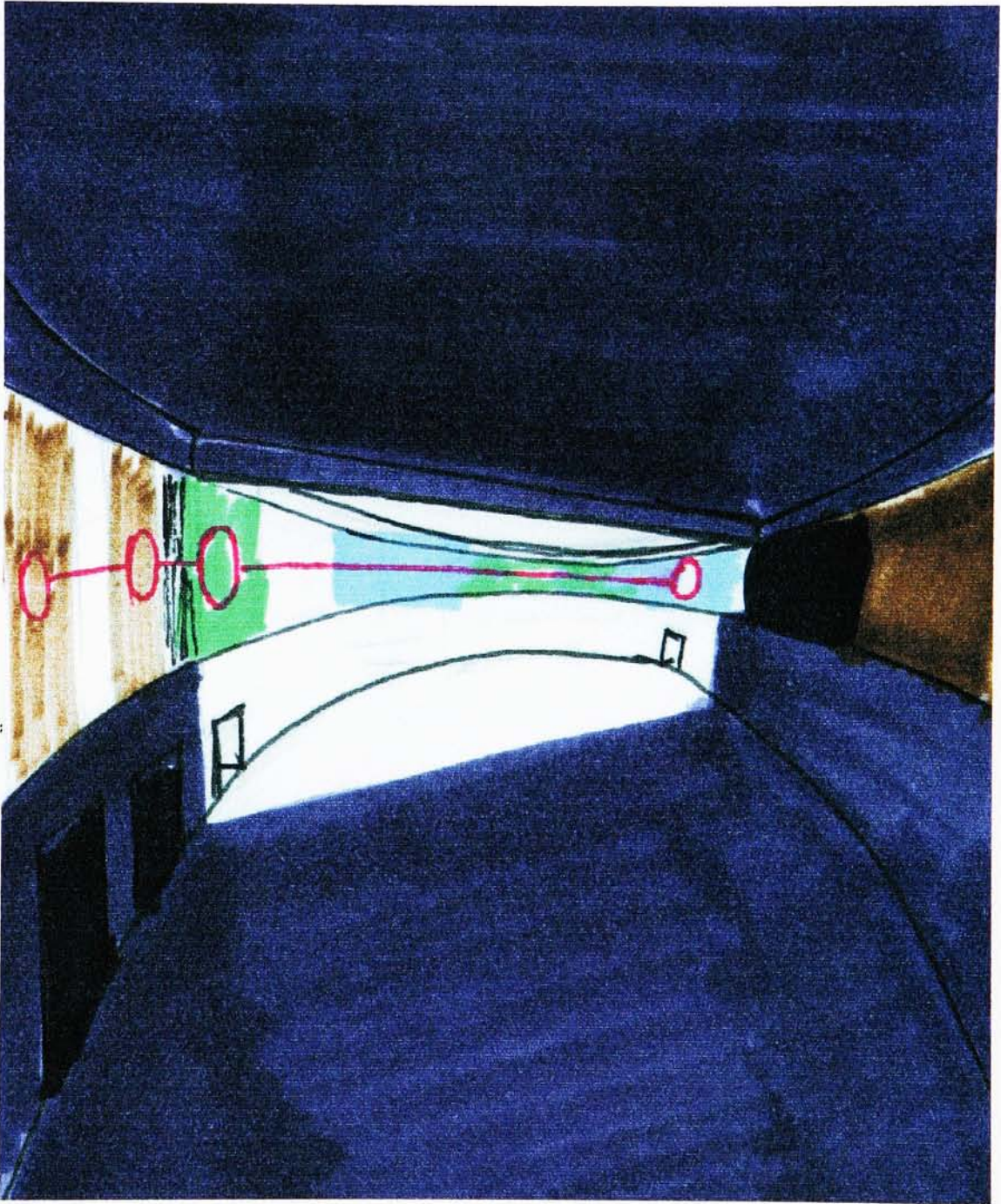
Conceptual drawing of "Allegory of the Cave" section in the preliminary exhibition

Conceptual drawing of the interior of the *imagining* room of the Media Cave
in the preliminary exhibition

Conceptual drawing of the interior of the *believing* room of the Media Cave
in the preliminary exhibition
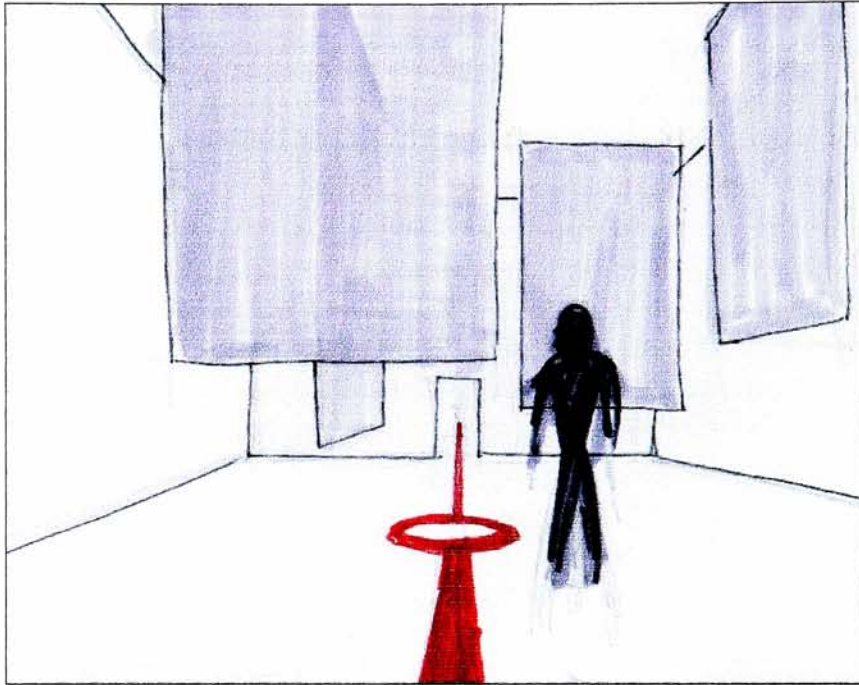
Conceptual drawing of the interior of the *thinking* room of the Media Cave
in the preliminary exhibition

Conceptual drawing of the interior of the *knowing* room of the Media Cave
in the preliminary exhibition

The inherent problem with this floorplan was the large amount of unused space within the framework of the exhibition's physical structure. The floorplan needed modification in order to minimize the unused space while still retaining the narrative flow of the information.

Several small studies, shown below, attempted to compact the exhibition.

Divided Line section

Allegory of the Cave section

Media Cave section

Allegory of the Cave section

Divided Line section

Media Cave section
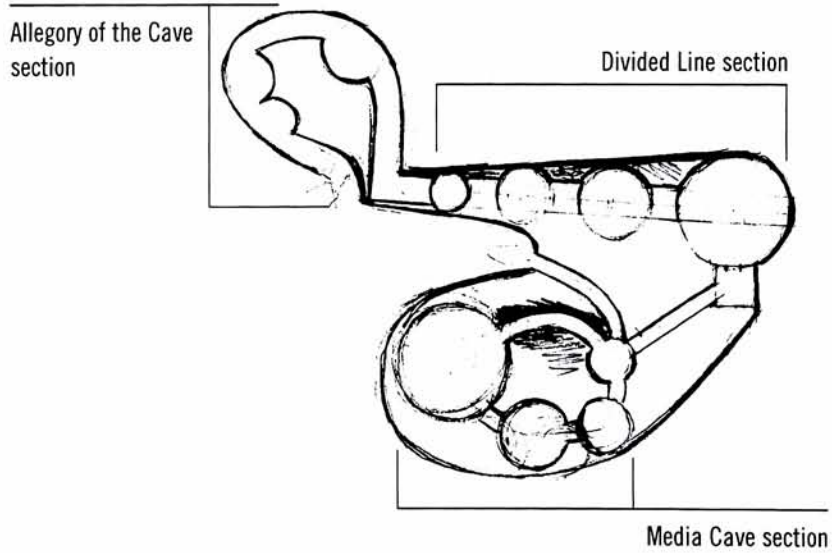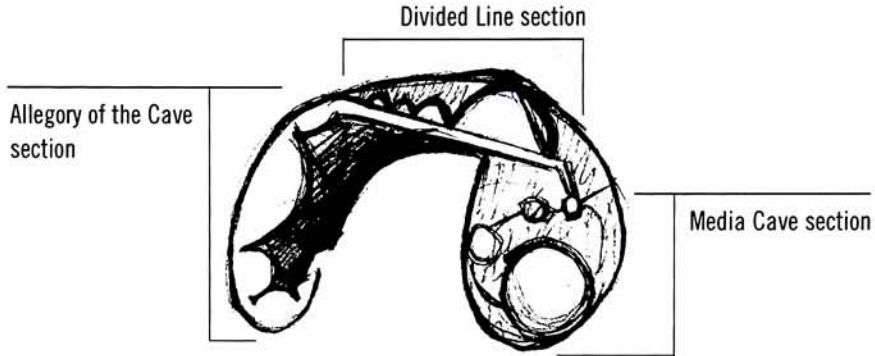
From the studies, the second floorplan was chosen for its effective and efficient use of space. The plan was then drawn to scale and refinements began. Special attention was paid on how the viewer would experience the space. Methods which were implemented in the examples collected during the external audit were analyzed again to determine which still proved appropriate in particular spaces within the exhibition. Modification of the second floorplan is shown below.

Divided Line section

Allegory of the Cave section

Media Cave section
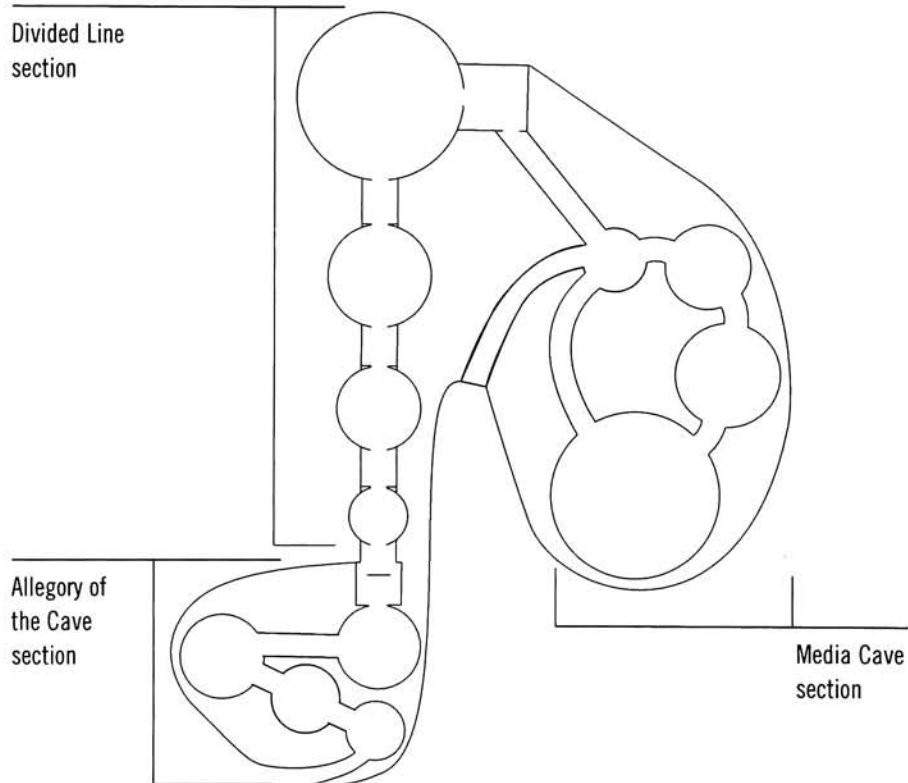
The floorplan was analyzed again. This analysis revealed some uncertainties and questions in regard to which sections within the exhibit were supposed to be parallel.

Exhibition Design Refinements

To remedy these concerns, the content outline was re-examined to determine whether three sections constituted the best solution and whether one section should receive a greater emphasis. As a result, the content outline changed from three main sections ("Allegory of the Cave," "Divided Line," and Media Cave) to only two main sections ("Divided Line" and Media Cave) with an emphasis on the Media Cave section. The "Allegory of the Cave" would still be addressed but only as support or explanation for the Divided Line information. This decision also remains closer to how Plato used the "Allegory of the Cave" to explain the concepts already mentioned in the "Divided Line."

With a new content organization, design of the exhibition began anew. During this round of modifications, the content and the form began to unify. The physical space of the two sections also became parallel. The final floorplan appears below.

Divided Line section

Media Cave section

entrance and exit

With the floorplan beginning to take on a more cohesive form, modification of the Divided Line section's content began. Originally, the idea was to explain the Divided Line through the use of the example of a human. Upon re-evaluation of the human example, it seemed too obvious to a viewer. Due to a familiarity with human shadows, a viewer would likely recognize it more quickly than a shadow of an object or another animal. As an alternative, an example of an automobile was selected. This example created confusion and competed in importance with the focus of the exhibition — the media.

The solution to this problem lay in the selection of an example which transcended both Platonic and contemporary eras. To further differentiate the two examples, the natural world was examined to find an example to contrast with the man-made media. Ultimately, a bird was chosen as an example from the natural world.

A re-analysis of the component parts of the Divided Line and Media Cave examples coincided with the selection of the bird example. Upon consultation with thesis committee members, the plan to depict "the Good" was relinquished in favor of depicting the essence of the example. In the case of the bird, the essence is *Bird-ness*; in media, *Media-ness*. Knowledge of an object's essence is realized during the *knowing* cognitive level. Once essences of many objects are known, knowledge of "the Good" becomes possible. With the modified organization of the levels of cognition in place, the four parts of each example were decided. They are:
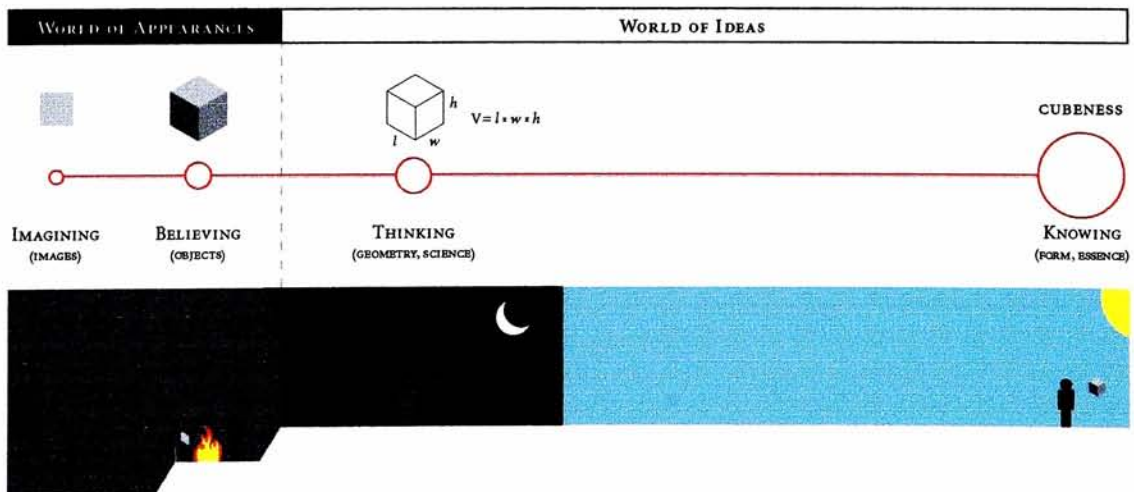
Bird example

imagining	shadows of a bird
believing	actual bird
thinking	diagram of flight
knowing	*Bird-ness*

Media example

imagining	sounds and images from print, TV, Web
believing	media transmitters (books, magazines, TVs, computers, stereos)
thinking	enlarged details and diagrammatic depictions of the media
knowing	*Media-ness*

With the floorplan and the content decided upon, the design of the interior elements began. The diagram which was created during the initial ideation process (see page 9) was redesigned in a clearer and more understandable form. The diagram is incorporated into the beginning of the exhibition for the purpose of serving as an initial introduction to Plato's levels of cognition. The revised diagram appears below.

WORLD OF APPEARANCES — WORLD OF IDEAS

$V = l \times w \times h$

CUBENESS

IMAGINING (IMAGES) — BELIEVING (OBJECTS) — THINKING (GEOMETRY, SCIENCE) — KNOWING (FORM, ESSENCE)

Signage

Next, the signage for each room was explored. Since the exhibit's main audience is visually-oriented learners, the use of text was purposely kept at a minimum. Therefore, the signage before entering each room consists of only a key word and a phrase identifying the room and a brief description of that particular level of cognition. Explorations of text treatment and materials appear below.

For all rooms, opaque surfaces with engraved text
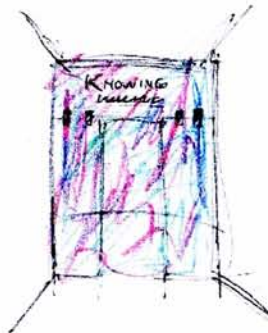
For the *thinking* and *knowing* rooms, plexiglass surfaces with applied text
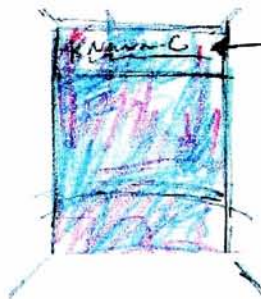
For the *thinking* and *knowing* rooms, plexiglass surfaces with applied text
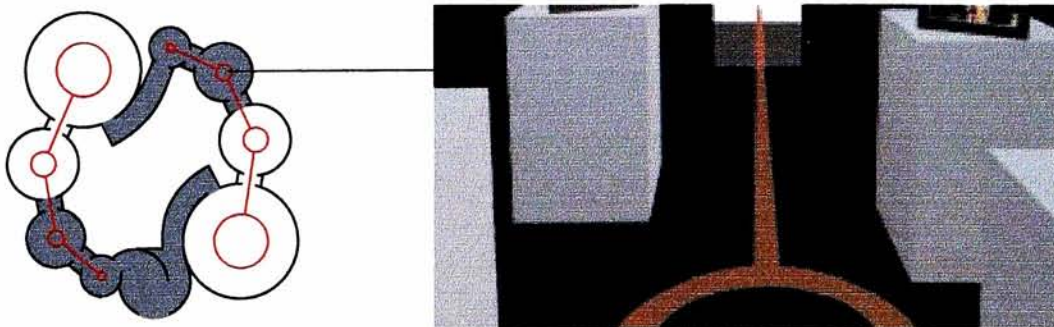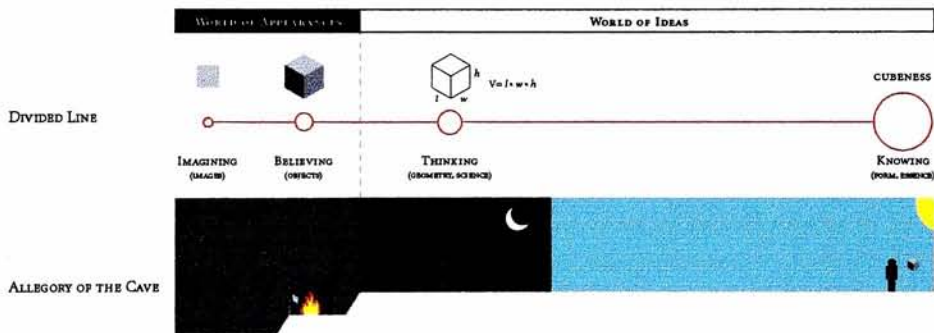
An element which appears throughout the whole exhibition is a line notation representing the Divided Line. The line notation successfully represents the Divided Line. It shows the amount of space which exists between the different levels. The circles also increase to symbolize an increase in the amount of reality a person knows within a particular cognitive level.

Appearing originally in the diagram which explains the levels of cognition at the entrance of the exhibition, this line notation reappears in an enlarged version on the floor in both the Bird and the Media areas of the exhibition. (The line notation and the application of it within the Levels of Cognition diagram and the exhibition design are shown below.)

Plato's levels of cognition

| | World of Appearances | | | World of Ideas | |

| | Imagining (images) | Believing (objects) | Thinking (geometry, science) | | Knowing (form, essence) |

DIVIDED LINE

ALLEGORY OF THE CAVE

Due to time constraints, conceptual renderings for only half of the rooms of the exhibition design were completed in time for presentation in the thesis show exhibition in the RIT Bevier Gallery. Shown below and on the following two pages are the renderings which were presented in the thesis show.
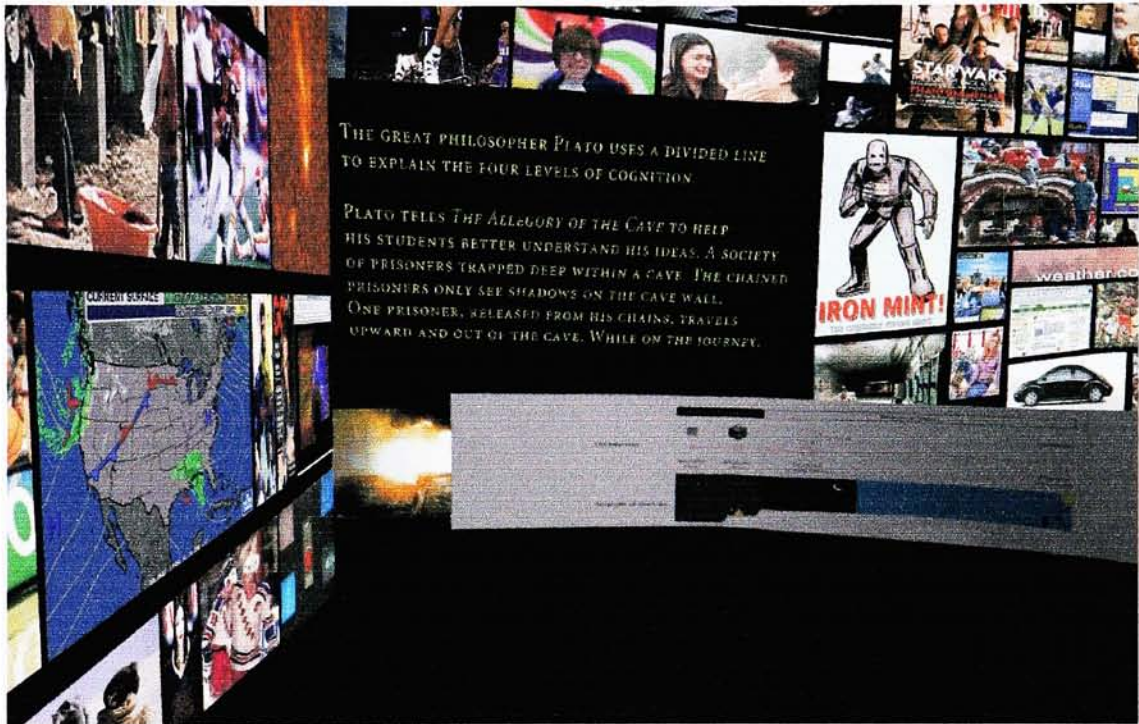
Conceptual rendering of the inside of the entrance to the final exhibition design

Below and on the following page are refinements to the conceptual drawings which appear on pages 26 and 27.

Conceptual rendering of the *imagining* room within the Media Cave section of the final exhibition design
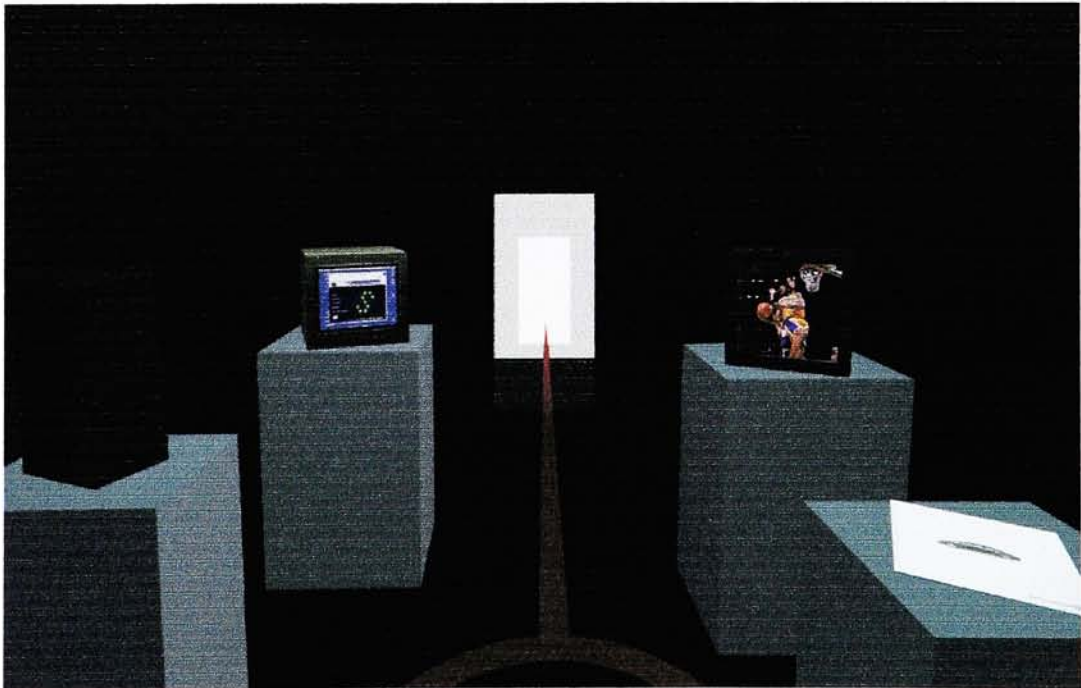
Conceptual rendering of the *believing* room within the Media Cave section of the final exhibition design

Conceptual rendering of the *thinking* room within the Media Cave section of the final exhibition design

Conceptual rendering of the *knowing* room within the Media Cave section of the final exhibition design

Evaluation

Evaluation of the project occurred simultaneously with the thesis show. The target audience received a questionnaire (shown below). The questions asked first gave an idea of the learning preference and the familiarity of the information to the student. The questions address the particular information contained within the exhibition. Specific questions also address improvements to the project, i.e. what could be added to the exhibition to aid the understanding of the content.

Questionnaire

How do you prefer to learn? (circle all that apply)

seeing
listening
reading
doing

What is your field of study?

___

Are you familiar with Plato's "Allegory of the Cave?"

no
yes, I've heard of it
yes, I've studied it

Are you familiar with Plato's "Divided Line?"

no
yes, I've heard of it
yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the "Divided Line" and the "Allegory of the Cave?"

no, all of it is unclear
no, some parts are unclear
yes, it is clear

If no, what is confusing or unclear?

___

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's Levels of Cognition has:

increased (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes)
somewhat successful (minor changes)
unsuccessful (major changes)

Questionnaire (continued)

If changes are needed, what are they?

_____

_____

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's Levels of Cognition?

_____

_____

If this exhibition were actually created, would it appeal to you? Why or why not?

_____

_____

Additional comments

_____

_____

The questionnaire was first distributed to two philosophy classes taught by Professor David Suits. This sub-section (philosophy students) of the target audience (college-aged students) was targeted to evaluate the accuracy of the philosophical content. Both classes studied Plato's Levels of Cognition either earlier in the quarter or in a prior course.

The questionnaire was next distributed to other RIT students. The goal of this evaluation was to determine the exhibition design's effectiveness at communicating Plato's concepts to students who might not have previously studied or might not have been aware of the exhibition design's philosophical content.

See Appendix B for copies of all the completed questionnaires.

Although close to seventy evaluation questionnaires were distributed, only twenty-five were returned. The subsequent analysis of the evaluation questionnaires revealed the following:

> The sampled students prefer to learn through a combination of seeing, listening, reading and doing.

> Half the students have studied the "Allegory of the Cave" and have heard of the "Divided Line."

> Three-quarters of the students understand the parallels between the allegory and the Divided Line. One quarter of the students understand only some of the parallels.

> All the students understand the content better after viewing the diagram and exhibition interior sketches.

> Three-quarters of the students think the application of Plato's Levels of Cognition to media is successful. One quarter think it is successful but minor changes are needed.

> When asked what could be added to the exhibition, the students addressed either the exhibition design or the presentation of the exhibition design in the thesis show. The addition of written text, such as excerpts from Plato's writings, was suggested several times as an improvement to the exhibition design. Thesis show comments suggested the addition of a scale model as well as illustrations of the rooms which explain the Divided Line through the example of a bird.

> In one way or another, the exhibition design interested the students. One student saw the exhibition's potential as "an additional resource in learning and understanding Plato's concepts." The following are other comments written by the students:

>> I would [go to the exhibition] since I'm constantly trying to understand the world that surrounds me, yet I find it hard to get beyond the *belief* stage.

>> Yes [the exhibition appeals to me]. I think philosophy is usually too abstract for most people, but this is interactive so that the viewer is involved, becomes interested, and sees the philosophy in terms that he or she can understand. The relationship to things we see and experience everyday is very important.

Viewer comments and suggestions such as the inclusion of more explanatory text within the exhibition and conceptual renderings of the Bird example rooms were completed during further implementation.

As mentioned earlier, due to time constraints, several of the rooms did not have conceptual renderings prior to the opening of the thesis show. After the thesis show, the renderings of the bird example rooms were completed as well as modifications to the *thinking* room of the Media Cave section. Explanatory text was added to the room as well as improved representations and details of the media. The additions to the room add a layer of understanding the previous rendering of the room lacked. (See page 36 for the conceptual rendering of the *thinking* room which was displayed during the thesis show in the Bevier Gallery and page 48 for the revised conceptual rendering of the *thinking* room.)

The entrance was also re-examined. Ultimately, a new rendering of the entrance was completed after discovering during the course of the evaluation stage that the entrance caused confusion. The problem was the entrance shows images from the media but makes no direct reference to the media. Also, the impact of the *imagining* room in the Media Cave section is lessen because the viewer has already had a similar experience at the beginning of the exhibition. (See page 34 for the conceptual rendering of the entrance which was displayed during the thesis show in the Bevier Gallery and below for the revised conceptual rendering of the entrance.)

Narrative of the Viewing Experience
The viewer enters the exhibit and descends. On the wall to the left of the viewer is explanatory text which provides a brief background of Plato and a synopsis of Plato's "Allegory of the Cave" and the "Divided Line." Continuing to descend, the viewer sees an overhang on which the Levels of Cognition diagram is applied (see conceptual rendering below). On the wall past the overhang is a section of text from the "Allegory of the Cave."

Turning to the left, the viewer encounters an entrance to a dimly lit room. Printed above the entrance is "Imagining (shadows)." Within the room and on the wall to the viewer's left is a shadow of a bird (see below).
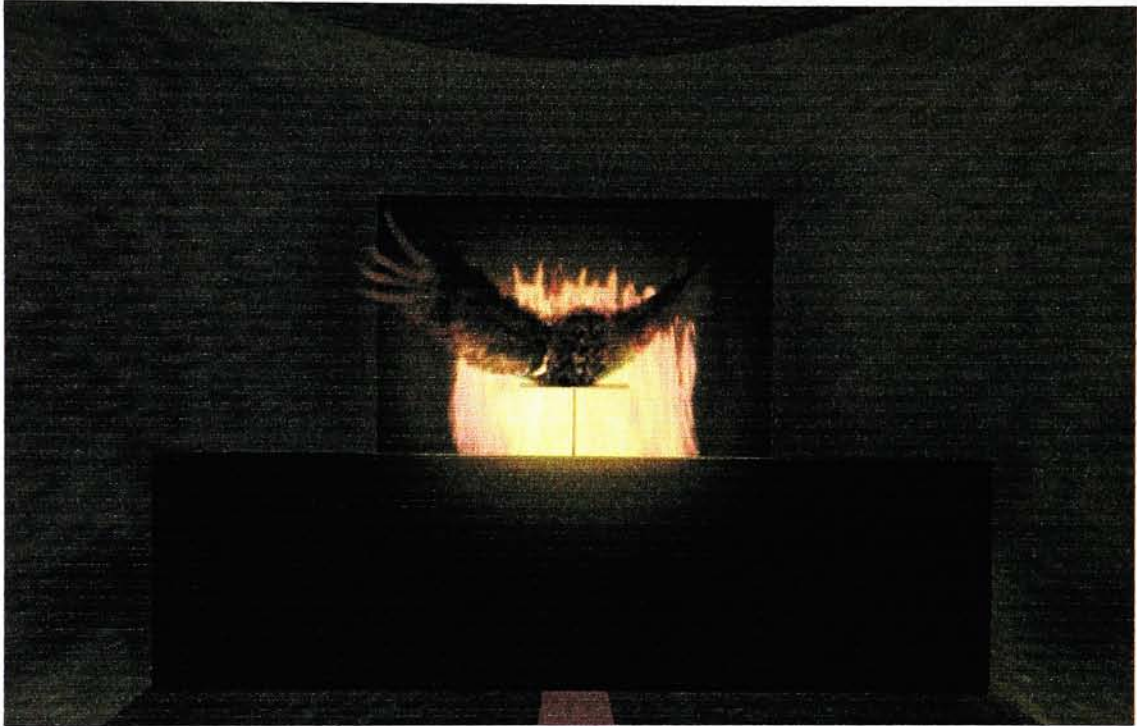
Opposite the shadow is an incline which leads to another room. Before entering the room, the viewer reads above the entry, "Believing (objects)." Within this larger but still dark room, the viewer sees an actual bird. Behind the bird is a wall within an image of a fire on it (see below). Walking around the side of the wall, the viewer sees an incline leading to another room.

A transition occurs within the hall between the two rooms. Marked by a sudden shift from black to white walls, ceiling and floor, the transition communicates the exit from the World of Appearances and the entrance into the World of Ideas. The shift from black to white is symbolic of the cave prisoner's journey from the darkness within the cave to the brightness outside the cave. Suspended from the ceiling above the division between black and white is a plane of plexiglass on which appear the words "The World of Ideas is closer to reality than the World of Appearances." On the floor immediately below the plexiglass appear the words "World of Appearances" (white letters on the black section of the floor) and "World of Ideas" (black letters on the white section of the floor). (See below for a rendering of the transition in the hallway.)

THE WORLD OF IDEAS
IS CLOSER TO REALITY THAN
THE WORLD OF APPEARANCES
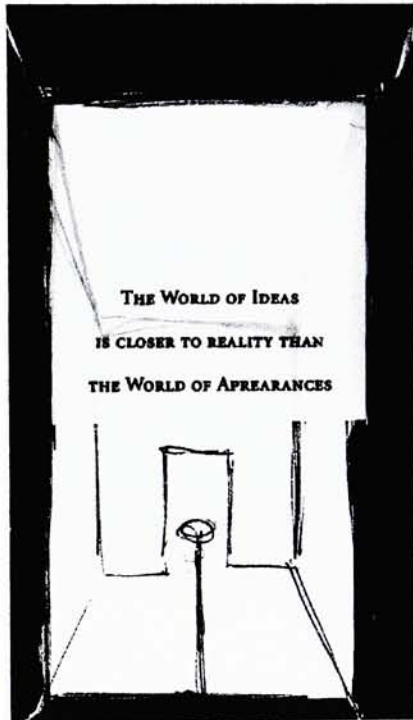
Before entering this room, the viewer reads above the door "Thinking (geometry, science)."
Within this larger and brighter room, the viewer discovers scientific diagrams and drawings
which explain the mechanics and aerodynamics of flight. In front of the diagrams are images
of birds printed onto glass. The viewer is able to look through the images and see the diagrams.
Printed below the glass panels is text explaining the physics of flight.
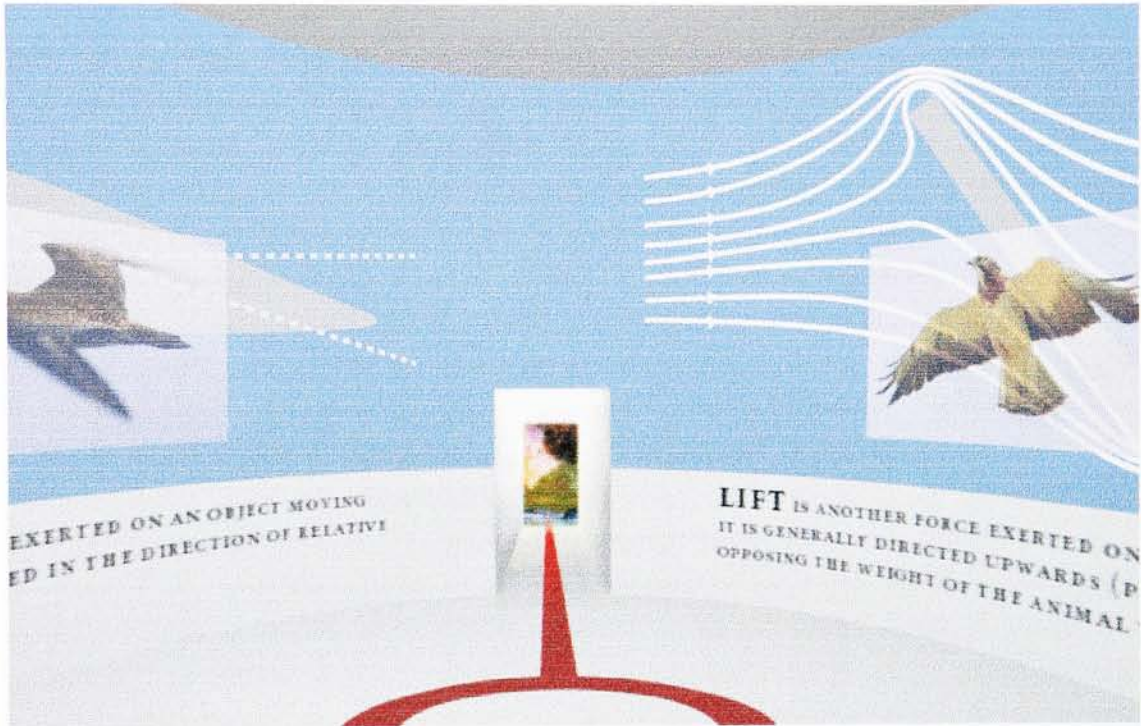
At the end of the room opposite the entry is yet another incline which leads to a much larger fourth room. The viewer reads, printed above the entrance, "Knowing (form, essence)." The essence of bird or *Bird-ness* is communicated within the room. Composited images of birds as well as the Latin and familiar names of birds produce the visual stimuli within the room. Aural stimuli is produced in the form of bird songs played simultaneously. The result is a sense of bird or *Bird-ness* without awareness of one specific species of bird.
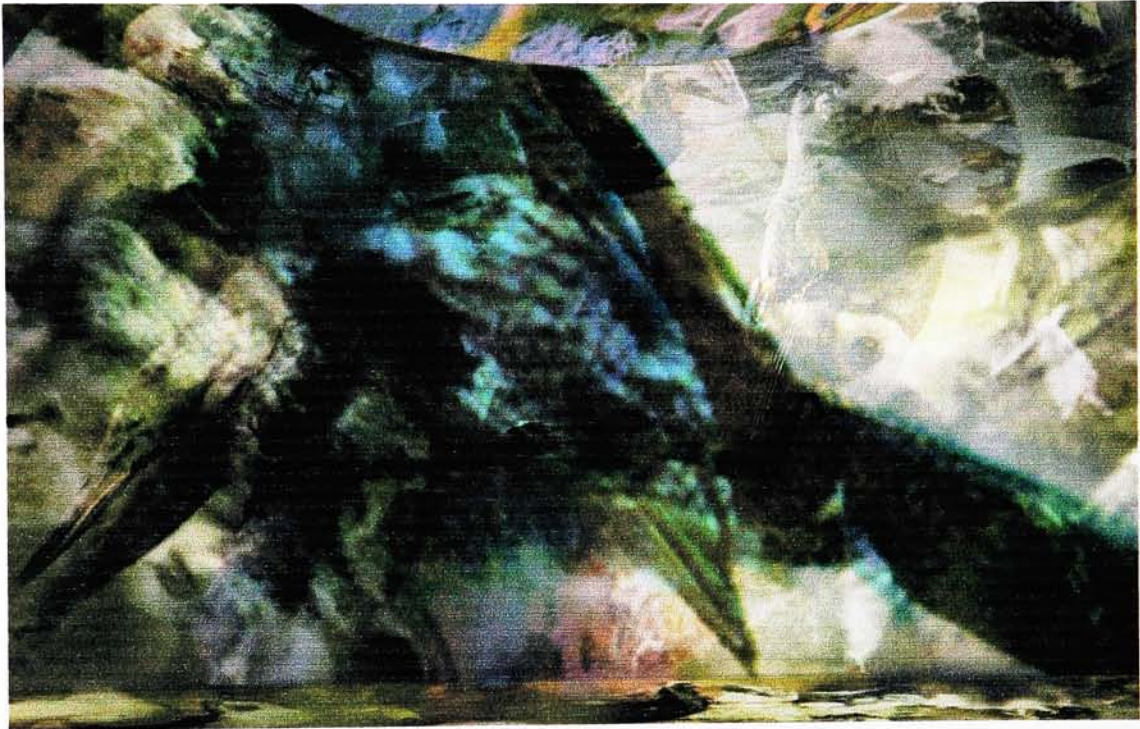
To the right of the room's entry is a hallway. Symbolic of a return journey to the cave, the hallway declines into darkness. Upon entering this hallway the viewer faces a wall. On the wall lies the question "How does this apply to me?"

Like the bird example, the viewer reads "Imagining (shadows)" which is printed above the entrance to the room at the end of the descending hallway. Upon entering the room, the viewer sees images from contemporary media — images from television, magazines, internet, among others (see below). Sound is incorporated into the room's experience as well. For instance, coinciding with a video of Hillary Clinton, the viewer would hear her speak or a viewer would hear a play-by-play commentary while watching a video clip of Michael Jordan. While the viewer remained within the room, the images would change.

To the right of the room's center is a doorway leading to an inclined hallway which takes the viewer to a second room. Above the entrance to this room is the text "Believing (objects)." Within the room, the viewer sees the media transmitters – televisions, computers, stereos and printed material. Like the previous room, the room is dark. The media transmitters are placed on pedestals spot-lit from above (see below).
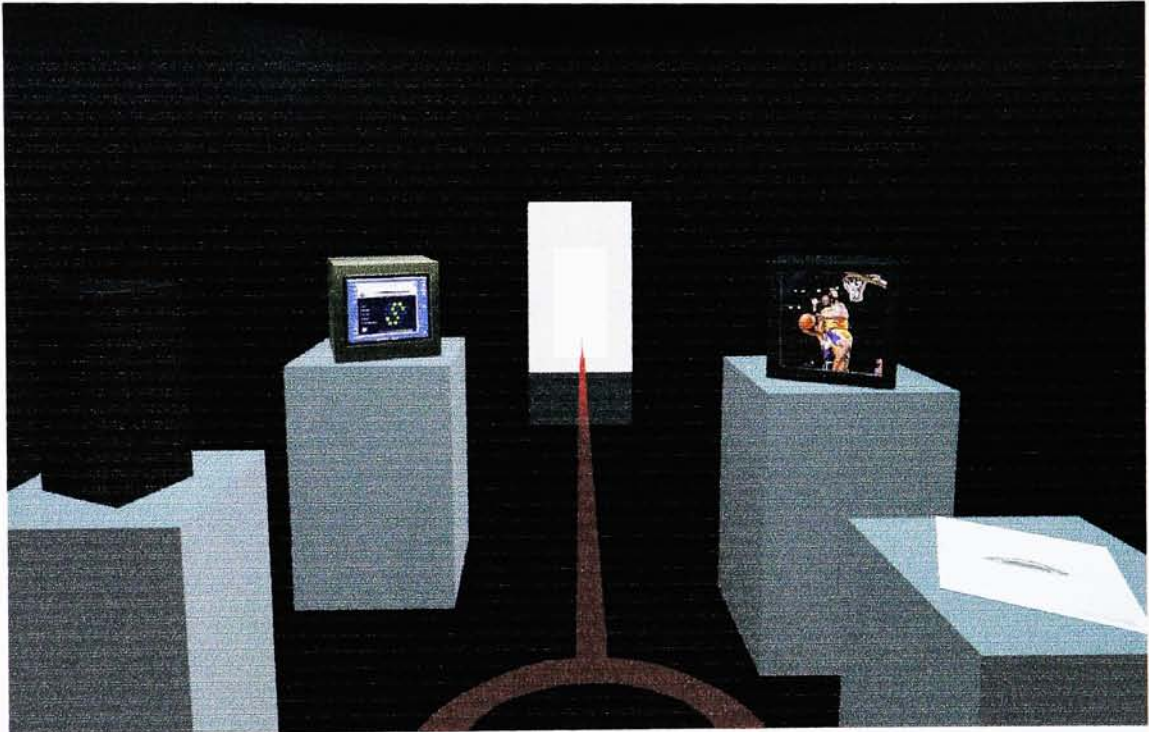
On the opposite side of the room is a hallway which inclines to another room. A transition similar to the transition which occurs between the *believing* and the *thinking* rooms of the bird example occurs here. The only difference within this hallway is the absence of the plexiglass hanging "from the ceiling.

Before walking though the entrance to the room at the end of the hallway, the viewer reads "Thinking (geometry, sciences)." Entering the room, the viewer sees it is divided into quarters — one-quarter for each media (print, digital, television, radio). As in the *thinking* room in the Bird section, four glass panels are mounted onto the wall. Printed onto the glass are a photograph, a Web page, a video capture and a stereo. The viewer sees enlarged details and diagrammatic representations of the media through the glass panels. On the wall beneath the glass panels is text explaining how the images or sound is created (see below). The viewer now is aware of the tiny dots of cyan, magenta, yellow, and black inks which combine to form an image within a magazine advertisement. The viewer sees that a Web page is composed of small squares of color. A video clip is a series of lines which show the current image and the next image on alternating lines. The viewer also sees a diagrammatic representation of sound.
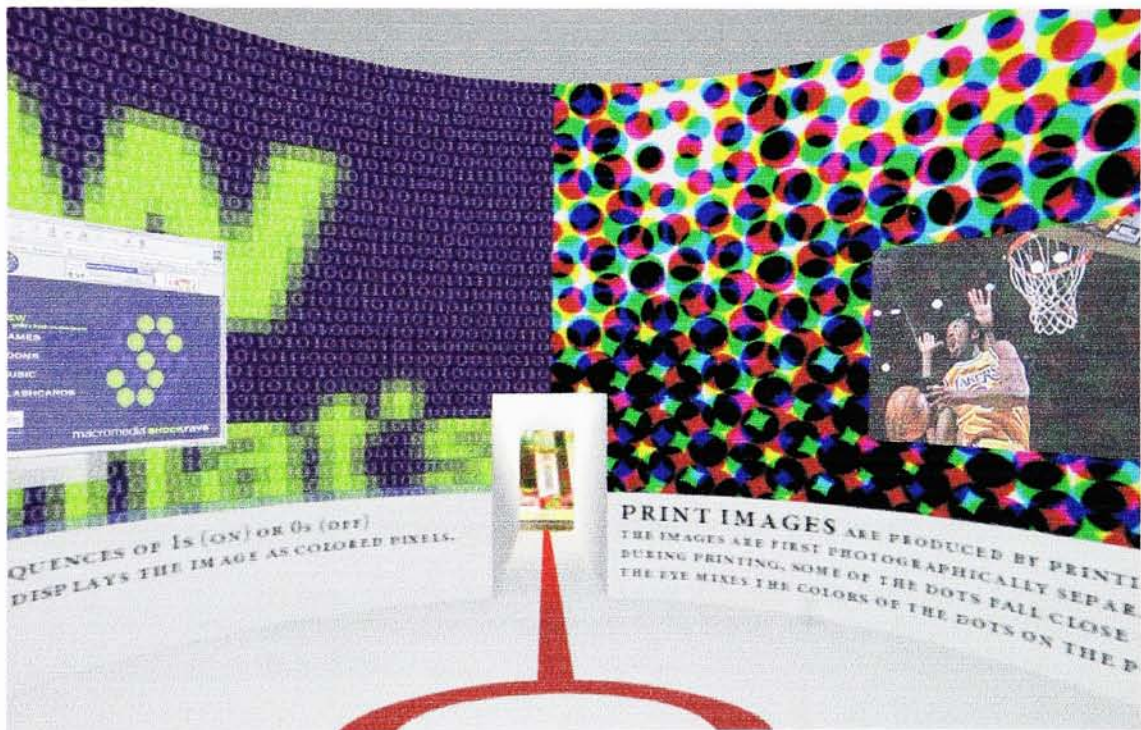
As in the previous room, an exit lies on the opposite end of the room. This exit leads to an incline which takes the viewer to the fourth and final room of the media cave example. Again, the viewer reads "Knowing (essence, form)" before entering the room. Within this room, images from the media are projected one on top of another on the floor, ceiling and walls (see below). The composite effect produces a feeling of media without choosing a specific media vehicle (television, internet, print) or a specific topic. Sound is added to the experience by overlaying sound samples from television and radio to produce a static-like non-sense sound which alludes to aural communication. Since the images are projected, the viewer becomes part of the *Media-ness* experience. Overlooking the fact that society created and drives the development of media would result in an incomplete representation of *Media-ness*.
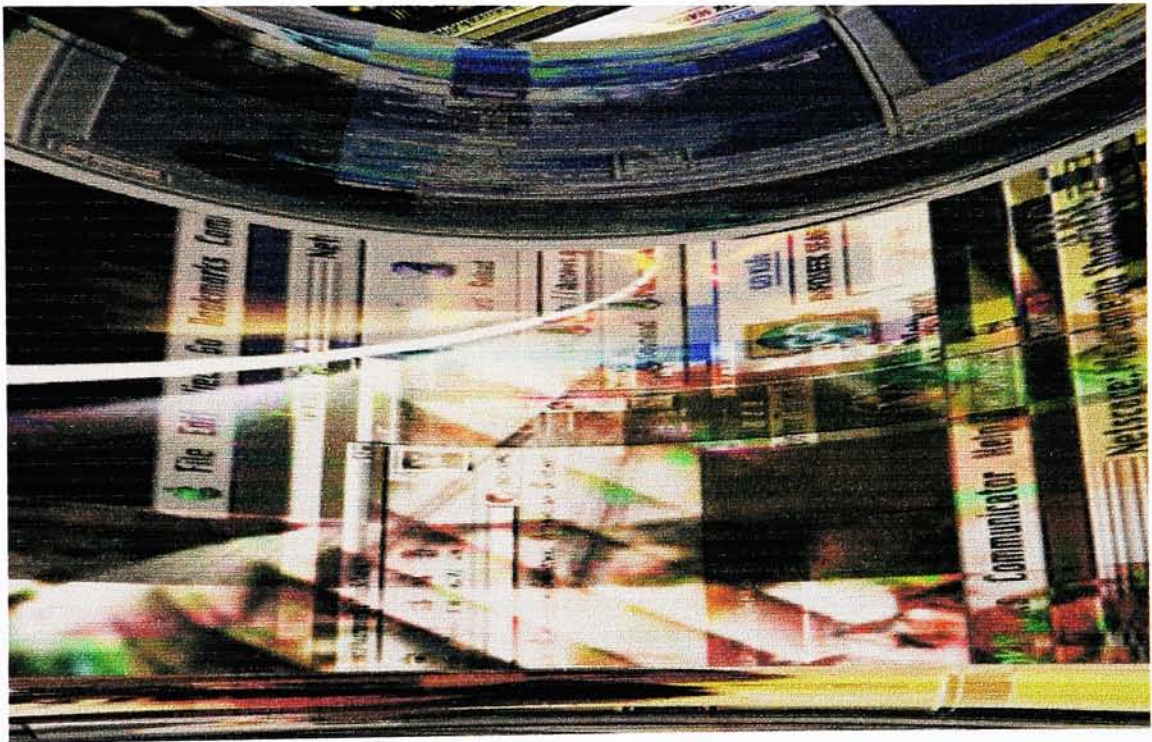
The viewer leaves the room through a doorway to the right of the room's center. Again, the viewer walks through a downward sloping hallway. The hallway returns the viewer to the entrance of the exhibition.

Dissemination

Presentation panels explaining the thesis project were displayed in the RIT Bevier Gallery
from April 5 through April 21, 1999. These panels included an introductory panel which stated
the thesis study's objectives and synopsized Howard Gardner's Theory of Multiple Intelligences
and Plato's "Divided Line" and "Allegory of the Cave." An explanation of the thesis application
was also included on the panel. Also displayed in the gallery was the explanatory diagram
which showed the parallels between the "Allegory of the Cave" and the "Divided Line." A large
floorplan of the exhibition was displayed alongside the diagram. The floorplan showed the viewer
the relationships (size and location) of the rooms to one another. The viewer was also able to
read a short description of each room of the exhibition. Lastly, computer-generated renderings
of five of the exhibition's rooms were displayed on five separate panels. Accompanying each
image was a smaller version of the floorplan which showed the viewer where the room was
located in the exhibition. In order to give the viewer a context as to what he or she was seeing,
text describing the room was also placed on the panel.

Several options which exist for future dissemination of this thesis project involve the
presentation of the study to educators. One place a presentation might be given is a conference
such as the National Education Association's annual event. The goal of the presentation would
be to further the awareness among educators of the value an application of Gardner's Theory
of Multiple Intelligences can add to a student's educational achievement. Teachers might be
more open to implementing the Multiple Intelligence Theory teaching strategies within their
classrooms if they see the strategies applied toward an example which seems too difficult to
visually translate such as Plato's Levels of Cognition. The project might also be disseminated
on a smaller scale via a presentation to a school board or to a university board of directors.
Another method for dissemination of the thesis study would target philosophy professors
with the goal of showing them how they can address the strengths and learning styles of all
their students.

Another dissemination idea is to approach a design firm which specializes in exhibition
design. The goal of this dissemination plan is to utilize the strengths and the experiences
of the designers to further develop the design concepts to a point of completion at which the
idea could then be presented to an educational institution such as a museum.

Upon completion of this thesis study, several weaknesses became apparent. The main weaknesses occur in the design application and are a result of time constraints. Although the idea of an exhibition surfaced naturally during the implementation stage, a greater effort should have been exerted on developing other possible design application ideas which are more manageable given the study's necessary timetable. Typically, the development, design and completion of an exhibition design take years. For example, Charles and Ray Eames began in early 1961 to develop the IBM Corporate Pavilion for the 1964 New York World's Fair.

Time constraints also hindered the presentation of the design application in the thesis show. Originally, a model of the exhibition was to be built to accompany the presentation boards in the RIT Bevier Gallery MFA Thesis Show. Members of the target audience mentioned a desire to see a scale model of the exhibition design in the thesis show. Again, time restraints did not allow the construction of a model. A model would have been useful for a number of reasons, chief of which is the added level of comprehension a model provides. Viewers of the model could see size relationships (height, width, depth) of the rooms as well as the elevation changes from one room to another. The diagrammatic floorplan of the exhibition design which appeared on one of the presentation boards did communicate this material, but some viewers might have lacked the spatial ability to mentally transform the written and two-dimensional visual format into a three-dimensional form.

The design of an exhibition requires many diverse skills necessary for the development and completion of a design concept. Exhibition design teams rely on the collaboration of architects, interior designers, production artists, graphic designers and administrators, among others. Based on individual skills and strengths, team members focus their energies on particular aspects of an exhibition during its development. The graphic designer might work alongside the architect or interior designer during the initial floorplan development, but the architect or interior designer would be primarily responsible for overseeing the details for that particular aspect of the exhibition.

In spite of the aforementioned weaknesses, the thesis project is a success. The design application achieved the goal of visually translating Plato's Levels of Cognition for visually-oriented college-age students. It also succeeded in gaining the interest in the material by the target audience. Almost every student who evaluated the thesis application wrote they would be interested in this exhibition. Most of the students remarked their interest in Plato's levels of cognition was a result of the application of Plato's theories during the analysis of contemporary media.

Conclusion

This thesis project focused on a particular sub-set of learners – visually-oriented learners. It examined the educational needs of this type of learner and by what means the learner can best access abstract written material. Through the examination of possible communication formats (book, poster, diagram, among others), exhibition design was selected. Exhibition design possessed advantages the other forms did not, such as the ability to create an environment in which the written form of the content assumes a physicality. Also, the combination of several methods (diagrams plus viewer participation plus photographs among others) becomes an option within an exhibition design solution.

The resultant exploration of an exhibition design which communicates Plato's Levels of Cognition and then applies it to contemporary society proved successful. The target audience also was attracted to the application of Platonic theories during the analysis of media.

The exhibition design also showed the effectiveness of visual teaching strategies. Teachers can use this thesis study as an example for how they can utilize visual teaching strategies in their classroom. For example, content can be diagrammed to visually show relationships which might not be as accessible in their original written form. Through the use of visual metaphors, educators can also compare the new content to concepts or examples the students already understand.

Plato's philosophers (the prisoners who left the cave and returned) possess an ability to share the knowledge they received outside the cave. They have a social responsibility which they must accept and fulfill. Analogous to the philosophers, graphic designers also possess the ability to educate society. This thesis study supports the premise that graphic design can enhance an educational experience.

Glossary of Terms

believing	the state of cognition in which physical objects are understood; correct morals and values are only recognized and not supported
exhibition design	the 3-D presentation of information or objects for public view
Form	unseen ideals or patterns which exist outside and independent of the mind, but knowable by the mind
The Good	the primal *Form* through which an individual can know morality and reality
imagining	the state of cognition in which images and morals are accepted blindly without question or judgment
knowing	the state of cognition in which the essence of an object is known; once many essences are known, an inductive thought process searches for the original *Form* or *The Good*
learning style	a way of processing new and previous perceptions
Plato	428 B.C. – 347 B.C.; philosopher; Socrates' student; wrote *The Republic*
Socrates	470 B.C. – 399 B.C.; philosopher who laid the foundations of Western culture; Plato's teacher
spatial intelligence	the ability to perceive the world accurately and to represent the spatial world internally in the mind
thinking	the level of cognition which marks the transition from a representable world of concrete objects to an abstract world of thought and *Forms*; the level of cognition in which occurs deductive logic as seen in geometry and the physical sciences
visual metaphors	a symbolic image used to compare an unfamiliar concept to a familiar concept
World of Appearances	the world in which the *imagining* and *believing* states of cognition occur; the world of concrete images and objects
World of Ideas	the world in which the *thinking* and *knowing* levels of cognition occur; the world which disregards objects in favor of *Forms*

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V. 27. 15th ed. Chicago: Encyclopedia Britannica, Inc., 1998. 436 - 40.

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Appendix A
External Audit Examples

Money machine: The Iraqi diversion

Title	*Money Machine: Iraqi Diversion*
Type of information	Business
To communicate ...	how Iraq was able to buy weapons
Communication Vehicle	Diagram
Color	4c process
	used symbolically
Photography	n/a
Illustration	technical ill.
	contour drawing
Image or Text Dominant	image
Language Use	heads: phrase
	copy: keywords, sentences
Sequencing	numbered phases
Interaction	n/a

How an Aircraft Carrier Works
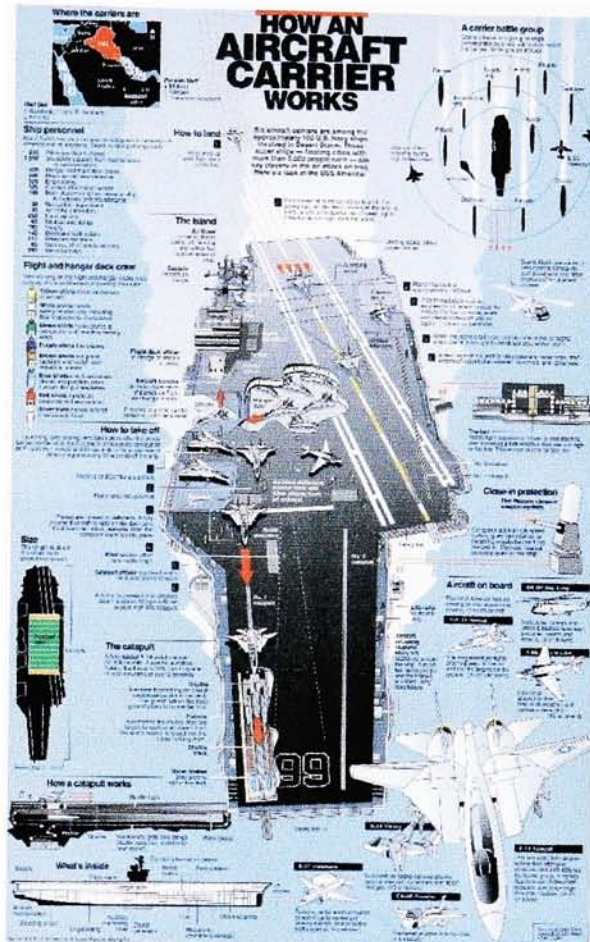
Title	*How an Aircraft Carrier Works*
Type of information	Military
To communicate …	how an aircraft carrier works
Communication Vehicle	Diagram
	Map
Color	4c process
	used symbolically and to code
Photography	n/a
Illustration	technical ill.
	contour drawing
Image or Text Dominant	image
Language Use	heads: phrases
	sub-heads: keywords, phrases
	copy: sentences
Sequencing	numbered phases
Interaction	n/a
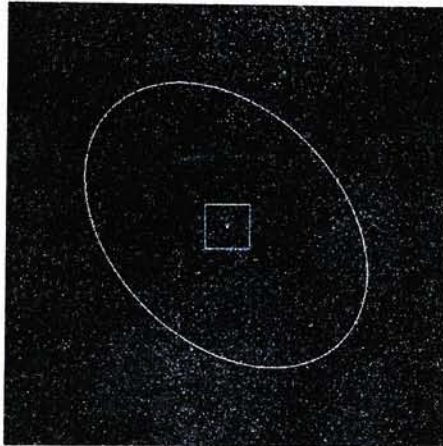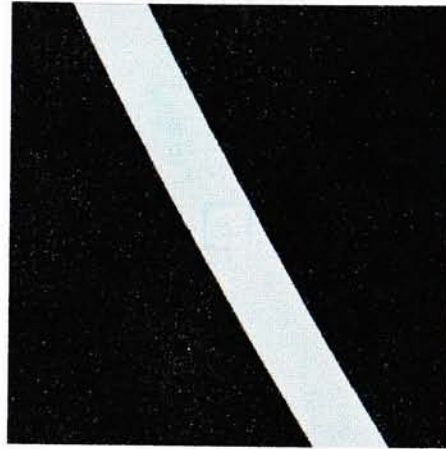
Title	*Powers of Ten* (film)
Type of information	Science / Math
To communicate ...	the physical size of large quantities
Communication Vehicle	Film
	Sound
Color	full color
	color coding
Photography	full color
Illustration	n/a
Image or Text Dominant	image
Language Use	sentences
Sequencing	size changes
Interaction	n/a
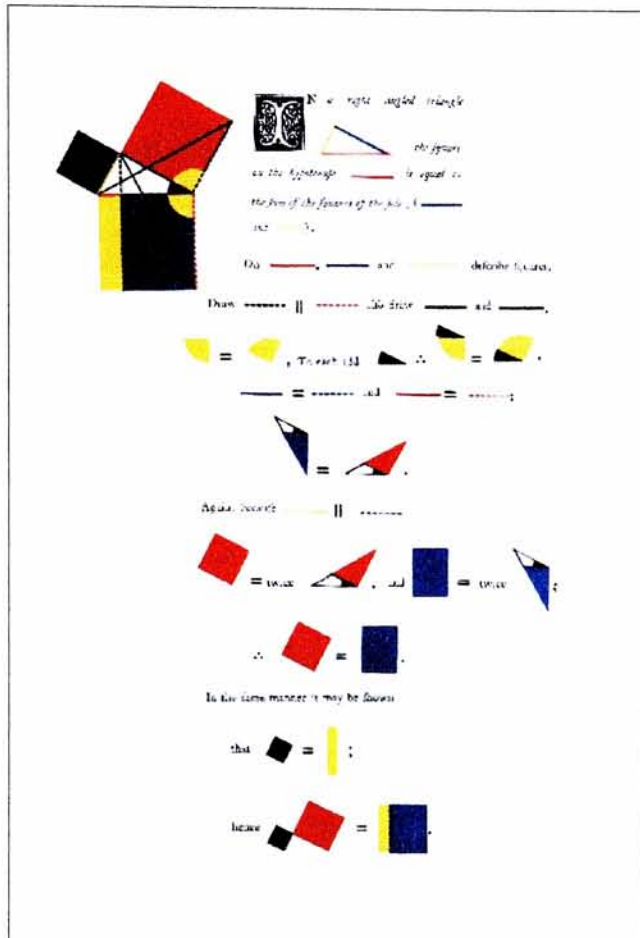
Title	*The First Six Books of the Elements of Euclid*
Type of information	Math
To communicate …	a geometric proof
Communication Vehicle	Diagram
Color	4c spot
	used symbolically
Photography	n/a
Illustration	technical illustration
Image or Text Dominant	image
Language Use	copy: sentences
Sequencing	logic
Interaction	n/a
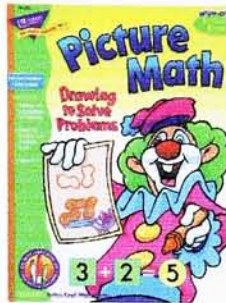
Draw kids on the playground to help you solve the problems.

Fill in a number to make your own problem.

☐ kids on the playground.
2 more come to play.
How many kids in all?

☐ + 2 = ◯

Fill in the numbers. Make your own problem!

☐ kids on the playground.
☐ kids go home.
How many kids on the playground?

☐ − ☐ = ◯

Title	*Picture Math*
Type of information	Math
To communicate …	adding, subtracting
Communication Vehicle	Drawing
	Participation
Color	4c process
	used playfully
Photography	n/a
Illustration	cartoon
	contour drawing
Image or Text Dominant	image
Language Use	head: keywords
	subheads: phrases
	copy: sentences
Sequencing	building upon skills
Interaction	draw
	write

Title	*The Physics of Flight*
Type of information	Science
To communicate ...	how airplanes fly
Communication Vehicle	Diagrams
	Participation
Color	4c process
Photography	full color
Illustration	technical illustration
	contour drawing
	stylized realism
Image or Text Dominant	text
Language Use	heads: keywords, phrases
	sub-heads: phrases, sentences
	copy: sentences
Sequencing	directions, how to's
Interaction	hands-on experiments

Title	*Metaphysics*
Type of information	Philosophy
To communicate ...	the differences between philosophical theories
Communication Vehicle	Diagram
Color	b/w
Photography	n/a
Illustration	cartoon
Image or Text Dominant	image
Language Use	heads: keywords
Sequencing	n/a
Interaction	n/a
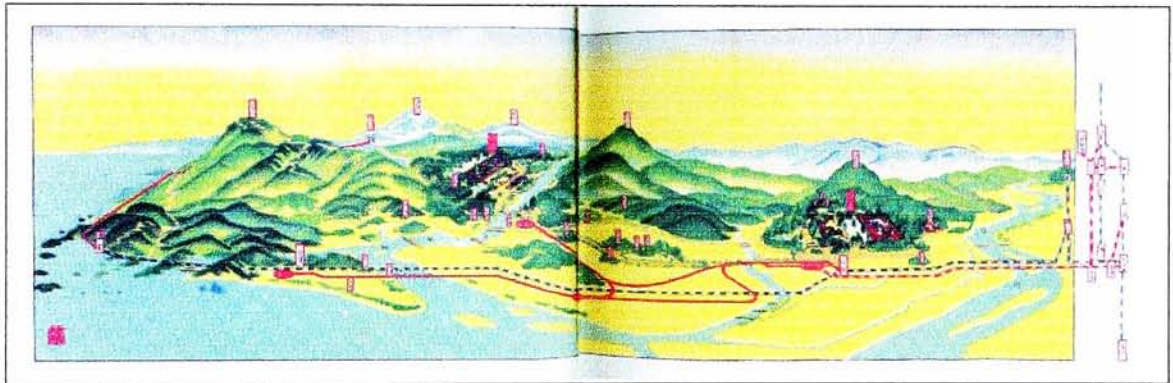
Title	*Guide for Visitors to Ise Shrine*
Type of information	Travel
To communicate …	the train route from major cities
Communication Vehicle	Map
Color	4c process
	used to code
Photography	n/a
Illustration	painterly realism
Image or Text Dominant	image
Language Use	heads: keywords
Sequencing	size changes
Interaction	n/a
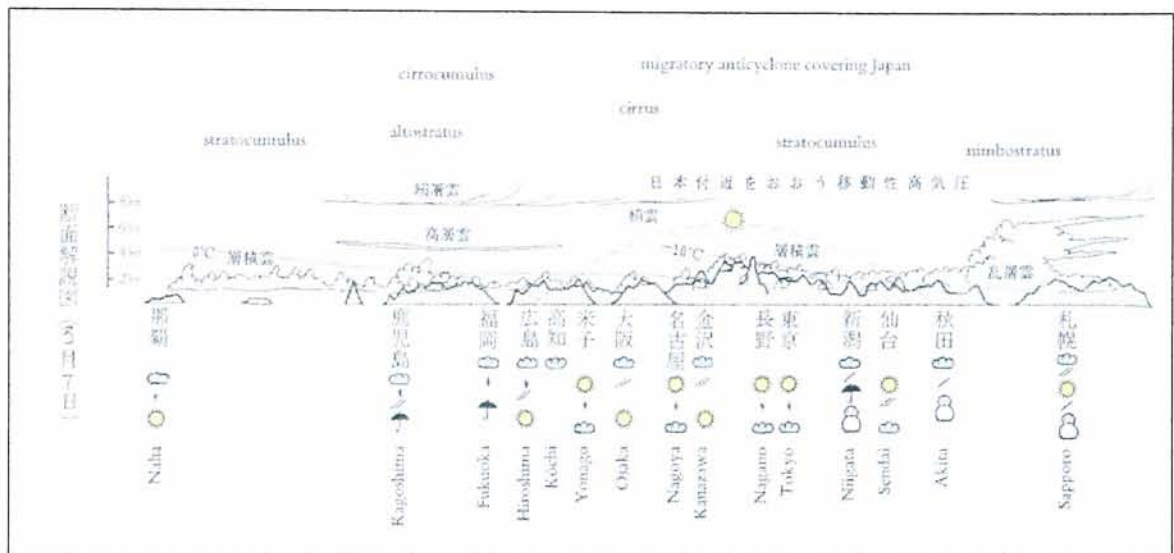
Title	*Japanese Weather Map*
Type of information	Science
To communicate …	weather information
Communication Vehicle	Map
Color	3c spot
	used symbolically
Photography	n/a
Illustration	technical illustration
	pictograms
	contour drawing
Image or Text Dominant	image
Language Use	heads: keywords
Sequencing	n/a
Interaction	n/a

Title	*Medical Access*
Type of information	Science
To communicate …	information about surgical procedures
Communication Vehicle	Diagram
Color	4c process
	used to code
Photography	n/a
Illustration	technical realism
	stylized simplified realism
	pictograms
Image or Text Dominant	text-image split
Language Use	heads: keywords, phrases
	copy: sentences
Sequencing	n/a
Interaction	n/a

Title — *Training Manuals for the US Air Force*
Type of information — Military
To communicate ... — information necessary to operate the airplane's guns
Communication Vehicle — Diagrams
Photographs
Color — 3c (2 spot)
Photography — half-tone
Illustration — technical illustration
representational
Image or Text Dominant — text-image split
Language Use — heads: keywords, phrases
copy: sentences
Sequencing — directions, how to's
Interaction — n/a
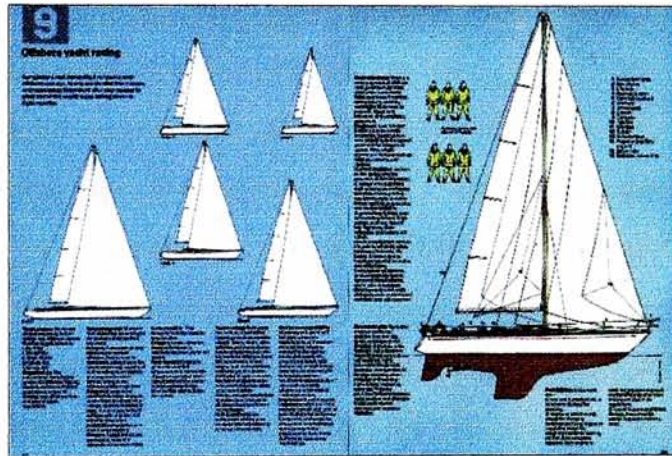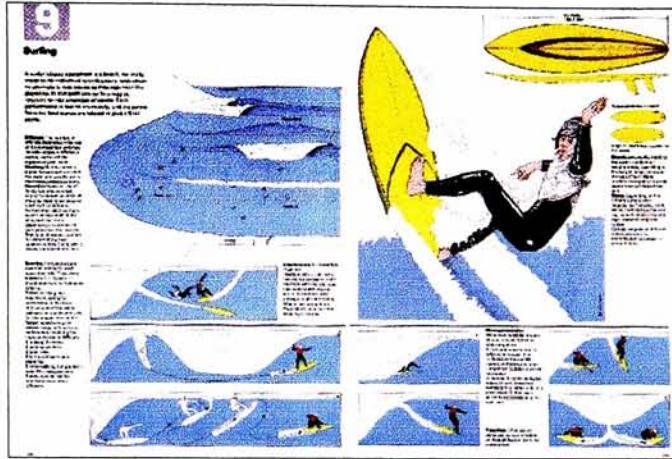
Title	*Rules of the Game*
Type of information	Sports
To communicate …	the rules for different sports
Communication Vehicle	Diagrams
Color	4c process
	used symbolically and to code
Photography	n/a
Illustration	technical illustration
	stylized realism
	contour drawing
Image or Text Dominant	text-image split
Language Use	heads: keywords
	copy: sentences
Sequencing	n/a
Interaction	n/a
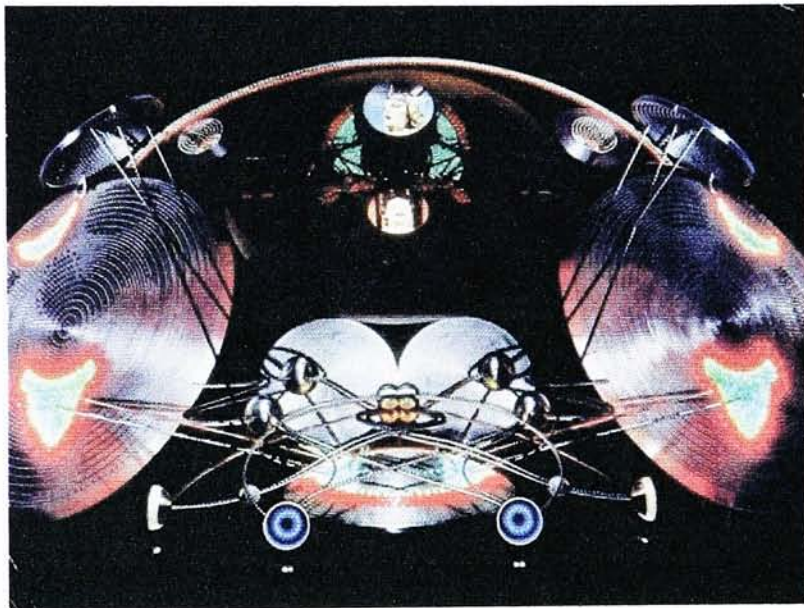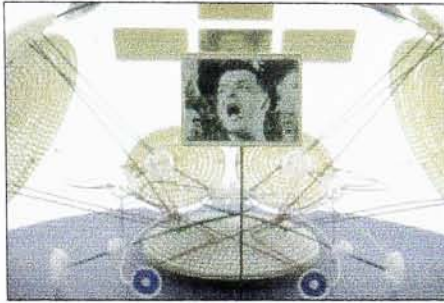
Title	*Brain Exhibit*
Type of information	Science
To communicate …	how auditory and visual perceptions are processed and stored in the brain
Communication Vehicle	Diagrams
	Space
	Movement
	Light
Color	full color
	used to code
Photography	n/a
Illustration	n/a
Image or Text Dominant	image
Language Use	heads: keywords
	copy: sentences
Sequencing	n/a
Interaction	enter physical space
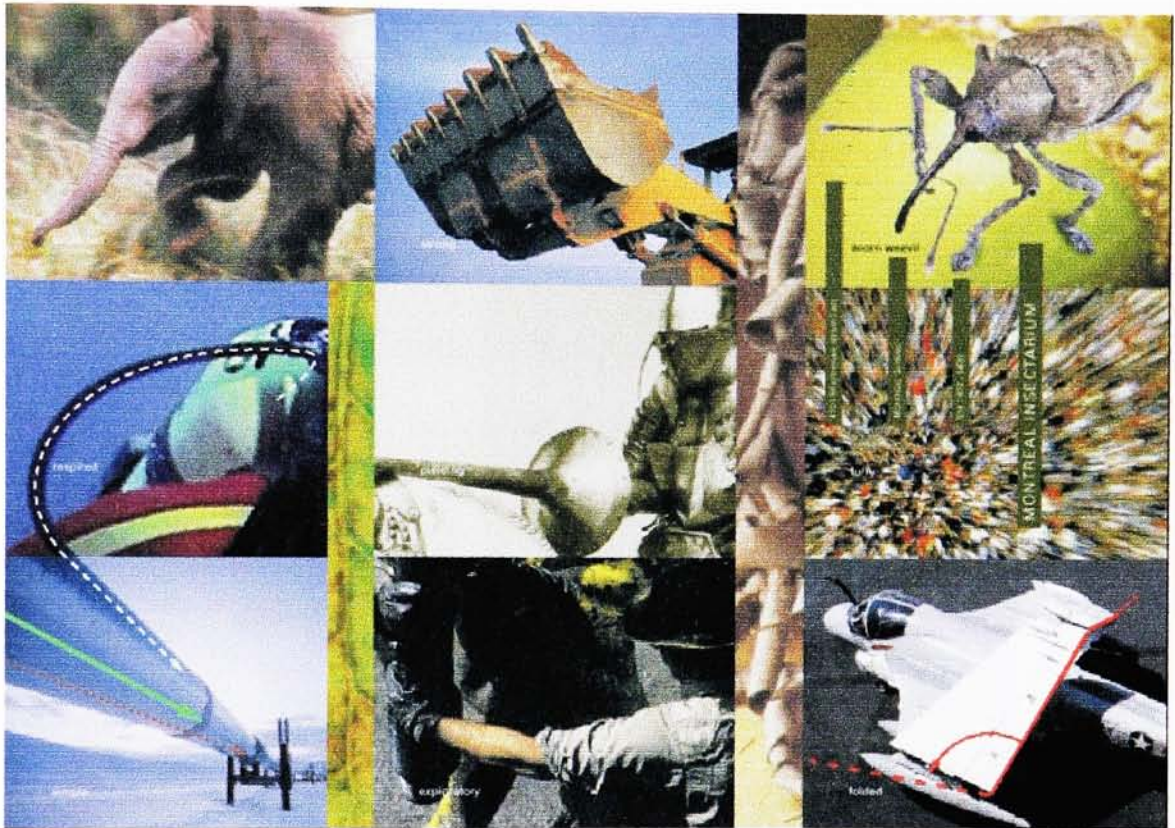
Title	*Montreal Insectarium: Acorn Weevil*
Type of information	Science
To communicate ...	the characteristics of the acorn weevil
Communication Vehicle	Diagram
	Photography
	Typography
	Visual Metaphors
Color	4c process
	used symbolically
Photography	full color
Illustration	n/a
Image or Text Dominant	image
Language Use	heads: keywords
Sequencing	n/a
Interaction	decode the metaphors

Title	*Orchestra 2000*
Type of information	Music
To communicate …	the identity of the orchestra
Communication Vehicle	Typography
Color	b/w and 4c process
	used symbolically
Photography	n/a
Illustration	type as image
Image or Text Dominant	text
Language Use	heads: keywords, phrases
	copy: keywords
Sequencing	n/a
Interaction	n/a

Art and Power/Knowledge

Eugenics: measuring the excluded inferior

Title	*Introducing Postmodernism*
Type of information	Theory
To communicate ...	theories relevant to postmodernism
Communication Vehicle	Photography
	Diagrams
Color	b/w
Photography	half-tone
Illustration	cartoon
	contour drawing
Image or Text Dominant	text-image split
Language Use	heads: phrases
	copy: sentences
Sequencing	building upon knowledge
Interaction	n/a

Genesis
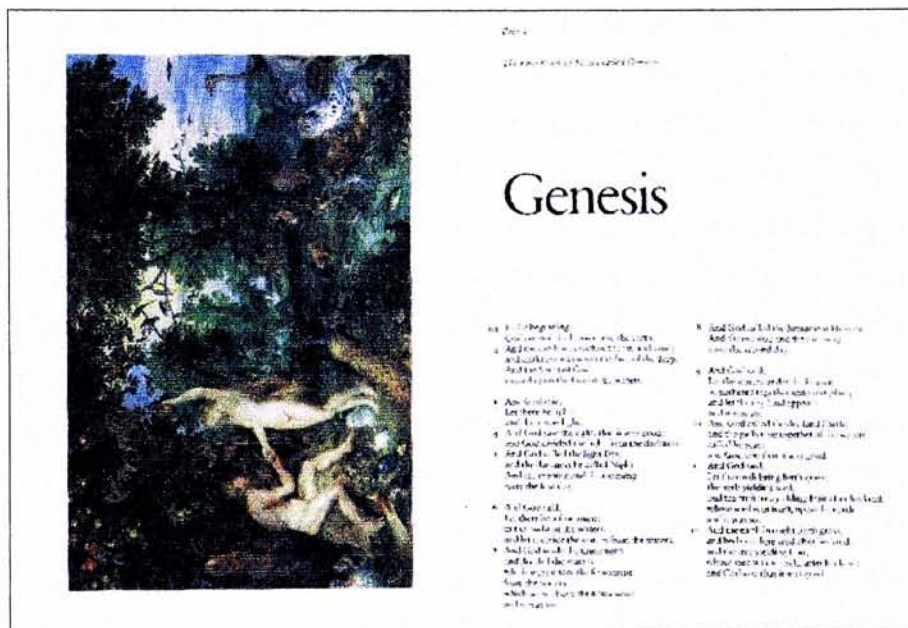
Title   *Washburn College Bible*
Type of information   Religion
To communicate …   the message of the Bible
Communication Vehicle   Typography
                               Photography
Color   4c process
Photography   full color
Illustration   n/a
Image or Text Dominant   text
Language Use   heads: keywords
                               copy: sentences
Sequencing   n/a
Interaction   n/a

Title	*Dante's Inferno series*
Type of information	Literature
To communicate …	the 14th century poem by Dante
Communication Vehicle	Metaphor
Color	many spot colors
	used symbolically
Photography	hand colored half-tones
Illustration	painterly realism
Image or Text Dominant	image
Language Use	n/a
Sequencing	series
Interaction	decode the symbols

Edward R. Tufte

Envisioning Information
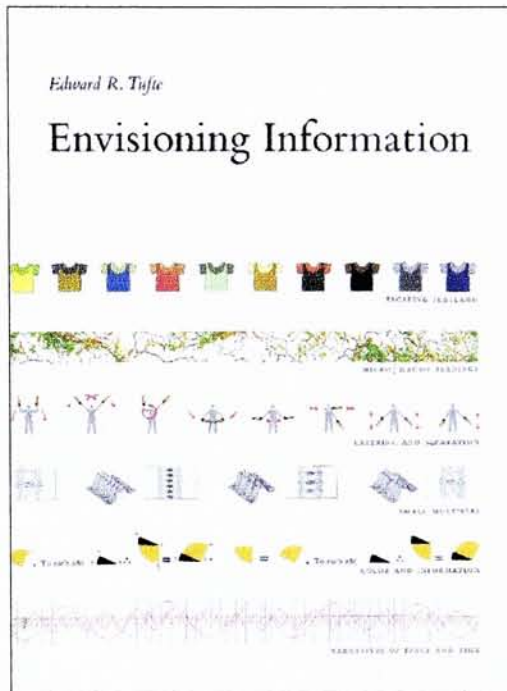
Title	*The Visual Display of Quantitative Information*
Type of information	Math
To communicate ...	how to graphically represent information
Communication Vehicle	Diagrams
	Maps
	Charts
Color	4c process
Photography	half-tone
	full color
Illustration	technical illustration
	painterly realism
	stylized realism
Image or Text Dominant	text-image split
Language Use	heads: phrases
	copy: sentences
Sequencing	n/a
Interaction	n/a

Appendix B
Completed Evaluation Forms

Philosophy made Visual

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners.** Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply)　　　　　seeing　(listening)　reading　doing

What is your field of study?

graphic Design

Are you familiar with Plato's *Allegory of the Cave*?　　　no　(yes, I've heard of it)　yes, I've studied it

Are you familiar with Plato's Divided Line?　　　　　　　no　(yes, I've heard of it)　yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

　　no, all of it is unclear
　　no, some parts are unclear
　　(yes, it is clear)

If no, what is confusing or unclear?

_____

_____

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

　　(increased (I learned something new))
　　remained the same (I already knew it).
　　remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

　　(very successful (no changes needed))
　　somewhat successful (minor changes needed)
　　unsuccessful (major changes needed)

If changes are needed, what are they?

Instead of cube-ness in diagram, use bird-ness?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

Perhaps illustrations of the bird-ness side of the exhibit

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, the media part would interest me

Additional comments

Color coding or arrows to help remind me as to what part of the exhibit "I am in"

Im not sure how the entrance + exit work as the same room. Top picture confuses me

it has both media & the diagram...

Philosophy made Visual

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners.** Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply)   (seeing)   (listening)   (reading)   (doing)

What is your field of study?

Liberal Arts

Are you familiar with Plato's *Allegory of the Cave*?   no   (yes, I've heard of it)   yes, I've studied it

Are you familiar with Plato's Divided Line?   (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

_____

....

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

I'd like to see drawing - of the bird -ness ruling

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, the media interest me

Additional comments

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners**. Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply)   (seeing)   (listening)   (reading)   (doing)

all parts need to be integrated

What is your field of study?

Applied Mathematics / Imaging Science

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   (yes, I've studied it)

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
(no, some parts are unclear)
yes, it is clear

If no, what is confusing or unclear?

I had a hard time connecting the Divided Line and Allegory of the Cave parallel in the Thinking section. In fact I didn't connect the Thinking section

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

within the context of the Allegory of the cave as a whole

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

_N/A_

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

I think Plato's ideas are very hard to understand. For someone without exposure to it some would read ... interactive exhibit with ... some there ... and video exhibit in the animation

If this exhibition was actually created, would it appeal to you? Why or why not?

I think it would be appealing. ... exhibit ... because it would be an additional resource in learning and understanding Plato's ideas.

Additional comments

Layout clean and well organized. Very well done.

Philosophy made Visual

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners**. Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply)　　　(seeing)　listening　(reading)　doing

What is your field of study?

Electrical Engineering

Are you familiar with Plato's *Allegory of the Cave*?　　　no　(yes, I've heard of it)　yes, I've studied it

Are you familiar with Plato's Divided Line?　　　(no)　yes, I've heard of it　yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
(somewhat successful (minor changes needed))
unsuccessful (major changes needed)

If changes are needed, what are they?

More text!

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

I'd like to see the bird rooms

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, the media excites me — It's a great topic

Additional comments

Philosophy made Visual

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners.** Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply)   (seeing)   listening   (reading)   (doing)

What is your field of study?

Software Engineering

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   (yes, I've heard of it)   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
(somewhat successful (minor changes needed))
unsuccessful (major changes needed)

If changes are needed, what are they?

The distinguishment between the first 2 macro levels (first two levels of the cave) needs to be increased visually

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

It's good

If this exhibition was actually created, would it appeal to you? Why or why not?

I would since I'm constantly trying to understand the work that surrounds me, yet I find it hard to get beyond the "ideal" state

Additional comments

A thoughtful application of older thoughts to modern times. This could very well be easily used as a teaching tool for philosophical concepts

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners.** Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply)   seeing   listening | reading | | doing)

What is your field of study?

_____ COMPUTER SCIENCE _____

Are you familiar with Plato's *Allegory of the Cave*?   no | yes, I've heard of it | yes, I've studied it

Are you familiar with Plato's Divided Line?   no | yes, I've heard of it | yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
| yes, it is clear |

If no, what is confusing or unclear?

_____

_____

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

| increased (I learned something new). |
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

| very successful (no changes needed) |
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

_____

_____

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

_____ NOTHING _____

_____

If this exhibition was actually created, would it appeal to you? Why or why not?

_____ IT IS INTERESTING _____

_____

Additional comments

_____

_____

Philosophy made Visual

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners.** Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply) — (seeing)   listening   reading   doing

What is your field of study? *English*

Are you familiar with Plato's *Allegory of the Cave*? — (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line? — (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?
- no, all of it is unclear
- no, some parts are unclear
- (yes, it is clear)

If no, what is confusing or unclear?

_____

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:
- (increased (I learned something new).)
- remained the same (I already knew it).
- remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?
- (very successful (no changes needed))
- somewhat successful (minor changes needed)
- unsuccessful (major changes needed)

If changes are needed, what are they?

_____

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

_____

If this exhibition was actually created, would it appeal to you? Why or why not?

I like the layout of the exhibition the rooms seem interesting, yes I would be interested in seeing it

Additional comments

- Excellent show. I especially like the rooms you can walk through.

Philosophy made Visual

The work in the Bevier gallery is presentation material for **a proposed exhibition aimed at visually communicating Plato's levels of cognition to visually-oriented learners.** Because evaluation is an important aspect of a project such as this one, the questions below are aimed at evaluating the success of the exhibition. Feedback will be analyzed and incorporated into the project. Thank you for your time.

How do you prefer to learn? (circle all that apply) (seeing) listening reading (doing)

What is your field of study?

graphic design

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   (yes, I've heard of it)   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).) *saw it in a new way which is always enlightening.*
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

I'd say written text along the way or say incorporated on tv screens or whatever just to be sure everything is very clear. Yes it's a traditional approach to do that but it helps people understand & make connections.

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes. I think philosophy is usually too abstract for most people, but this is interactive so that the visitor is involved, becomes interested, &

Additional comments *sees the philosophy in terms that he or she can understand. The relationship to things we see everyday & experience is very important.*

*This is just picky, but the outer shape looked like intestines.
That has nothing to do with the cognitive understanding of the exhibit.*

Philosophy made Visual

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How do you prefer to learn? (circle all that apply)   seeing   listening   reading   doing

What is your field of study?

graphic design

Are you familiar with Plato's *Allegory of the Cave*?   no   _yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
yes, it is clear

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

increased (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

No, you've done a great job!

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes. I think it will be interesting to experience a visual learning process like that.

Additional comments

Philosophy made Visual

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How do you prefer to learn? (circle all that apply) — seeing — listening — (reading) — doing

What is your field of study?

English

Are you familiar with Plato's *Allegory of the Cave*? — no — (yes, I've heard of it) — yes, I've studied it

Are you familiar with Plato's Divided Line? — no — (yes, I've heard of it) — yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, I am a very word-oriented person and to see material presented visually is a nice change.

Additional comments

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

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How do you prefer to learn? (circle all that apply)   seeing   listening   reading   (doing)

What is your field of study?

Graphic Design

Are you familiar with Plato's *Allegory of the Cave*?   no   (yes, I've heard of it)   yes, I've studied it

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?
no, all of it is unclear
(no, some parts are unclear)
yes, it is clear

If no, what is confusing or unclear?

If there was a model, it would be more clear.

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:
(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?
very successful (no changes needed)
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

Model

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, because walking into it, through it adds another level of information

Additional comments

Good job, nicely presented.

Philosophy made Visual

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How do you prefer to learn? (circle all that apply)   seeing   listening   reading   (doing)

What is your field of study?

Computer Science

Are you familiar with Plato's *Allegory of the Cave*?   (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   no   (yes, I've heard of it)   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased) (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

If this exhibition was actually created, would it appeal to you? Why or why not?

Additional comments

Interesting application of Philosophical Ideas into Visually real space

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

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How do you prefer to learn? (circle all that apply)   ~~seeing~~   listening   reading   ~~doing~~

What is your field of study?

Information Tech.

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?
- no, all of it is unclear
- no, some parts are unclear
- yes, it is clear

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:
- increased (I learned something new).
- remained the same (I already knew it).
- remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?
- very successful (no changes needed)
- somewhat successful (minor changes needed)
- unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

If this exhibition was actually created, would it appeal to you? Why or why not?

Mother Technology is very appealing to me.

Additional comments

Kirk Gustafson

Philosophy made Visual

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How do you prefer to learn? (circle all that apply)   (seeing)   (listening)   (reading)   (doing)

What is your field of study?

Mechanical Engineering

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   (yes, I've studied it)

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

....
....

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new))
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

....
....

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

....
....

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, it is interesting and draws attention.
....

Additional comments

....
....

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

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How do you prefer to learn? (circle all that apply)   seeing   listening   reading   doing

What is your field of study?   *graphic design... visual arts.*   *all.*

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   ⟨yes, I've studied it⟩

Are you familiar with Plato's *Divided Line*?   no   ⟨yes, I've heard of it⟩   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

    no, all of it is unclear
    no, some parts are unclear
    ⟨yes, it is clear⟩

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

    ✓ increased (I learned something new).
    remained the same (I already knew it).
    remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

    ✓ very successful (no changes needed)
    somewhat successful (minor changes needed)
    unsuccessful (major changes needed)

If changes are needed, what are they?

The series of boards were a little confusing at first b/c the entrance is shown at the end of the media cave and the example start at the imagining portion of media cave. How does the viewer travel through this exhibit

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

directional... movement. How the viewer is expected to travel through this exhibit. Clockwise / counterclockwise?

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes. Very interesting content. Reinforcing conceptual thinking

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Additional comments

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How do you prefer to learn? (circle all that apply)   seeing   listening .   reading   doing

What is your field of study?

_____   _____ Psychology _____

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
yes, it is clear

If no, what is confusing or unclear?

_____ I understand the relationship Between cave and Media cave _____
_____ Since I understand The Allegory of the cave, I'm not sure How someone would (IF they didn't ever have knowledge of story.

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

I saw the Idea of the Allegory in another perspective

increased (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

_____ I would like to see the Broken up steps of the Plato's _____
_____ definition of the allegory more ' to the media are separated _____

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

_____ Segments of Plato's writing explaining thoughts _____

If this exhibition was actually created, would it appeal to you? Why or why not?

_____ Yes, media over stimulation would be interesting. ✱ _____

Additional comments

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

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How do you prefer to learn? (circle all that apply)   (seeing)   (listening)   reading   (doing)

What is your field of study?

Are you familiar with Plato's *Allegory of the Cave*?   (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate
the parallels between the Divided Line and the *Allegory of the Cave*?

    no, all of it is unclear
    no, some parts are unclear
    (yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show,
your understanding of Plato's levels of cognition has:

    (increased (I learned something new).)
    remained the same (I already knew it).
    remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

    (very successful (no changes needed))
    somewhat successful (minor changes needed)
    unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

If this exhibition was actually created, would it appeal to you? Why or why not?

Probably not, not generally interested in Plato

Additional comments

Philosophy made Visual

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How do you prefer to learn? (circle all that apply)   (seeing)   listening   (reading)   (doing)

What is your field of study?   *graphic design*

Are you familiar with Plato's *Allegory of the Cave*?   (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's *Divided Line*?   (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

   no, all of it is unclear
   (no, some parts are unclear)
   yes, it is clear

If no, what is confusing or unclear?

~~*"Essence" "Knowing"*~~

The Allegory of the Cave

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

   (increased (I learned something new).) *but*
   remained the same (I already knew it).
   remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

   very successful (no changes needed)
   (somewhat successful (minor changes needed))
   unsuccessful (major changes needed)

If changes are needed, what are they?

- *Should media in "Imagining room" be blurry vs. ...?*
- *Is "Knowing" same as "understanding" maybe ... cultural implications of media or ... ...*

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

If this exhibition was actually created, would it appeal to you? Why or why not?

yes — I am a visual learner ... + doing would help me understand ...

Additional comments

Philosophy made Visual

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How do you prefer to learn? (circle all that apply)   (seeing) (listening) (reading) (doing)

What is your field of study?   Physician Assistant

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   (yes, I've studied it)

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, it was very interesting

Additional comments

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

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How do you prefer to learn? (circle all that apply)   seeing   listening   (reading)   doing

What is your field of study?

Textile

Are you familiar with Plato's *Allegory of the Cave*?   (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes), it is clear

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased) (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

More description and hands on exercise

If this exhibition was actually created, would it appeal to you? Why or why not?

Additional comments

Good Job

Kirk Gustafson

Philosophy made Visual

Evaluation Questionnaire
MFA Graphic Design Thesis Show
Bevier Gallery
Building 7A
Second Floor

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How do you prefer to learn? (circle all that apply)   seeing   listening   reading   (doing)

What is your field of study?

COMPUTER ENGINEERING

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   (yes, I've studied it)

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

_____

_____/_____

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

increased (I learned something new).
(remained the same (I already knew it).)
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
(somewhat successful (minor changes needed))
unsuccessful (major changes needed)

If changes are needed, what are they?

Some of the images that were chosen didn't fit the project's purpose.

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

Maybe transparencies or visual illusions created by light and shadow would reinforce Plato's Allegory message.

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes exhibitions shouldn't be static, they should instigate our intelligence and our senses. This exhibition would appeal me exactly because it trigger senses to address the intelligence

Additional comments

....

_____

How do you prefer to learn? (circle all that apply) seeing (listening) reading (doing)

What is your field of study?

Computer Engineering

Are you familiar with Plato's *Allegory of the Cave*? (no) yes, I've heard of it yes, I've studied it

Are you familiar with Plato's Divided Line? (no) yes, I've heard of it yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

_____

_____

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

_____

_____

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

_____

_____

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes, another visualization couldn't hurt knowledge

_____

Additional comments

_____

_____

Thank you for your time.

How do you prefer to learn? (circle all that apply)   seeing   (listening)   reading   (doing)

What is your field of study? *Phil* (handwritten)

Are you familiar with Plato's *Allegory of the Cave*?   (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes,) it is clear

If no, what is confusing or unclear?

Based on the diagrams and interior renderings in the thesis show,
your understanding of Plato's levels of cognition has:

(increased) (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

More Jand tell me the cognition (handwritten, unclear)

If this exhibition was actually created, would it appeal to you? Why or why not?

Yes I-l would be cool to see if it really can make a diffrence (handwritten, unclear)

Additional comments   *They's always cool* (handwritten, unclear)

Thank you for your time. *No Parsnto* (handwritten signature, unclear)

How do you prefer to learn? (circle all that apply)   seeing   (listening)   reading   doing

What is your field of study?

Photography

Are you familiar with Plato's *Allegory of the Cave*?   no   yes, I've heard of it   (yes, I've studied it)

Are you familiar with Plato's Divided Line?   no   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
(no, some parts are unclear)
yes, it is clear

If no, what is confusing or unclear?

the levels of ascension from the ...

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

increased (I learned something new).
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

(very successful (no changes needed))
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

perhaps translations of his writings

If this exhibition was actually created, would it appeal to you? Why or why not?

yes, I have an interest in philosophy

Additional comments

You're on the right track. Good luck!

Thank you for your time.

How do you prefer to learn? (circle all that apply)   seeing   listening   reading   (doing)

What is your field of study?

Environmental Management

Are you familiar with Plato's *Allegory of the Cave*?   (no)   yes, I've heard of it   yes, I've studied it

Are you familiar with Plato's Divided Line?   (no)   yes, I've heard of it   yes, I've studied it

Does the exhibition diagram "Plato's Levels of Cognition" clearly communicate the parallels between the Divided Line and the *Allegory of the Cave*?

no, all of it is unclear
no, some parts are unclear
(yes, it is clear)

If no, what is confusing or unclear?

_____

_____

Based on the diagrams and interior renderings in the thesis show, your understanding of Plato's levels of cognition has:

(increased (I learned something new).)
remained the same (I already knew it).
remained the same (I am still confused).

How successful do you feel is the application of Plato's ideas to media?

very successful (no changes needed)
somewhat successful (minor changes needed)
unsuccessful (major changes needed)

If changes are needed, what are they?

The explanation I'm a little confused in the concept probably because I am unfamiliar with it.

What, if anything, could be added to the exhibition to increase a viewer's understanding of Plato's levels of cognition?

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If this exhibition was actually created, would it appeal to you? Why or why not?

Yes because it seems to do with media and media interests me.

Additional comments

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Thank you for your time.